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Formazione

La matrice relazionale della genitorialità: vulnerabilità psichica e
configurazioni affettive nel periodo perinatale.

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Capitolo 1

Essere donna, diventare madre: Trasformazioni psichiche in gravidanza

1.1 Gravidanza e riorganizzazione intrapsichica

Descrivere la maternità è un fatto complesso, perché complesso è il processo che porta la donna a diventare madre. Non solo per la fatica insita nella gravidanza, ma anche, e soprattutto, perché diventare madre è un fatto individuale, e al tempo stesso un fatto relazionale, sociale, culturale. Infatti, “la maternità, intesa come messa al mondo di un bambino, è una esperienza universale, forse l’esperienza universale, se è vero che ciascuno di noi ha conosciuto, come prima dimora, un corpo di donna” (Silvia Vegetti Finzi, p. 162). Quel corpo di donna che muta e si trasforma nello stato di gravidanza. L’interno si popola e “...vuol dire, essere madri, aver provato la sensazione di sentire qualcosa muoversi all’interno di sé, perfettamente coscienti del fatto di non essere, almeno per il periodo della gestazione, individui, atomi unici e indivisibili, bensì essere dividui, divisibili, sorta di endiadi, uno in due, due in uno” (Francesca Rigotti, 2000, p. 60). Questa operazione di decentramento della donna porta la psiche della donna stessa a pensarsi e ri-pensarsi.

Come sottolineato da Diana Norsa e Giulio Cesare Zavattini (1997), la gravidanza impone un’urgente riorganizzazione delle esperienze affettive del passato, rendendo particolarmente permeabile il confine tra mondo interno e realtà relazionale attuale. In questa fase, l’identità materna in via di costruzione si sviluppa all’interno di un campo relazionale in trasformazione, caratterizzato dal passaggio dalla diade alla triade e dall’attesa del figlio, che introduce un terzo reale e fantasmatico nello spazio psichico della coppia. Tale passaggio riattiva dinamiche edipiche e pre-edipiche, favorendo il riemergere di conflitti, desideri e fantasie inconsce legate alle origini della propria storia affettiva.

Il contributo freudiano offre una cornice simbolica fondamentale per comprendere la funzione psichica della gravidanza. Sigmund Freud (1930) descrive la casa come una

sostituzione del ventre materno, ovvero della prima dimora in cui l'essere umano ha sperimentato una condizione di sicurezza e protezione. Questa formulazione richiama direttamente la funzione originaria di contenimento esercitata dal corpo materno, inteso come primo oggetto e primo spazio psichico in cui il soggetto ha sperimentato il sentirsi contenuto, avvolto, al sicuro. Durante la gravidanza, tale funzione viene riattualizzata in modo particolarmente intenso: la donna, infatti, non solo diventa concretamente il contenitore primario del figlio, ma si confronta anche, sul piano intrapsichico, con la propria esperienza originaria di essere stata contenuta.

Il ventre materno può, quindi, essere concepito come uno spazio transizionale in cui si intrecciano passato e presente, corpo e psiche, memoria affettiva e anticipazione del futuro. La gravidanza riattiva i cosiddetti fantasmi dell'infanzia (Selma Fraiberg, 1975), sollecitando un lavoro di elaborazione che può favorire la trasformazione delle relazioni oggettuali interne e la costruzione di una funzione materna sufficientemente buona e contenitiva. La capacità della donna di abitare simbolicamente questo spazio, integrando le proprie esperienze infantili con la nuova identità materna, rappresenta un passaggio cruciale per l'organizzazione del legame prenatale e per la qualità delle future interazioni madre-bambino.

Secondo Grete Bibring (1959), la gravidanza costituisce una "crisi evolutiva normativa", durante la quale l'organizzazione psichica della donna viene profondamente sollecitata e sottoposta a un processo di ristrutturazione. Bibring (1959) definisce la gravidanza come un processo maturativo in cui l'equilibrio emotivo precedente viene temporaneamente destabilizzato, a causa della convergenza di fattori biologici, psicologici e relazionali. Tale destabilizzazione non assume connotazioni patologiche, ma rappresenta una condizione fisiologica che apre la possibilità di un significativo riassetto intrapsichico, cui dovrebbe far seguito un livello di integrazione più maturo. Nel corso di questo periodo, i profondi cambiamenti somatici agiscono come potenti catalizzatori psichici, riattivando conflitti,

fantasie e rappresentazioni inconscie legate alla storia infantile e alle prime relazioni oggettuali. La psiche, così come il corpo, è chiamata a confrontarsi con una trasformazione che coinvolge simultaneamente il piano fisico e mentale. Il concetto stesso di crisi, utilizzato dall'autrice – dal greco κρίσις «scelta, decisione, fase decisiva», derivato di κρίνω «distinguere» – sottolinea come la gravidanza rappresenti una fase di particolare intensità e complessità, capace di modificare radicalmente il rapporto della donna con il proprio corpo, con la propria identità e con il proprio mondo interno.

Nel quadro teorico proposto da Daniel N. Stern, la transizione alla genitorialità comporta l'emergere di una specifica organizzazione psichica definita “costellazione materna”, che riorganizza temporaneamente il mondo rappresentazionale della donna durante la gravidanza e nel periodo immediatamente successivo alla nascita. Tale configurazione implica una ristrutturazione delle priorità emotive e relazionali e si articola in tre livelli rappresentazionali interconnessi, attraverso i quali la futura madre elabora il proprio passato, ridefinisce la propria identità presente e costruisce mentalmente la relazione con il bambino che sta per nascere (Stern, 1985).

Il primo livello è quello *intergenerazionale*, che riguarda la relazione della donna con le proprie figure genitoriali e, in particolare, con la madre. In questa dimensione vengono riattivate e rielaborate le rappresentazioni interiorizzate delle esperienze di accudimento vissute nell'infanzia. La gravidanza rappresenta infatti un momento di particolare sensibilità psicologica in cui ricordi, emozioni e modelli relazionali legati alla propria storia familiare tendono a riemergere e a essere reinterpretati alla luce della nuova esperienza di genitorialità. Questo processo consente alla futura madre di confrontarsi con i modelli educativi ricevuti, valutando quali aspetti desidera mantenere in continuità e quali, invece, intende modificare o trasformare nel proprio stile di cura.

Il passaggio dall'essere figlia della propria madre al diventare madre del proprio figlio comporta un'inevitabile riattivazione delle rappresentazioni interne della maternità, nonché

dei conflitti infantili originati nella relazione primaria con la madre. Il livello intergenerazionale svolge quindi una funzione fondamentale nella trasmissione e nella possibile rielaborazione dei modelli di accudimento tra generazioni.

Il secondo livello è quello *personale*, che riguarda il processo di riorganizzazione dell'identità individuale necessario a integrare il nuovo ruolo genitoriale. La gravidanza comporta infatti una trasformazione significativa del senso di sé, in cui la donna è chiamata a ridefinire la propria identità includendo la dimensione materna accanto alle altre componenti della propria vita personale, relazionale e professionale. In questa fase emergono interrogativi relativi alla propria capacità di prendersi cura del bambino, al senso di competenza genitoriale e alle modalità con cui il nuovo ruolo potrà integrarsi con le altre identità precedentemente consolidate. Il livello personale implica pertanto un complesso lavoro psichico di integrazione e riorganizzazione interna, attraverso il quale la donna costruisce una rappresentazione coerente di sé come madre e sviluppa un senso di autoefficacia e responsabilità genitoriale.

Il terzo livello è quello della *generazione futura*, che concerne la relazione con il bambino che sta per nascere e include le rappresentazioni mentali del figlio e del legame che si instaurerà con lui. In questa dimensione si sviluppano fantasie, aspettative e immagini relative alle caratteristiche del bambino, al suo sviluppo e alla qualità della relazione futura. È importante sottolineare che questi tre livelli rappresentazionali non operano in modo indipendente, ma costituiscono un sistema dinamico in cui passato, presente e futuro si intrecciano continuamente. Come evidenziato da Serge Lebovici (1983), durante la gravidanza i genitori tendono a costruire mentalmente un “bambino immaginario”, sul quale vengono proiettati desideri, speranze e ideali. Attraverso tali rappresentazioni anticipatorie e inconsce, il genitore inizia a elaborare il proprio ruolo nella relazione con il figlio e a prepararsi emotivamente alla costruzione del legame affettivo dopo la nascita.

Le rappresentazioni delle proprie esperienze infantili influenzano il modo in cui la donna costruisce l'immagine di sé come madre e le aspettative nei confronti del bambino, mentre le fantasie relative al figlio possono riattivare ricordi e modelli relazionali legati alla propria storia familiare. In questo senso, la costellazione materna rappresenta un processo di integrazione temporale delle esperienze relazionali, attraverso il quale la futura madre rielabora la propria storia di attaccamento, ridefinisce la propria identità e costruisce le basi psicologiche della relazione con il bambino ancora prima della nascita.

Anche Donald Winnicott (1956) ha evidenziato come la gravidanza e il periodo perinatale favoriscano uno stato di particolare sensibilità psichica, che egli definisce “preoccupazione materna primaria”. Questo stato mentale è caratterizzato da una profonda focalizzazione della madre sul bambino e sui suoi bisogni e comporta una temporanea modificazione dell'equilibrio psichico abituale della donna. Pur implicando una parziale attenuazione delle consuete difese psicologiche, tale condizione non rappresenta un elemento patologico, ma costituisce piuttosto un assetto psichico adattivo, funzionale alla capacità della madre di sintonizzarsi con il neonato e di rispondere in modo sensibile ai suoi segnali.

La preoccupazione materna primaria consente alla madre di sviluppare una particolare sensibilità nei confronti degli stati interni del bambino, favorendo un processo di identificazione empatica che rende possibile l'anticipazione e la comprensione dei suoi bisogni fisiologici ed emotivi. La gravidanza e il periodo immediatamente successivo alla nascita rappresentano una fase di riorganizzazione del funzionamento psichico in cui la donna costruisce progressivamente una rete complessa di rappresentazioni mentali relative al bambino, a sé stessa come madre e alla relazione che si sta instaurando (Winnicott, 1956).

Lo stesso Winnicott (1953) ha inoltre descritto la gravidanza come un periodo preparatorio alla creazione di uno spazio potenziale o area transizionale, che troverà la sua piena espressione nel primo anno di vita del bambino. Tale spazio si colloca in una dimensione intermedia tra realtà e fantasia, tra interno ed esterno, tra soggettivo e oggettivo, e

presuppone la capacità materna di tollerare il paradosso costitutivo della maternità: il bambino è simultaneamente oggetto interno, investito di fantasie e identificazioni, e presenza reale, separata e dotata di alterità. La gravidanza prepara dunque le condizioni psichiche per sostenere questa tensione senza annullarla, rendendo possibile l'esperienza transizionale che sarà alla base dello sviluppo emotivo del bambino.

Un ulteriore contributo alla comprensione dei processi psichici che caratterizzano la gravidanza proviene dal modello teorico elaborato da Wilfred Bion (1962), che pone al centro dell'esperienza materna la funzione di contenimento. Secondo la prospettiva bioniana, la relazione precoce tra madre e bambino si fonda sulla capacità della madre di accogliere e trasformare gli stati emotivi primitivi del neonato. Durante la gravidanza, questa funzione appare già in fase di preparazione e riorganizzazione: la donna è chiamata a sviluppare una disposizione psichica simile alla *rêverie* materna, ovvero la capacità di ricevere, tollerare e dare significato agli stati emotivi non ancora organizzati.

Nel linguaggio teorico di Bion, il neonato è inizialmente dominato da elementi beta, ossia esperienze sensoriali ed emotive grezze, non ancora mentalizzate e quindi non pensabili. Attraverso la funzione alfa, la madre è in grado di trasformare tali elementi in contenuti psichici simbolizzabili, rendendo possibile l'elaborazione emotiva e la costruzione del pensiero. In questo processo la madre svolge una funzione di contenitore psichico, capace di accogliere le proiezioni del bambino, metabolizzarle e restituirle in una forma più organizzata e tollerabile.

Applicata al periodo gestazionale, questa prospettiva suggerisce che la gravidanza costituisca una fase in cui la funzione di contenimento materna viene progressivamente attivata e preparata. La donna non si limita infatti a elaborare mentalmente la presenza del bambino, ma sperimenta anche una profonda riattivazione del proprio mondo interno. Ricordi, emozioni e conflitti legati alla propria storia relazionale possono emergere con particolare intensità, richiedendo un lavoro psichico di simbolizzazione e integrazione.

In questo senso, la gravidanza può essere intesa come uno spazio psichico di trasformazione, in cui la donna rielabora aspetti della propria esperienza emotiva mentre si prepara a svolgere la funzione di contenimento nei confronti del figlio.

In questo processo trasformativo, il corpo materno assume un ruolo centrale, configurandosi come il luogo in cui si intrecciano dimensione somatica e dimensione psichica. Le trasformazioni corporee della gravidanza non rappresentano soltanto eventi biologici, ma diventano anche il supporto di processi simbolici e rappresentazionali attraverso cui la donna costruisce progressivamente la propria identità materna e la relazione con il bambino.

La cosiddetta “crisi gravidica” assume dunque una duplice valenza: essa presenta “connotazioni positive di maturazione, ma anche [nella sua] valenza di vulnerabilità che lascia spazio a possibili rischi sul piano psicologico” (Dabrassi & Imbasciati, 2011, p. 51). Quindi, se da un lato, la gravidanza può costituire un potente fattore evolutivo, promuovendo processi di integrazione del Sé, di ristrutturazione identitaria e di ampliamento della capacità riflessiva; dall’altro, l’allentamento delle difese e la regressione fisiologica che accompagnano la gestazione possono esporre la donna a una riemersione di conflitti infantili non risolti e a vissuti di fragilità emotiva (Dabrassi & Imbasciati, 2011; Joan Raphael-Leff, 1991).

Se, come affermano Daniel N. Stern e Nadia Bruschweiler-Stern (1998), madri non si nasce ma si diventa, è fondamentale considerare il processo maturativo che durante la gravidanza raggiunge un vertice trasformativo, consentendo gradualmente alla donna di interiorizzare e assumere la funzione materna. Tale processo non coincide con un semplice adattamento a un nuovo ruolo sociale, ma implica una profonda ristrutturazione dell’identità femminile, che si intreccia con la storia relazionale pregressa della donna (Arietta Slade et al., 2009).

In relazione alla personalità e al funzionamento della donna, infatti, Dinora Pines (1982, 1988) propone una distinzione concettuale tra desiderio di gravidanza e desiderio di maternità. Il primo sarebbe prevalentemente connesso a bisogni narcisistici – la conferma

della fertilità, la continuità generazionale o il riconoscimento sociale della femminilità – mentre il secondo implica la disponibilità emotiva a riconoscere il bambino come altro-da-sé e a investirlo stabilmente come oggetto di cura e relazione.

La gravidanza può così essere letta come una fase di transizione evolutiva ad alta densità affettiva, in cui la donna oscilla tra bisogni regressivi e tensioni generative, tra il desiderio di essere accudita e la disponibilità ad accudire.

La gravidanza riattiva, infatti, dinamiche identificatorie complesse: la donna è chiamata a confrontarsi con l'immagine interiorizzata della propria madre, a rinegoziarne gli aspetti idealizzati o conflittuali e a differenziarsene, pur mantenendo una continuità generazionale. In questo movimento dialettico tra identificazione e separazione si gioca una parte cruciale della costruzione dell'identità materna.

1.2 La maternità interiore: lo spazio simbolico della gestazione

Accanto alle trasformazioni corporee e alle riorganizzazioni psicologiche che scandiscono i diversi momenti della gravidanza, la letteratura psicoanalitica ha posto in evidenza l'esistenza di una dimensione più propriamente interna, simbolica e rappresentazionale dell'esperienza materna, che accompagna e sostiene la gestazione biologica.

In tale prospettiva, Monique Bydlowski (2000) ha introdotto il concetto di “maternità interiore” per designare quella realtà psichica che si sviluppa parallelamente alla gravidanza corporea. Essa non coincide con l'evento somatico in sé, ma costituisce uno spazio mentale in cui prendono forma fantasie, affetti, desideri, timori e rappresentazioni relative al bambino atteso e al Sé materno in trasformazione.

La maternità interiore può essere intesa come un vero e proprio laboratorio psichico, nel quale si elaborano le identificazioni con la propria madre, si riattivano conflitti infantili e si ridefiniscono i confini dell'identità femminile. In questo spazio simbolico si intrecciano passato, presente e futuro: il passato delle relazioni primarie interiorizzate, il presente

dell'esperienza corporea e relazionale della gravidanza, il futuro anticipato del legame con il bambino reale. La gestazione assume così la forma di un processo generativo che riguarda simultaneamente il corpo e la mente, il figlio e la madre, in una dinamica di co-costruzione. La peculiare condizione di contemporanea presenza e assenza del bambino nella vita psichica materna, particolarmente evidente nei primi mesi, è stata ulteriormente approfondita da Bydlowski (1997) attraverso il concetto di "trasparenza psichica". Tale nozione descrive uno stato mentale caratterizzato da una specifica permeabilità dell'apparato psichico, in cui contenuti inconsci, ricordi infantili e fantasie arcaiche tendono ad affiorare alla coscienza con minori barriere difensive. L'autrice sottolinea come questa configurazione emotiva rappresenti una condizione fisiologica della gravidanza, distinta da fenomeni regressivi di natura psicopatologica: si tratta di una regressione funzionale, temporanea e potenzialmente evolutiva, che favorisce il lavoro di rielaborazione identitaria richiesto dalla transizione alla maternità.

La trasparenza psichica può essere articolata in almeno due dimensioni fondamentali, entrambe intrinsecamente connesse all'esperienza gravidica. Una prima dimensione concerne una particolare modalità relazionale, assimilabile a uno stato di latente richiesta di sostegno e di contenimento, che colloca la donna in una posizione di apertura e di maggiore dipendenza affettiva nei confronti dell'altro significativo. Questo assetto relazionale, caratterizzato da una più intensa sensibilità alle risposte ambientali, rende il contesto relazionale (partner, famiglia, operatori sanitari) un elemento cruciale per l'equilibrio psichico materno.

Una seconda dimensione riguarda il legame tra la situazione attuale della gravidanza e la riattivazione delle esperienze infantili. I ricordi dell'infanzia, le rappresentazioni delle figure genitoriali interiorizzate e le tonalità affettive ad esse associate emergono con maggiore vividezza, mentre i meccanismi di rimozione appaiono temporaneamente attenuati. È proprio la compresenza, da un lato, di fantasie regressive e memorie cariche di affettività,

talvolta nostalgiche, talvolta conflittuali e dolorose, e, dall'altro, di una relativa povertà di elaborazioni razionali e discorsive sul feto, a costituire un indicatore distintivo dello stato di trasparenza psichica. Il bambino, in questa fase, è più "sentito" che pensato: è oggetto di investimenti affettivi intensi, ma ancora parzialmente indifferenziati sul piano rappresentazionale.

Questa attività psichica, frequentemente espressa attraverso modalità immaginative e oniriche, sostiene una progressiva regressione del Sé materno verso livelli più primitivi dell'organizzazione affettiva, riconducibili alle esperienze fetali e neonatali. Tale regressione, lungi dall'essere disorganizzante, può assumere una funzione strutturante: incrementando la sensibilità emotiva e la capacità empatica, essa prepara la donna a sintonizzarsi con i bisogni primari del neonato (Stern, 1985).

Nel corso della gravidanza, soprattutto quando la donna è adeguatamente sostenuta dalla relazione di coppia e dal contesto ambientale, viene così progressivamente istituito uno spazio sia fisico sia mentale destinato al nascituro. Tale spazio accoglie le rappresentazioni di sé come madre, del partner come padre e del bambino futuro, configurandosi come un contenitore simbolico dell'idea di un figlio e dell'identità materna in via di formazione. Si tratta di un luogo-tempo dai confini fluidi, che si intreccia con le aree più arcaiche dell'esperienza psichica e attinge tanto alla realtà quanto alla fantasia, alle immagini e ai ricordi legati ai propri genitori interiorizzati.

In tale direzione, Ferrara Mori (2008) introduce il concetto di gravidanza psicologica, intesa come il processo attraverso cui la donna sviluppa una capacità di fantasticheria materna, costruendo uno spazio mentale in cui il bambino può essere pensato, immaginato e contenuto prima ancora della nascita. Analogamente, Catherine Marinopoulos (2005) descrive questa funzione come la possibilità di creare un luogo psichico di accoglienza per il bambino che verrà.

In questo senso, la maternità interiore rappresenta il terreno simbolico nel quale prende forma la nascita psichica del bambino, che precede e prepara quella biologica. Attraverso questo processo, la donna costruisce progressivamente un assetto mentale capace di accogliere l'alterità del figlio e di sostenere la relazione affettiva che si svilupperà dopo la nascita.

Parallelamente, numerosi contributi classici e contemporanei hanno infine sottolineato come le trasformazioni endocrine e corporee della gravidanza siano strettamente intrecciate a modificazioni nei processi emotivi, cognitivi e relazionali, contribuendo alla costruzione dell'identità materna e alla formazione delle prime rappresentazioni del bambino (Bibring, 1959; Massimo Ammaniti et al., 1995; Joan Raphael-Leff, 2001). In tale cornice, i tre trimestri possono essere letti non soltanto come fasi biologiche, ma come momenti psichici caratterizzati da compiti evolutivi specifici, attraverso i quali la donna costruisce progressivamente la propria identità materna e la relazione con il bambino che verrà.

1.3 La gravidanza: un processo integrato tra esperienza psichica e trasformazione somatica

«La gestazione non è solo un accadimento del corpo che inizia e si conclude all'interno del ciclo fisiologico di nove mesi. Ha un tempo interno.» (Vegetti Finzi, 1999, p. 27).

La gravidanza si configura come un processo psichico oltre che biologico: corpo e psiche non evolvono in modo indipendente, ma si influenzano reciprocamente in una circolarità costante: le modificazioni endocrine e fisiologiche incidono sulla regolazione affettiva e cognitiva, mentre le rappresentazioni mentali della gravidanza modulano la percezione corporea e l'esperienza sintomatologica. Ne deriva un'esperienza unitaria, in cui il corpo diviene progressivamente luogo di relazione e matrice simbolica del legame con il bambino. Tale adattamento sembra avvenire e progredire nei tre trimestri di gravidanza. I nove mesi della gravidanza, infatti, sono accompagnati da trasformazioni progressive che investono

simultaneamente il corpo e la mente della donna nella loro irriducibile unità. Il tempo biologico necessario alla crescita e alla maturazione fetale coincide con un tempo psichico altrettanto indispensabile alla costruzione e al consolidamento delle competenze genitoriali, che costituiranno il fondamento del futuro legame madre–figlio. La gestazione può così essere intesa come un processo di doppia generatività: mentre il feto si sviluppa sul piano somatico, la donna attraversa un percorso di riorganizzazione intrapsichica che la conduce verso l’assunzione progressiva della funzione materna.

Nel primo trimestre, i rapidi cambiamenti ormonali, in particolare l’aumento di progesterone, estrogeni e gonadotropina corionica umana (hCG), si associano frequentemente a labilità emotiva, affaticamento, nausea e incremento dei livelli di ansia e ambivalenza (Hill et al., 2025; Wenzel et al., 2025). Sul piano psicologico, questa fase è spesso connotata da un’intensificazione dei processi introspettivi e da una temporanea ritrazione dell’investimento relazionale verso l’esterno. La gravidanza viene prevalentemente vissuta come evento interno e corporeo, mentre la rappresentazione del feto tende a rimanere ancora astratta e poco differenziata (Condon, 1993; Ammaniti et al., 2008). Si tratta di un periodo di “incubazione psichica”, in cui la donna elabora l’evento gravidico e ne verifica la compatibilità con la propria organizzazione interna. Nei soggetti con vulnerabilità pregresse, tale fase può favorire l’emergere di sintomi psicosomatici o di distress emotivo, che esprimono la difficoltà a integrare le ambivalenze riattivate.

Il secondo trimestre è generalmente associato a una maggiore stabilità fisica e psicologica. La riduzione dei disturbi somatici e, soprattutto, la percezione dei primi movimenti fetali segnano un passaggio cruciale: il feto, da presenza immaginata, diviene esperienza sensoriale concreta. Questo evento favorisce la transizione da una rappresentazione del bambino come parte del Sé a una percezione più chiara della sua alterità, facilitando l’emergere dell’attaccamento prenatale (Condon & Corkindale, 1997; Siddiqui & Hägglöf, 2000). In tale fase aumentano le fantasie sul bambino, la mentalizzazione delle sue

caratteristiche e l'investimento affettivo, con un parallelo miglioramento del tono dell'umore e una più stabile integrazione dell'identità materna (Ammaniti et al., 1999; Brandon et al., 2009). Si consolida così uno spazio psichico triadico, in cui il bambino viene progressivamente rappresentato come soggetto dotato di stati mentali propri.

Nel terzo trimestre, le trasformazioni corporee si accentuano e possono associarsi a disagio fisico, disturbi del sonno e senso di limitazione funzionale. Sul piano psicologico, numerose ricerche evidenziano un incremento dell'ansia, in particolare in relazione al parto imminente, alla salute del bambino e alla percezione della propria competenza genitoriale (Huizink et al., 2004; Alder et al., 2007). Contestualmente, si intensificano i processi anticipatori relativi alla separazione e alla nascita: la donna è chiamata a elaborare il passaggio dal bambino immaginato al bambino reale, con una progressiva riorganizzazione delle rappresentazioni materne. Sebbene l'investimento affettivo rimanga generalmente elevato, può emergere una maggiore ambivalenza emotiva, soprattutto in presenza di fattori di rischio psicologico o di traumi pregressi (Dayan et al., 2006; Van den Bergh et al., 2017).

Poiché il percorso gravidico appare come un processo dinamico e stratificato, in cui trasformazioni biologiche e riorganizzazioni psichiche si intrecciano costantemente, la qualità con cui tali passaggi vengono attraversati e simbolizzati incide in modo significativo sulla strutturazione dell'identità materna e sulla configurazione precoce del legame madre-bambino, ponendo le basi per le future traiettorie relazionali.

A tal proposito, anche la letteratura psicoanalitica ha individuato specifiche scansioni evolutive della gestazione, concependola come un processo dinamico di riorganizzazione dell'equilibrio intrapsichico. Grete Bibring (1959, 1961) ha distinto due momenti fondamentali: una prima fase, che va dal concepimento fino alla percezione dei movimenti fetali, caratterizzata dalla tendenza a vivere l'embrione e poi il feto come parte del proprio Sé, in una condizione di fusione psichica e di marcata centratura narcisistica; poi, una seconda fase, che si estende dalla percezione dei movimenti fino al parto, in cui la donna è

chiamata a riorganizzare il proprio assetto psichico in funzione della separazione imminente. In questa prospettiva, il passaggio dal “bambino interno” al “bambino altro-da-sé” rappresenta un compito evolutivo cruciale, che implica un progressivo decentramento dell’Io e la capacità di tollerare la differenza.

Dinora Pines (1972, 1982) ha ulteriormente approfondito tale modello, sottolineando come le fantasie materne siano strettamente intrecciate agli eventi corporei che scandiscono le diverse fasi della gravidanza. Nella fase iniziale, la donna tende a rivolgere l’attenzione prevalentemente verso il proprio mondo interno, sperimentando una fisiologica regressione psichica, una maggiore passività e un’accentuata sensibilità emotiva, in parallelo alle significative modificazioni ormonali. I disturbi somatici tipici di questo periodo possono essere letti, in una prospettiva psicosomatica, anche come espressioni simboliche di conflitti inconsci e ambivalenze nei confronti della gravidanza. Sintomi quali nausea e vomito sono stati interpretati come tentativi inconsci di negare, espellere o controllare la nuova condizione, nel desiderio di ripristinare un assetto precedente percepito come più stabile.

Con il progredire della gestazione e la comparsa dei movimenti fetali, il feto comincia a essere rappresentato come entità progressivamente distinta dalla madre. Tale trasformazione implica un cambiamento qualitativo dell’esperienza psichica: alla fusionalità iniziale subentra una crescente consapevolezza dell’alterità del bambino, accompagnata dall’emergere di ansie depressive e di timori legati alla separazione e alla perdita. Pines individua inoltre una fase prossima al parto, caratterizzata da intense preoccupazioni per l’integrità e la salute del bambino e da fantasie relative all’evento nascita. Dopo il parto, la donna è nuovamente chiamata a riorganizzare il proprio assetto interno per integrare la presenza concreta del neonato, affrontando il passaggio dal bambino immaginato al bambino reale, con le inevitabili discrepanze tra fantasia e realtà.

Un modello in parte alternativo è stato proposto da Joan Raphael-Leff (1980), che descrive la gravidanza come articolata in tre periodi principali. Il primo, definito fase di “inattività

vigile”, è contraddistinto dal tentativo di contenere il disorientamento legato alla nuova condizione e di preservare un iniziale equilibrio narcisistico. Segue una fase di progressiva apertura, in cui il feto viene mentalmente riconosciuto e differenziato, consentendo una più chiara individuazione dell’altro-da-sé e una maggiore disponibilità relazionale. Il terzo periodo, che culmina nel parto, è segnato da un movimento di riavvicinamento: la madre si prepara emotivamente all’incontro con il bambino reale, integrando le fantasie prenatali con l’attesa concreta della nascita.

All’interno di questo processo evolutivo, Raphael-Leff (1983, 1985, 1986) ha inoltre delineato differenti stili materni, che influenzano le rappresentazioni prenatali e la qualità della relazione precoce madre-bambino. In particolare, distingue uno stile “facilitante” e uno “regolatore”, configurazioni che riflettono modalità differenti di integrazione delle trasformazioni gravidiche.

Le madri facilitanti tendono a vivere la maternità come dimensione coerente con la propria identità femminile, mostrando una buona tolleranza delle oscillazioni emotive e delle trasformazioni corporee. Esse riescono ad attraversare le diverse fasi della gravidanza – dalla regressione iniziale e dall’unione fusionale con il feto, alla progressiva differenziazione, fino alla costruzione di una posizione materna autonoma rispetto alla propria madre – mantenendo un investimento affettivo ricco e flessibile. Il bambino viene dotato precocemente di caratteristiche personali, e si sviluppa un dialogo immaginativo che testimonia una buona capacità di mentalizzazione prenatale.

Le madri con stile regolatore, al contrario, tendono a vivere la gravidanza prevalentemente come mezzo per ottenere un figlio, piuttosto che come esperienza trasformativa. Possono manifestare difficoltà nell’accettare i cambiamenti corporei e resistenze rispetto ai fisiologici processi di disorganizzazione e riorganizzazione psichica, ricorrendo a difese razionalizzanti e a un marcato controllo emotivo. In tali casi, il bambino può essere inconsciamente vissuto come elemento intrusivo, e i movimenti fetali come segnali di una presenza estranea che

irrompe nello spazio del Sé. L'investimento affettivo e la ricchezza delle fantasie prenatali risultano più limitati, e la gravidanza può essere accompagnata dal desiderio che termini rapidamente.

Questo assetto può riflettersi anche nell'esperienza del parto, talvolta percepito come evento minaccioso e difficilmente tollerabile sul piano emotivo. Ne può derivare una maggiore richiesta di medicalizzazione (induzioni, anestesia, parto cesareo) come tentativo di controllare l'angoscia e ridurre l'impatto di ambivalenze non pienamente elaborate. In questa prospettiva, la gravidanza appare come uno spazio psichico di oscillazione costante tra ripiegamento narcisistico e apertura generativa, tra identificazione con il proprio Sé infantile e costruzione di un'immagine di madre capace di prendersi cura. Tale processo si articola inevitabilmente attraverso il confronto, implicito o esplicito, con la propria esperienza di figlia e con le rappresentazioni interiorizzate della propria madre (Ammaniti et al., 1995), confermando la natura profondamente relazionale e transgenerazionale della transizione alla maternità.

1.4 Riattivazione transgenerazionale delle rappresentazioni genitoriali in gravidanza

Proprio per il suo forte potere evocativo, l'attesa di un figlio tende a riattivare in modo particolarmente intenso gli schemi relazionali interiorizzati nelle prime esperienze di attaccamento. In questo processo, il genitore entra in contatto non solo con le rappresentazioni delle proprie figure genitoriali, ma anche con il proprio Sé bambino, riattivando bisogni, angosce e desideri arcaici. Si osserva così una tendenza a identificare il figlio con parti di sé, con aspetti idealizzati o, al contrario, con componenti scisse e conflittuali. Tale dinamica può favorire la riproposizione di modelli relazionali pregressi, in particolare di quelli disfunzionali, soprattutto quando nella storia personale dei partner sono presenti vissuti di trascuratezza, rifiuto o incoerenza affettiva (Norsa & Zavattini, 1988).

Questa riattivazione può risultare particolarmente intensa nei casi in cui la storia evolutiva sia stata segnata da esperienze di maltrattamento, abuso o grave trascuratezza. In tali condizioni, la gravidanza può riaprire nuclei traumatici non pienamente elaborati, riattivando memorie implicite legate a stati di paura, impotenza o svalutazione. L'incontro con il proprio bambino può infatti evocare identificazioni complesse e talvolta ambivalenti: il genitore può trovarsi a oscillare tra l'identificazione con il bambino vulnerabile che è stato e quella con la figura adulta che, nella propria esperienza infantile, è risultata fonte di sofferenza o mancato riconoscimento (Cimino, 2003). Quando tali vissuti non sono stati sufficientemente mentalizzati, essi possono interferire con la costruzione delle rappresentazioni genitoriali e con la capacità di immaginare il figlio come soggetto separato, favorendo processi di ripetizione o inversione dei modelli relazionali interiorizzati (Fonagy, 2002).

In altri termini, quando le esperienze infantili non sono state sufficientemente elaborate e simbolizzate, esse possono riemergere sotto forma di fantasmi nella stanza dei bambini, secondo la celebre espressione di Selma Fraiberg (1975), insinuandosi nella relazione con il figlio e influenzandone precocemente la qualità. Tali fantasmi rappresentano configurazioni affettive e rappresentazionali non integrate che rischiano di essere trasmesse transgenerazionalmente, qualora non trovino uno spazio di pensabilità e di trasformazione. In particolare, le esperienze di maltrattamento infantile possono generare modelli operativi interni caratterizzati da aspettative di rifiuto, ostilità o imprevedibilità relazionale, che tendono a riattivarsi nel momento in cui il soggetto si confronta con la prospettiva di assumere il ruolo genitoriale (Stern, 1974) .

Parallelamente, diventare genitori implica anche un orientamento verso il futuro e l'apertura a una dimensione generativa. Il nuovo legame offre infatti l'opportunità di riorganizzare il sistema degli investimenti affettivi e dei significati emotivi, promuovendo un movimento che va oltre la mera ripetizione del passato. In presenza di un adeguato sostegno relazionale e di sufficienti capacità riflessive, l'esperienza della genitorialità può diventare uno spazio

privilegiato per interrompere la trasmissione intergenerazionale del trauma, consentendo una rielaborazione delle esperienze precoci e la costruzione di modalità relazionali più sicure e sensibili (Bedaso, 2021).

Questo processo di rielaborazione si realizza attraverso quella particolare modalità psichica che Bertrand Cramer e Francisco Palacio Espasa (1993) definiscono *deuil développemental*, ovvero un “lutto evolutivo” che accompagna ogni transizione significativa dello sviluppo. Nel contesto della gravidanza, tale lutto riguarda la perdita di precedenti assetti identitari (di figlia, di partner in una coppia senza figli, di individuo centrato prevalentemente sui propri bisogni) e implica un processo di separazione simbolica dalle configurazioni relazionali del passato. Attraverso l’elaborazione di questa perdita diventa possibile accedere a una nuova configurazione identitaria, nella quale la donna può riconoscersi come madre e costruire una relazione con il figlio fondata su nuovi significati affettivi.

In questa dialettica tra perdita e acquisizione, regressione e trasformazione, vulnerabilità e crescita, la gravidanza si configura dunque come un crocevia evolutivo, in cui si intrecciano processi intrapsichici, relazionali e transgenerazionali. Proprio per questo motivo, la qualità dell’elaborazione delle esperienze infantili, in particolare di quelle traumatiche o di maltrattamento, assume un ruolo cruciale nel determinare il modo in cui il futuro genitore riuscirà a costruire la relazione con il bambino e a sostenere il suo sviluppo emotivo

Il lavoro psichico della gravidanza può, quindi, essere inteso come un processo complesso di trasformazione identitaria che coinvolge non soltanto la donna, ma l’intera coppia e, più ampiamente, il sistema familiare. All’interno di questo processo si struttura progressivamente quella che può essere definita la matrice psichica della relazione genitore-figlio, ovvero l’insieme di disposizioni emotive, rappresentazioni interne e aspettative relazionali che orienteranno le prime interazioni con il bambino dopo la nascita.

La costruzione della funzione genitoriale rappresenta, pertanto, l’esito di un processo dinamico e multilivello, che nasce dall’interazione continua tra passato e presente, tra

memorie infantili e proiezioni future. Le esperienze relazionali precoci, le modalità di attaccamento interiorizzate e la qualità delle relazioni significative sperimentate nel corso della vita contribuiscono infatti a modellare le rappresentazioni della genitorialità e le modalità con cui l'adulto si prepara ad accogliere il bambino. Questo processo evolutivo si sviluppa progressivamente nel tempo e assume configurazioni differenti in funzione delle caratteristiche specifiche di ciascun genitore, della storia personale e relazionale della coppia e delle peculiarità del bambino atteso.

Attraverso tale percorso trasformativo, l'adulto è progressivamente chiamato a riorganizzare la propria identità psichica per fare spazio al bambino reale. Ciò implica un graduale processo di separazione dalle immagini idealizzate o fantasmatiche che avevano accompagnato le fasi iniziali della gravidanza e l'integrazione di nuove rappresentazioni più realistiche del bambino e della relazione futura. L'identità genitoriale si configura dunque come il risultato di un processo di integrazione tra storia personale passata, esperienza presente e aspettative rivolte al futuro.

Tuttavia, proprio in ragione dell'intensità delle riorganizzazioni psichiche che lo caratterizzano, il periodo perinatale può rappresentare anche una fase di particolare vulnerabilità psicologica. La riattivazione di memorie emotive legate alle proprie esperienze infantili, la ridefinizione dell'identità individuale e di coppia e l'assunzione di nuove responsabilità possono infatti esporre alcuni individui a un maggiore rischio di sviluppare forme di disagio psicologico. In questo senso, le trasformazioni psichiche che accompagnano la transizione alla genitorialità costituiscono il contesto entro cui si colloca il fenomeno della depressione perinatale, che verrà affrontato nel capitolo successivo, che rappresenta una delle condizioni psicopatologiche più frequentemente osservate durante la gravidanza e nel periodo successivo alla nascita del bambino.

L'analisi delle dinamiche psicologiche che caratterizzano il lavoro della gravidanza consente dunque di comprendere più profondamente come la depressione perinatale non rappresenti

un evento isolato, ma si inserisca all'interno di un più ampio processo di riorganizzazione identitaria e relazionale che coinvolge entrambi i genitori e l'intero sistema familiare.

Capitolo 2

La teoria clinica incontra la ricerca: un progetto longitudinale sui fattori di rischio e di protezione nel periodo perinatale

Il lavoro di ricerca svolto nel corso dei tre anni del dottorato in *Health Promotion and Cognitive Sciences* si è collocato all'interno di un più ampio programma di ricerca-intervento finalizzato alla comprensione e alla prevenzione del disagio psicologico nel periodo prenatale e perinatale. In particolare, tale attività si è sviluppata nell'ambito del progetto "Quando nasce un genitore – Informazione, screening, prevenzione e trattamento precoce del disagio psichico in gravidanza e della depressione post-partum", finanziato dal Piano Sanitario Nazionale (2020) e coordinato dalla Prof.ssa Maria Rita Infurna. A questo si è affiancato il contributo del progetto PRIN "Prediction of psychopathological outcome and parental reflective functioning based on perinatal risk factors: a machine learning quantitative longitudinal study on mothers and fathers", finanziato dal Ministero dell'Università e della Ricerca.

L'integrazione tra questi progetti ha consentito di sviluppare un quadro di ricerca articolato e multidimensionale, volto a indagare i principali fattori di rischio e di protezione associati al benessere psichico dei futuri genitori. In particolare, l'attenzione è stata rivolta al ruolo delle esperienze infantili avverse, del supporto sociale, della qualità della relazione di coppia e della capacità di mentalizzazione nel predire l'insorgenza della depressione prenatale e la qualità dell'attaccamento prenatale dei futuri genitori nei confronti del bambino, già nel corso della gravidanza. L'impianto teorico di riferimento ha assunto che la vulnerabilità psicopatologica nel periodo perinatale non sia riconducibile a un singolo fattore, ma emerga dall'interazione dinamica tra dimensioni individuali, relazionali e contestuali. In tale prospettiva, le esperienze di maltrattamento e trascuratezza infantile sono state considerate

come fattori di rischio a lungo termine, suscettibili di riattivarsi durante la transizione alla genitorialità, influenzando sia il benessere psicologico sia la qualità del legame con il nascituro.

2.1 Obiettivi e ipotesi dello studio

Lo studio ha coinvolto donne in gravidanza a partire dalla dodicesima settimana di gestazione e i loro partner, con l'obiettivo generale di individuare precocemente i profili di rischio psicopatologico e psicosociale nel periodo perinatale. In particolare, la ricerca ha mirato a identificare i soggetti a rischio attraverso l'utilizzo di strumenti standardizzati, a rafforzare i fattori protettivi mediante interventi di sostegno psicologico e psicoeducativo. Un ulteriore obiettivo ha riguardato la validazione di un protocollo di screening del rischio psicosociale applicabile nei contesti clinici.

Le ipotesi formulate hanno previsto che la presenza di fattori di rischio — quali esperienze di maltrattamento infantile, scarso supporto sociale e bassa funzione riflessiva — fosse associata a livelli più bassi di attaccamento prenatale e a una maggiore probabilità di sviluppare esiti psicopatologici, in gravidanza e nel postpartum. È stato inoltre ipotizzato che il supporto sociale percepito e la qualità della relazione di coppia svolgessero un ruolo mediatore rispetto agli effetti dei fattori di rischio. Infine, si è ipotizzato che un elevato profilo di vulnerabilità nel periodo prenatale fosse associato a maggiori difficoltà nello sviluppo dell'attaccamento e del benessere psichico genitoriale nel periodo postnatale.

2.2 Disegno dello studio e metodologia

Per rispondere a tali obiettivi, è stato adottato un disegno longitudinale che ha consentito di monitorare l'evoluzione delle variabili indagate in diverse fasi del periodo perinatale. La raccolta dei dati è stata effettuata presso l'U.O.C. di Ostetricia e Ginecologia dell'Ospedale Civico di Palermo e presso le altre sedi del progetto, a partire dal secondo trimestre di

gravidanza e proseguita fino ai mesi successivi alla nascita del bambino, permettendo di osservare le traiettorie evolutive del benessere psicologico genitoriale.

L'approccio metodologico ha integrato strumenti quantitativi standardizzati e colloqui clinici, consentendo una valutazione approfondita e multidimensionale dei partecipanti. Tale impostazione ha reso possibile non solo l'individuazione precoce dei profili di rischio, ma anche il monitoraggio dei cambiamenti nel tempo e la valutazione dell'efficacia degli interventi attivati.

2.3 Strumenti

La raccolta dei dati è avvenuta attraverso strumenti standardizzati di autovalutazione e colloqui clinici, permettendo di esplorare dimensioni quali il disagio psicopatologico, l'attaccamento prenatale e postnatale, la funzione riflessiva e il supporto sociale percepito. Le dimensioni indagate per lo screening dei fattori di rischio sono state le seguenti:

- Informazioni socio-anagrafiche: domande volte a raccogliere dati sociodemografici (età, sesso, istruzione, professione, territorio di residenza, ...).
- Informazioni relative alla gravidanza: domande volte a raccogliere informazioni sulla gravidanza in corso (settimana di gestazione, alto/basso rischio, gravidanze precedenti, ecc...)
- Eventi stressanti negli ultimi 12 mesi: indaga la presenza di eventi stressanti nell'ultimo anno (grave malattia o incidente, perdita di una persona cara, problemi economici, ecc...) e la presenza di disagio psicologico (depressione, ansia, ecc...) precedente all'attuale gravidanza.
- Supporto sociale percepito: versione italiana del Maternity Social Support Scale (MSSS) (Dabrassi, F., Della Vedova, A.M., Imbasciati, A., 2008). Scala self-report composta da 6 item di tipo Likert con cui si rileva il supporto sociale percepito, rispetto alla famiglia, agli amici ed al partner. Il questionario può essere

somministrato anche ai partner delle donne in gravidanza. Il punteggio della scala, ordinata da “spesso” (5) a “mai” (1), può variare da 6 a 30. Secondo i cut-off, individuati dagli autori che hanno costruito la scala (Webster et al., 2000), un punteggio tra 6-18 indica un basso livello; tra 19-24 un livello intermedio e punteggi maggiori di 24 un livello adeguato.

- **Childhood Trauma Questionnaire-Short Form (CTQ-SF):** versione italiana del Childhood Trauma Questionnaire (Bernstein, D.P., Stein, J.A., Newcomb, M.D., et al., 2003). Il questionario, nella sua forma breve, è utilizzato, nella pratica psicologica e psichiatrica e nella ricerca clinica e psicosociale, per la rilevazione retrospettiva delle esperienze traumatiche di maltrattamento e abuso, vissute durante l'infanzia e l'adolescenza. Esso è costituito da 28 items, valutati su una scala di tipo Likert a 5 punti, ordinata da “Mai” (1) a “Molto spesso” (5), in base alla frequenza con cui le esperienze si sono verificate. Dei 28 items, 25 sono items clinici e permettono di valutare cinque scale, corrispondenti a diverse tipologie di maltrattamento, quali: Abuso Emotivo, Abuso Fisico, Abuso Sessuale, Neglect Emotivo, Neglect Fisico. Il loro punteggio può variare da 5 a 25. Per ogni scala sono stati stabiliti dei cut-off per definire i livelli di esposizione alle esperienze di maltrattamento, che possono variare da “assenti” a “gravi” (Bernstein, D.P., Fink, L., 1998); gli altri 3 items costituiscono una scala di validità, definita “Minimization/Denial”, il cui punteggio può variare da 0 a 3.
- **Attaccamento prenatale – Maternal Antenatal Attachment Scale e Paternal Antenatal Attachment Scale (MAAS e PAAS; Condon, 1993):** questionari per la valutazione dell'attaccamento prenatale. La scala materna (MAAS) è composta da 19 item e la scala paterna (PAAS) da 16 item che valutano i sentimenti dei genitori nei confronti del nascituro nelle ultime due settimane su una scala Likert da 1 a 5 punti. Punteggi più alti indicano livelli più elevati di legame. Gli item non sono esattamente gli stessi

nella scala materna e paterna, perché il quadro dell'attaccamento prenatale di Condon considera alcuni aspetti diversi tra attaccamento materno e paterno: 14 item sono comuni, 2 sono specifici dei padri e 5 sono specifici per le madri. Gli studi di validazione italiani del MAAS (Busonera, et al., 2016) e PAAS (Della Vedova & Burro, 2017) mostrano buone caratteristiche psicometriche degli strumenti.

- Attaccamento postnatale – Postpartum Bonding Questionnaire (PBQ; Brockington et al., 2001; Montiroso et al., 2009): strumento self-report che indaga su possibili difficoltà e disturbi nella relazione della madre e del padre con il loro neonato. Lo strumento è composto da 25 item valutati su una scala Likert a 6 punti che vanno da 0 (sempre) a 5 (mai) suddivisi in 4 sottoscale: legame alterato (es. “Mi sento felice quando il mio bambino sorride o ride”), rifiuto e rabbia patologica (es. "Mi sento arrabbiato con il mio bambino"), ansia focalizzata sul bambino (es. "Il mio bambino mi fa sentire ansioso") e rischio di abuso (es. "Ho voglia di ferire il mio bambino"). Gli studi di validazione italiani dello strumento (Busonera, et al., 2017; Montiroso et al., 2009) mostrano buone caratteristiche psicometriche dello strumento.
- Disagio psicopatologico: Perinatal Assessment of Maternal Affectivity e Perinatal Assessment for Paternal Affectivity (PAMA e PAPA; Baldoni et al., 2018): Il PAMA e il PAPA sono dei questionari self-report di screening a 10 item utilizzati per valutare i disturbi affettivi materni e paterni perinatali (Baldoni, Matthey, Agostini, Schimmenti e Caretti, 2018). Viene data un'autovalutazione da 0 a 3 per nove item, per un punteggio totale massimo di 27. L'item 9 è dicotomico e non viene valutato. Un alto punteggio indica un maggiore rischio per un disturbo affettivo. Il PAPA è il primo strumento di screening sviluppato per valutare specificamente i disturbi dell'affettività paterna perinatale (Baldoni et al., 2018).
- Disagio clinico: Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987; Benvenuti et al., 1999): questionario self-report a 10 items su scala Likert a 4 punti,

che indaga lo stato psichico ed emotivo del soggetto nell'ultima settimana. Punteggi più alti indicano un disagio più elevato. L'item 10 deve essere particolarmente attenzionato, poiché valuta il rischio di ideazione suicidaria

- Funzione Riflessiva: Reflective Functioning Questionnaire (RFQ) (Fonagy et al., 2016): versione italiana (Morandotti et al., 2018): valuta le capacità di mentalizzazione, attraverso la misurazione del grado di certezza e incertezza con cui gli individui utilizzano le informazioni sullo stato mentale per comprendere il proprio comportamento e quello altrui. Esso è costituito da due sottoscale -Certezza e Incertezza sugli stati mentali-, ognuna delle quali contiene 6 item di tipo Likert a 7 punti.
- Parental reflective functioning questionnaire (PRFQ -Luyten et al., 2017; Pazzagli et al., 2018). (rilevato al tempo due e tre): questionario self-report di 18 item valutati su una scala Likert a 7 punti che valuta il funzionamento della funzione riflessiva dei genitori ed è stato progettato principalmente per i genitori di bambini di età compresa tra 0 e 5 anni. Include item relativi all'interesse e alla curiosità dei genitori negli stati mentali del bambino e al modo in cui questi stati mentali possono avere un impatto sul comportamento. Sono presenti 3 sottoscale (Pre-mentalizzazione, Certezza negli stati mentali e Interesse e curiosità).

Questo approccio valutativo ha consentito non solo di individuare precocemente eventuali profili di rischio, ma anche di monitorare nel tempo i cambiamenti e le traiettorie evolutive dei partecipanti.

2.4 Analisi dei dati

I dati raccolti sono stati analizzati mediante statistiche descrittive, con l'obiettivo di delineare le caratteristiche socio-demografiche del campione e di esaminare la distribuzione delle principali variabili oggetto di studio.

Il campione, reclutato al tempo T0 presso le unità coinvolte nel progetto PRIN *“Prediction of psychopathological outcome and parental reflective functioning based on perinatal risk factors: a machine learning quanti-qualitative longitudinal study on mothers and fathers”* (Palermo, Bari, Lecce e Messina), è composto da 1179 donne in gravidanza, distribuite come segue: Palermo (68%), Messina (5%), Lecce (19%) e Bari (8%). L’età media delle partecipanti è pari a 34 anni (DS = 5.01).

Il campione maschile è costituito da 276 uomini (età media = 36.5 anni; DS = 5.6), così distribuiti: Palermo (45%), Messina (11%), Lecce (32%) e Bari (12%).

Sono state inoltre condotte analisi correlazionali per esaminare le relazioni tra le variabili e verificare la presenza di associazioni significative, nonché analisi comparative tra i gruppi di partecipanti. Modelli di regressione lineare e logistica sono stati utilizzati per valutare il contributo dei fattori di rischio allo sviluppo di esiti psicopatologici e di pattern di attaccamento disfunzionali. Infine, sono state effettuate analisi di cluster per identificare eventuali sottogruppi omogenei all’interno del campione. Le analisi sono state condotte mediante software statistici dedicati (SPSS, versione 28.0).

Accanto alla componente osservativa, il progetto ha incluso una dimensione applicativa, prevedendo interventi di sostegno psicologico e psicoeducativo rivolti alle coppie con maggiori livelli di vulnerabilità. Tali interventi hanno avuto l’obiettivo di favorire l’elaborazione delle esperienze personali, promuovere la consapevolezza emotiva e sostenere lo sviluppo di competenze genitoriali adattive, in un’ottica preventiva.

Un elemento di particolare innovatività è stato rappresentato dal coinvolgimento sistematico dei partner, consentendo di ampliare la comprensione dei processi relazionali implicati nella transizione alla genitorialità e di evidenziare il ruolo della coppia come contesto fondamentale nella modulazione del rischio psicopatologico.

Nel complesso, il lavoro svolto ha contribuito a delineare un modello integrato della salute mentale perinatale, offrendo al contempo indicazioni operative per l'implementazione di protocolli di screening precoce e intervento nei servizi clinici e territoriali.

Le tabelle di seguito riportate presentano in dettaglio le caratteristiche del campione. Per quanto riguarda le analisi statistiche approfondite, si rimanda agli allegati relativi agli articoli già pubblicati.

Tabella 1.

Statistiche descrittive del campione

Variabile	Donna in gravidanza	Partner
	N (%)	N(%)
Titolo di studio		
Nessuno	0.3%	0.4%
Licenza elementare	0.5%	0.7%
Licenza media	13.6%	8%
Diploma	35.2%	41%
Laurea	27.7%	26.7%
Specializzazione post lauream o master	22.8%	23.1%
Condizione Professionale		
Disoccupata/o	32,8%	1.8%
Studentessa/o	2.2%	0.7%
Lavoro retribuito saltuario	9.6%	9.7%
Lavoro retribuito stabile	55.2%	87.6%
Pensione di invalidità	0.2%	0.1%
Stato civile		
Nubile/Celibe	9.8%	6.9%
Convivente/Coniugata/o	84.4%	89.5%
Separata/o/Divorziata/o	0.8%	3.6%
Condizioni economiche		
Gravi problemi	0,4%	0.8%
Qualche problema	9.3%	8.8%
Standard modesto	62%	63%
Standard medio-alto	28.3%	27.4%

Tabella 2.

Informazioni sulla gravidanza

Variabile	N%
Trimestre	
Primo	0.8%
Secondo	14.1%
Terzo	85.2%
Procreazione medicalmente assistita	
Sì	6.3%
No	93.7%

Capitolo 3

Il disagio psichico nel periodo perinatale: caratteristiche cliniche, fattori di rischio e implicazioni relazionali

3.1 La Depressione perinatale

La salute mentale materna nel periodo perinatale rappresenta oggi una priorità di sanità pubblica a livello globale. L'Organizzazione Mondiale della Sanità stima che circa il 10% delle donne in gravidanza e il 13% delle donne nel periodo immediatamente successivo al parto sviluppino un disturbo mentale, prevalentemente di natura depressiva (WHO, 2015). Tali dati evidenziano come la transizione alla genitorialità costituisca una fase di particolare vulnerabilità psicologica. In questa fase di vita, infatti, i cambiamenti ormonali, le riorganizzazioni identitarie e le nuove responsabilità connesse al ruolo genitoriale possono amplificare la suscettibilità a forme di disagio emotivo.

La presenza di sintomi depressivi nel periodo perinatale assume una rilevanza clinica e sociale significativa, in quanto può influenzare non solo il benessere della madre, ma anche il funzionamento della relazione di coppia, la qualità delle interazioni precoci genitore-bambino e, più in generale, lo sviluppo emotivo, cognitivo e relazionale del bambino. Numerosi studi hanno infatti evidenziato come la depressione perinatale sia associata a difficoltà nella regolazione emotiva materna, a minore sensibilità nelle interazioni precoci e a esiti evolutivi meno favorevoli nei figli (Al-Abri, 2023; Sacchi, 2021; Slomian, 2019).

Nel contesto italiano, le evidenze disponibili confermano la rilevanza epidemiologica dei disturbi emotivi nel periodo perinatale. Una recente revisione sistematica condotta da Camoni (2023), realizzata secondo le linee guida PRISMA (Liberati et al., 2009; Page et al., 2021), rappresenta il primo tentativo di sintetizzare in modo sistematico le stime di prevalenza della depressione perinatale nel nostro Paese. Gli studi inclusi, pubblicati tra il

2000 e il 2022, e selezionati attraverso una ricerca sistematica nei principali database internazionali, sono stati sottoposti a valutazione della qualità metodologica mediante la checklist del Joanna Briggs Institute (Munn et al., 2022). Dei 25 studi inizialmente giudicati eleggibili, 17 sono stati considerati di buona qualità metodologica e inclusi nelle analisi finali, fornendo dati relativi sia al periodo prenatale sia a quello postnatale.

I risultati della meta-analisi indicano che, durante la gravidanza, circa una donna su cinque presenta un rischio clinicamente significativo di depressione (Camoni, 2023). Nel periodo post-partum, la prevalenza appare fortemente influenzata dai criteri utilizzati per l'identificazione del rischio: adottando un cut-off dell'Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987) pari o superiore a 9, oltre una donna su quattro risulta a rischio di depressione; utilizzando invece un cut-off più restrittivo ($EPDS \geq 12$), la prevalenza si riduce a circa una donna su dieci. Questa variabilità sottolinea come le stime epidemiologiche possano essere significativamente influenzate dagli strumenti di screening e dai criteri diagnostici adottati, suggerendo la necessità di interpretare tali dati alla luce delle differenze metodologiche tra gli studi.

Ulteriori indicazioni sulla diffusione del disagio psicologico nel periodo perinatale emergono da una recente indagine multicentrica condotta in Italia tra novembre 2021 e novembre 2022, finalizzata alla valutazione del rischio di sintomi depressivi e ansiosi nelle donne in gravidanza e nel post-partum (INS, 2022). Lo studio ha coinvolto 20 strutture sanitarie distribuite in otto regioni italiane e ha incluso complessivamente 4.884 donne che hanno accettato di partecipare a uno screening psicologico. Di queste, il 57,3% è stato valutato nel periodo prenatale, mentre la restante parte nel periodo successivo alla nascita.

I risultati dello screening hanno evidenziato la presenza di livelli clinicamente rilevanti di vulnerabilità psicologica in una quota consistente del campione. In particolare, quasi una donna su quattro ha riportato punteggi indicativi di rischio di depressione sulla base dell'EPDS, mentre il 15,4% ha mostrato un rischio significativo di ansia secondo la

Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006). L'analisi stratificata per fase del periodo perinatale ha, inoltre, evidenziato una maggiore prevalenza di sintomi depressivi e ansiosi durante la gravidanza rispetto al periodo post-partum: nel preparto il rischio di depressione e ansia è risultato rispettivamente pari al 28,9% e al 17,1%, mentre nel periodo successivo alla nascita tali percentuali si sono ridotte al 19,0% e al 13,2%. Pur in presenza di una certa variabilità tra i centri coinvolti, questi risultati suggeriscono che la gravidanza rappresenta una fase particolarmente sensibile per l'emergere di condizioni di disagio psicologico. Le evidenze italiane risultano coerenti con quanto osservato a livello internazionale. Diverse revisioni sistematiche e meta-analisi condotte in contesti culturali differenti riportano infatti tassi di prevalenza comparabili a quelli italiani per la depressione perinatale (Shorey et al., 2018; Underwood et al., 2016; Nisar et al., 2020; Liu et al., 2022), suggerendo che il fenomeno rappresenti una condizione ampiamente diffusa e trasversale ai diversi contesti socio-culturali.

A livello internazionale, però, la letteratura evidenzia significative disuguaglianze nella distribuzione del rischio. Nei Paesi a basso e medio reddito, la prevalenza della depressione perinatale risulta infatti più elevata, raggiungendo il 15,6% durante la gravidanza e il 19,8% nel periodo post-partum (Howard et al., 2020; Hahn-Holbrook et al., 2018). Tali differenze sono generalmente attribuite all'interazione tra fattori socioeconomici, condizioni di stress cronico, accesso limitato ai servizi sanitari e minori opportunità di supporto sociale. Queste evidenze suggeriscono che la depressione perinatale non possa essere interpretata esclusivamente come un fenomeno individuale, ma debba essere compresa all'interno di una più ampia cornice bio-psico-sociale.

Per questo motivo, la letteratura scientifica si è progressivamente orientata verso l'identificazione dei principali fattori di rischio che possono contribuire all'insorgenza e al mantenimento della depressione perinatale.

La letteratura ha dimostrato che un ruolo cruciale è svolto dallo stress percepito e dagli eventi di vita avversi. La gravidanza rappresenta una fase di significativa riorganizzazione psicologica e relazionale, durante la quale l'esposizione a stressor, quali difficoltà economiche, problemi lavorativi, conflitti relazionali o esperienze traumatiche pregresse, può amplificare la vulnerabilità individuale. Studi longitudinali hanno dimostrato che elevati livelli di stress durante la gravidanza sono fortemente associati alla comparsa e alla persistenza di sintomi depressivi (Miodownik, 2025; Pearson, 2013).

Parallelamente, la qualità del supporto sociale rappresenta uno dei principali fattori protettivi. Un sostegno adeguato, sia emotivo che pratico, proveniente dal partner, dalla famiglia o dalla rete sociale, è associato a una riduzione significativa del rischio depressivo (Badaso, 2021). Al contrario, condizioni di isolamento sociale o relazioni conflittuali aumentano il carico emotivo e il rischio di depressione post-partum (Cho, 2022; Leahy-Warren et al., 2012). In particolare, la qualità della relazione di coppia assume un ruolo centrale: livelli elevati di conflittualità o una scarsa partecipazione del partner alla gravidanza sono stati associati a una maggiore incidenza di depressione prenatale (Barber, 2019).

Infine, anche i fattori socio-economici contribuiscono in modo significativo alla vulnerabilità depressiva. Basso livello di istruzione, instabilità lavorativa, difficoltà economiche e condizioni abitative precarie sono stati identificati come importanti predittori di depressione in gravidanza, in quanto associati a un aumento dello stress cronico e a una riduzione dell'accesso alle risorse di supporto (Maria de Jesus Silva, 2020; Lancaster et al., 2010).

La comprensione di tali fattori risulta fondamentale non solo per una migliore definizione dei modelli eziologici del disturbo, ma anche per lo sviluppo di programmi di prevenzione e intervento precoce mirati alle popolazioni maggiormente vulnerabili. Alla luce di queste considerazioni, il paragrafo successivo offrirà una panoramica dei principali disturbi

psicologici che possono manifestarsi nel periodo perinatale, con particolare attenzione alle loro caratteristiche cliniche, ai fattori di rischio e alle implicazioni per il benessere della madre, del bambino e della relazione genitore–figlio.

3.2 Il Baby Blues

Il *Baby Blues* (BB), noto anche come *Maternity Blues* (MB), rappresenta una condizione emotiva transitoria e di lieve entità che interessa una quota significativa di donne nel periodo immediatamente successivo al parto. A differenza di altri disturbi dell'umore perinatali, il BB non è classificato come un vero e proprio disturbo psicopatologico, poiché tende a presentare un decorso spontaneamente autolimitante e una sintomatologia generalmente lieve e temporanea.

Dal punto di vista clinico, i sintomi più frequentemente riportati includono umore deflesso, instabilità emotiva, crisi di pianto o facile tendenza al pianto, irritabilità, ansia, insonnia, affaticamento, difficoltà di concentrazione e una marcata ipersensibilità emotiva (Tosto et al., 2023). L'esordio del Baby Blues si colloca tipicamente tra il terzo e il quinto giorno dopo il parto, mentre la sintomatologia tende a risolversi spontaneamente entro le prime due o tre settimane. Il picco di intensità dei sintomi è generalmente osservato tra il decimo giorno e la terza settimana postpartum, come già descritto nella letteratura classica sull'argomento (Hamilton, 1967).

L'eziologia del Baby Blues appare complessa e multifattoriale. Un ruolo centrale è attribuito ai rapidi cambiamenti biologici che si verificano dopo il parto, in particolare al brusco calo dei livelli di estrogeni e progesterone e al concomitante aumento della prolattina. Queste modificazioni endocrine possono contribuire a determinare una maggiore labilità emotiva, una maggiore reattività allo stress e una generale vulnerabilità affettiva. A tali processi si affianca inoltre una possibile alterazione della regolazione dell'asse ipotalamo-ipofisi-

surrene (HPA), associata a una maggiore sensibilità agli stimoli stressanti e a una ridotta capacità di modulazione delle risposte emotive (Tosto et al., 2023).

Accanto ai fattori biologici, la letteratura evidenzia anche il ruolo di variabili ostetriche e psicosociali nel favorire l'insorgenza del Baby Blues. Tra queste figurano, ad esempio, una gravidanza non pianificata, il dolore percepito durante il parto, il ricorso al parto cesareo e le difficoltà nell'avvio dell'allattamento, condizioni che possono contribuire ad aumentare il carico emotivo e lo stress associati alla fase immediatamente successiva alla nascita (Tosto et al., 2023).

Dal punto di vista epidemiologico, studi internazionali stimano una prevalenza globale del Baby Blues che può raggiungere circa l'80% delle neomadri, sebbene tali percentuali mostrino una notevole variabilità in relazione al contesto geografico, socioeconomico e culturale. In particolare, condizioni di disagio sociale, deprivazione economica e limitato accesso a risorse di supporto possono contribuire ad aumentare la probabilità di sperimentare questa condizione. In Europa, la prevalenza media stimata si attesta intorno al 55,2% (Tosto et al., 2023).

Sebbene il decorso del Baby Blues sia generalmente benigno e autolimitante, la letteratura evidenzia come una sintomatologia particolarmente intensa o persistente oltre i 10–14 giorni postpartum richieda un'attenta valutazione clinica. In una percentuale non trascurabile di casi, infatti, il Baby Blues può rappresentare un fattore di vulnerabilità per lo sviluppo di una depressione postpartum conclamata: si stima che circa il 10–20% delle donne che sperimentano sintomi di MB possa successivamente sviluppare un disturbo depressivo nel periodo postnatale (Della Vedova & Cristini, 2011).

La diagnosi del Baby Blues risulta tuttavia complessa, anche a causa dell'assenza di strumenti diagnostici univoci e specificamente validati. In ambito clinico e di ricerca vengono utilizzate diverse scale di valutazione. Tra queste, la *Stein Maternity Blues Scale*, composta da 13 item, consente di individuare diversi livelli di disagio emotivo: punteggi

compresi tra 3 e 8 indicano generalmente una condizione di disagio lieve, mentre punteggi pari o superiori a 9 suggeriscono una sintomatologia più intensa. Un ulteriore strumento ampiamente utilizzato è l'*Edinburgh Postnatal Depression Scale* (EPDS), composta da 10 item, che consente di individuare un possibile disturbo depressivo postpartum: punteggi superiori a 12 indicano un elevato rischio di depressione, mentre valori compresi tra 9 e 12 suggeriscono la necessità di un monitoraggio clinico (Tosto et al., 2023).

Dal punto di vista degli interventi, la letteratura sottolinea l'importanza di adottare un approccio di supporto integrato, che non si limiti esclusivamente all'ambito psicologico ma includa anche dimensioni relazionali e sociali. Accanto a interventi di tipo psicoeducativo o psicoterapeutico, come la terapia cognitivo-comportamentale o i gruppi di sostegno, assume infatti particolare rilevanza la possibilità per le neomadri di accedere a reti di supporto sociale. La condivisione di esperienze, emozioni, paure e strategie di coping con altre donne che attraversano la stessa fase di vita può favorire la normalizzazione delle reazioni emotive postpartum e contribuire a prevenire l'evoluzione verso forme di disagio psicologico più severe (Ravaldi, 2007; Shorey et al., 2018; Biaggi et al., 2016).

3.3 Disturbo Depressivo Maggiore con Esordio nel Peripartum (DPP)

Il Disturbo Depressivo Maggiore con esordio nel peripartum (DPP) rappresenta la condizione psicopatologica più frequentemente riscontrata nel periodo perinatale e costituisce un rilevante problema di salute pubblica per le sue implicazioni cliniche, relazionali e sociali. In Italia, la prevalenza stimata della depressione nel periodo successivo al parto varia tra il 7% e il 12% delle neomadri (Ministero della Salute, 2023), con possibili conseguenze non solo sul benessere psicologico materno ma anche sulla qualità delle relazioni familiari e sullo sviluppo del bambino.

Secondo il Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition, Text Revision (DSM-5-TR), il DPP è classificato come una specificazione del Disturbo

Depressivo Maggiore quando l'esordio dei sintomi avviene durante la gravidanza oppure entro le prime quattro settimane successive al parto (American Psychiatric Association [APA], 2023). Tuttavia, numerosi autori hanno sottolineato come questa delimitazione temporale risulti relativamente restrittiva rispetto alla reale manifestazione clinica del disturbo, che può emergere o consolidarsi lungo un arco temporale più ampio che comprende l'intero periodo perinatale.

Un crescente numero di studi ha evidenziato come i sintomi depressivi possano manifestarsi già durante la gravidanza, suggerendo l'esistenza di una sostanziale continuità psicopatologica tra periodo prenatale e postnatale (). In particolare, lo studio longitudinale condotto da Banti et al. (2011) ha rilevato una prevalenza significativa di sintomi depressivi già nel corso della gravidanza, evidenziando come la depressione postpartum rappresenti frequentemente l'evoluzione o la riacutizzazione di una condizione depressiva preesistente. Queste evidenze contribuiscono a mettere in discussione una concezione dicotomica della depressione perinatale, basata sulla separazione tra fase prenatale e postnatale, e suggeriscono piuttosto l'opportunità di adottare una prospettiva longitudinale nella valutazione della salute mentale materna. In questa prospettiva, il periodo perinatale può essere considerato come un continuum di vulnerabilità psicologica all'interno del quale fattori biologici, psicologici e relazionali interagiscono nel determinare l'emergere o il mantenimento dei sintomi depressivi.

3.3.1 Criteri diagnostici del Disturbo Depressivo Maggiore nel periodo perinatale

Dal punto di vista diagnostico, la diagnosi di Disturbo Depressivo Maggiore con esordio nel peripartum richiede la presenza di almeno cinque sintomi per un periodo minimo di due settimane, con un cambiamento significativo rispetto al precedente livello di funzionamento. Almeno uno dei sintomi deve consistere in umore depresso oppure in marcata perdita di interesse o piacere nelle attività quotidiane (APA, 2023).

Tra i sintomi principali rientrano: umore depresso persistente, anedonia, significative alterazioni dell'appetito o del peso corporeo, insonnia o ipersonnia, agitazione o rallentamento psicomotorio, affaticamento o perdita di energia, sentimenti di autosvalutazione o colpa eccessiva, difficoltà di concentrazione o indecisione e pensieri ricorrenti di morte o ideazione suicidaria. Nel contesto perinatale, tali manifestazioni possono assumere caratteristiche peculiari, intrecciandosi con vissuti emotivi legati alla maternità, alle trasformazioni corporee e alla riorganizzazione identitaria connessa alla transizione al ruolo genitoriale.

Oltre ai sintomi depressivi tipicamente descritti nei disturbi dell'umore, la depressione perinatale è frequentemente accompagnata da specifiche difficoltà relazionali nella diade madre-bambino. In questo contesto, le donne possono sperimentare intensi sentimenti di inadeguatezza rispetto al ruolo materno, sensi di colpa persistenti, difficoltà nel riconoscere e rispondere in modo sensibile ai bisogni del neonato, paura di rimanere da sole con il bambino o vissuti di estraneità emotiva nei suoi confronti (Ravaldi, 2007).

Tali esperienze possono contribuire all'instaurarsi di un circolo vizioso in cui l'intensificazione dei sintomi depressivi riduce ulteriormente la percezione di competenza genitoriale e la capacità di sintonizzazione emotiva con il bambino. In questo senso, la depressione perinatale non rappresenta esclusivamente una condizione individuale, ma può avere importanti ripercussioni sullo sviluppo della relazione primaria e sulla qualità delle interazioni precoci.

Un ulteriore aspetto rilevante nella comprensione della depressione perinatale riguarda la dimensione della riorganizzazione identitaria associata alla maternità. La nascita di un figlio comporta infatti un profondo processo di trasformazione psicologica, che implica la ridefinizione del proprio ruolo, delle relazioni significative e della rappresentazione di sé.

In questa prospettiva, alcuni autori hanno sottolineato come la transizione alla maternità possa comportare anche una dimensione di lutto simbolico legata alla perdita dell'identità

precedente della donna come individuo autonomo e indipendente (Ravasi Bellocchio, 2012). Quando questo processo di rielaborazione non viene adeguatamente integrato sul piano psicologico, può configurarsi come un lutto non elaborato che aumenta la vulnerabilità allo sviluppo di sintomi depressivi nel periodo perinatale. In tali situazioni, il ricorso a meccanismi difensivi quali la dissociazione può rappresentare una modalità maladattiva di gestione di vissuti emotivi percepiti come intollerabili, contribuendo al mantenimento o all'aggravamento del quadro psicopatologico.

3.4 Evidenze longitudinali sulla depressione perinatale

Un contributo particolarmente significativo alla comprensione della depressione perinatale come fenomeno dinamico e continuo è rappresentato dallo studio longitudinale condotto da Banti et al. (2011). Gli autori hanno esaminato la prevalenza, l'incidenza, la ricorrenza e i nuovi esordi dei sintomi depressivi a partire dal terzo mese di gravidanza fino al primo anno dopo il parto, offrendo una prospettiva temporale ampia e clinicamente rilevante.

I risultati mostrano come la depressione nel periodo perinatale non rappresenti un evento isolato circoscritto al periodo post-partum, ma piuttosto un processo psicopatologico che può emergere, persistere o riattivarsi lungo l'intero arco temporale che va dalla gravidanza avanzata al primo anno di vita del bambino. In particolare, gli autori evidenziano una prevalenza significativa di sintomi depressivi già durante la gravidanza, con percentuali talvolta sovrapponibili a quelle osservate nel periodo successivo alla nascita.

Un elemento di particolare interesse riguarda la distinzione tra diverse traiettorie di decorso della sintomatologia depressiva. Lo studio identifica infatti pattern differenti di depressione ricorrente, persistente e di nuovo esordio. I dati indicano che una quota significativa di donne che manifestano sintomi depressivi nel post-partum presentava già una sintomatologia depressiva durante la gravidanza, suggerendo che il periodo postnatale possa rappresentare, in molti casi, una fase di riacutizzazione piuttosto che di insorgenza ex novo del disturbo.

Parallelamente, viene identificato anche un sottogruppo di donne che sviluppano sintomi depressivi esclusivamente dopo il parto, evidenziando la necessità di mantenere elevata l'attenzione clinica anche nei casi in cui la gravidanza sembri essersi svolta in modo psicologicamente adattivo.

Dal punto di vista clinico, queste evidenze supportano l'ipotesi che la depressione perinatale sia caratterizzata da pattern eterogenei di esordio e decorso, rendendo potenzialmente inadeguati interventi di screening limitati a un singolo momento temporale, come la visita puerperale. Al contrario, emerge la necessità di un monitoraggio longitudinale del benessere psicologico materno, che accompagni la donna dalla gravidanza al primo anno dopo la nascita, integrando la valutazione psicologica nei percorsi di assistenza ostetrica.

Inoltre, la mancata individuazione precoce dei sintomi depressivi durante la gravidanza può contribuire a una sottostima della reale prevalenza della depressione post-partum, con il rischio di interpretare come “nuovo esordio” ciò che in realtà rappresenta la prosecuzione di una sofferenza già presente. Questa prospettiva assume particolare rilevanza alla luce delle evidenze che associano la depressione prenatale non trattata a esiti negativi sia per la madre sia per il bambino, tra cui maggiori livelli di distress materno, difficoltà nella transizione alla genitorialità e problematiche nella relazione madre-bambino.

In conclusione, è possibile affermare che il lavoro di Banti et al. (2011) contribuisce in modo sostanziale a ridefinire il concetto di depressione post-partum, collocandolo all'interno di una più ampia cornice di depressione perinatale e rafforzando l'importanza di strategie di prevenzione, screening precoce e continuità della presa in carico nel periodo che va dalla gravidanza al primo anno di vita del bambino.

3.5 Impatto dei disturbi perinatali sulla salute mentale materna

Le conseguenze dei disturbi mentali materni nel periodo perinatale non si limitano alla dimensione individuale della madre, ma si estendono in modo significativo al funzionamento

familiare e allo sviluppo del bambino. Un'ampia letteratura scientifica ha evidenziato come la depressione perinatale sia associata a numerosi esiti negativi sia sul piano della salute materna sia sul piano dello sviluppo infantile (Yang, 2022; Rogers, 2023).

Dal punto di vista della salute materna, le donne che sperimentano depressione o altri disturbi mentali nel periodo postnatale possono incontrare difficoltà nel prendersi cura di sé, con una ridotta capacità di alimentarsi adeguatamente, mantenere una corretta igiene personale e accedere alle cure sanitarie necessarie (Dagher, 2021). Questa compromissione del funzionamento quotidiano può contribuire al peggioramento delle condizioni di salute fisica e aumentare il rischio di problematiche mediche nel periodo successivo al parto (Miller, 2022).

Parallelamente, la sofferenza psicologica materna può influenzare in modo significativo la qualità delle interazioni precoci madre-bambino. In particolare, la depressione perinatale è stata associata a una riduzione della sensibilità materna, a minori livelli di responsività ai segnali del neonato e a maggiori difficoltà nell'instaurare un buon attaccamento al bambino e nella regolazione emotiva durante le interazioni precoci (O'Dea, 2023, Erickson, 2019). Tali dinamiche possono ostacolare l'instaurarsi di un legame di attaccamento sicuro e interferire con processi fondamentali per lo sviluppo socio-emotivo del bambino.

Considerata l'elevata plasticità e vulnerabilità dei primi mesi di vita, alterazioni nelle interazioni precoci possono avere effetti duraturi sullo sviluppo infantile. Numerosi studi hanno infatti evidenziato associazioni tra depressione materna perinatale e maggior rischio di difficoltà cognitive, emotive e comportamentali nei figli, nonché problematiche relative alla crescita e alla salute fisica, come malnutrizione o maggiore suscettibilità a infezioni (Rogers, 2020).

L'utilizzo di strumenti di screening e valutazione psicologica nel periodo perinatale assume un valore particolarmente rilevante alla luce del persistente stigma sociale associato alla malattia mentale durante la gravidanza e nel post-partum. Nonostante la crescente attenzione

scientifica verso la salute mentale perinatale, molte donne continuano a percepire sentimenti di vergogna, colpa o inadeguatezza legati alla possibilità di sperimentare difficoltà psicologiche in una fase della vita culturalmente rappresentata come intrinsecamente positiva e gratificante. Tale stigma costituisce un ostacolo significativo alla richiesta di aiuto e all'accesso ai servizi di supporto psicologico e psichiatrico (Quatraro & Grussu, 2018).

Le conseguenze della mancata identificazione e del mancato trattamento dei disturbi mentali perinatali possono essere particolarmente gravi. Tra gli esiti più critici vi è il rischio suicidario, che rappresenta una delle principali cause di mortalità materna nei Paesi ad alto reddito (Zhang, 2020). In questo contesto, uno studio longitudinale su vasta scala condotto da Lee et al. (2022) ha evidenziato come le donne con diagnosi di depressione post-partum presentino un rischio di suicidio significativamente più elevato rispetto a quelle senza tale diagnosi. In particolare, mentre nelle donne senza depressione post-partum il rischio di tentativo suicidario emerge mediamente dopo circa cinque anni dal parto, nelle donne con DPP questa finestra temporale si riduce drasticamente, manifestandosi spesso entro il primo anno successivo alla nascita. Studi recenti indicano inoltre che il suicidio rappresenta una delle principali cause di mortalità tra le donne durante la gravidanza e nel primo anno dopo il parto (Yu et al., 2024). Questo dato sottolinea l'importanza di considerare il periodo perinatale come una fase di particolare vulnerabilità psicologica che richiede un monitoraggio attento e continuativo. Anche il campione palermitano dal cui studio prende origine il presente elaborato evidenzia un dato rilevante in relazione all'ideazione suicidaria: il 2.8% del campione di donne in gravidanza ha riportato la presenza di pensieri suicidari durante il periodo perinatale.

Nonostante la rilevanza e la gravità di tali esiti, la letteratura scientifica sottolinea che i disturbi mentali perinatali rappresentano condizioni trattabili. Interventi mirati alla riduzione dei sintomi depressivi e al sostegno del benessere psicologico materno sono associati a

miglioramenti significativi non solo nella salute mentale delle madri, ma anche negli indicatori di sviluppo e benessere dei bambini (Carona, 2023).

In questa prospettiva, l'Organizzazione Mondiale della Sanità sottolinea l'importanza di sviluppare modelli di intervento integrati e accessibili, che possano essere implementati anche in contesti caratterizzati da risorse limitate. In diversi Paesi a basso e medio reddito sono stati sviluppati programmi di intervento a basso costo basati sul coinvolgimento di operatori sanitari non specialisti o di figure di supporto comunitario adeguatamente formate, dimostrando risultati promettenti nella riduzione dei sintomi depressivi materni e nel miglioramento del benessere familiare (WHO, 2015).

Alla luce di queste evidenze, la salute mentale materna è oggi riconosciuta come una componente essenziale delle politiche sanitarie perinatali. Nell'ambito dell'agenda globale per lo sviluppo sostenibile, l'attenzione si sta progressivamente spostando da indicatori esclusivamente focalizzati sulla mortalità materna verso misure più ampie di benessere, come la copertura sanitaria universale e l'aspettativa di vita in buona salute. Questo cambiamento di paradigma implica un rafforzamento dell'integrazione tra salute mentale e servizi di assistenza materno-infantile, nonché lo sviluppo di strategie di prevenzione, identificazione precoce e intervento che siano sensibili alle disuguaglianze sociali, alle questioni di genere e alla tutela dei diritti umani.

3.6 Studio 1. When a Parent Is Born: An Integrated Approach to Perinatal Mental Health and Early Risk Screening

Claudia Guarneri, Jada Sottile, Eleonora Bevacqua, Maria Clara Leone, Raffaella Mineo, Claudia Rini, Martina Riolo, Antonio Maiorana and Maria Rita Infurna

Il paragrafo presenta in forma sintetica lo studio “When a Parent Is Born: An Integrated Approach to Perinatal Mental Health and Early Risk Screening”, pubblicato nell’anno 2025, sulla rivista *European Journal of Investigation in Health, Psychology and Education*. La versione completa dell’articolo è consultabile nell’Allegato 1, dove sono riportati metodologia e risultati in dettaglio.

In linea con quanto precedentemente discusso, la valutazione psicologica durante la gravidanza si configura come un passaggio cruciale nell’ambito della prevenzione e della promozione della salute mentale perinatale. Essa consente, infatti, di individuare precocemente la presenza di sintomi depressivi e di altre forme di disagio psicopatologico, favorendo l’attivazione di interventi tempestivi e mirati. In questa prospettiva si colloca lo studio “*When a Parent Is Born: An Integrated Approach to Perinatal Mental Health and Early Risk Screening*” (Guarneri et al., 2025), sviluppato secondo un approccio integrato e multidisciplinare, con l’obiettivo di implementare procedure sistematiche di screening precoce dei principali fattori di rischio psicologici e psicosociali nel periodo prenatale. Il lavoro si fonda su un modello biopsicosociale che interpreta la salute mentale come il risultato dell’interazione dinamica tra variabili individuali, relazionali e contestuali, riconoscendo la gravidanza come una fase caratterizzata da una duplice natura: da un lato, momento di vulnerabilità, dall’altro, finestra privilegiata per interventi preventivi.

La letteratura evidenzia come la gravidanza comporti profonde trasformazioni sul piano biologico, psicologico e relazionale, tali da poter amplificare fragilità preesistenti o favorire

l'emergere di nuove difficoltà. In questo quadro, accanto al ruolo ormai consolidato delle esperienze di maltrattamento infantile come fattori di rischio a lungo termine per lo sviluppo di psicopatologia, ulteriori determinanti risultano rilevanti nel contribuire al disagio psicologico durante la gravidanza e il periodo post-partum. Tra questi, assumono particolare rilievo la carenza di supporto sociale, l'esposizione a eventi di vita stressanti, le difficoltà relazionali e la presenza di sintomi psicosomatici, che possono agire in modo cumulativo o interattivo nell'aumentare la vulnerabilità individuale.

Alla luce di tali evidenze, l'individuazione dei fattori predittivi di condizioni psicologiche avverse rappresenta un obiettivo centrale non solo per la tutela del benessere materno, ma anche per le implicazioni sullo sviluppo del bambino e sulla qualità delle prime interazioni genitore-figlio. In questo contesto, lo studio di Guarneri et al. (2025) ha analizzato un ampio campione di donne in gravidanza ($n = 997$), esaminando in modo integrato variabili quali le esperienze di abuso infantile, il supporto sociale percepito, la qualità della relazione di coppia e gli eventi stressanti, al fine di comprendere i determinanti del disagio psicologico nel periodo perinatale.

I risultati preliminari hanno evidenziato una presenza significativa di sintomi depressivi anche in campioni non clinici, confermando il ruolo centrale delle esperienze traumatiche infantili, in particolare dell'abuso emotivo e della trascuratezza, come predittori di vulnerabilità psicologica. Parallelamente, è emersa la funzione protettiva della qualità della relazione di coppia, sottolineando l'importanza delle risorse relazionali nel favorire un migliore adattamento emotivo durante la gravidanza. Complessivamente, tali evidenze supportano una concezione multilivello della salute mentale perinatale, evidenziando la necessità di modelli integrati di valutazione e intervento.

Dal punto di vista metodologico, lo studio si è inserito nel progetto "Quando nasce un genitore", caratterizzato da un disegno longitudinale articolato in due momenti di rilevazione (gravidanza e follow-up post-partum). Nella presente analisi sono stati considerati

esclusivamente i dati raccolti durante la gravidanza (T0). Il campione era costituito da 997 donne (età media = 32.75 anni; DS = 5.33), reclutate presso ambulatori ospedalieri dedicati alla gravidanza fisiologica e a rischio. La procedura prevedeva la somministrazione di un protocollo di screening psicologico integrato in formato self-report, con il supporto di psicologi, finalizzato alla rilevazione di variabili sociodemografiche, informazioni ostetriche e dimensioni psicologiche e relazionali.

Per quanto concerne la valutazione delle variabili principali, la sintomatologia depressiva è stata misurata mediante l'Edinburgh Postnatal Depression Scale (EPDS), mentre il disagio psicologico perinatale più ampio è stato rilevato attraverso la Perinatal Assessment of Maternal Affectivity (PAMA). Il supporto sociale percepito è stato valutato tramite la Maternity Social Support Scale (MSSS), e la qualità della relazione di coppia mediante la Dyadic Adjustment Scale (DAS). Le esperienze di maltrattamento infantile sono state indagate con il Childhood Trauma Questionnaire–Short Form (CTQ-SF), mentre l'attaccamento prenatale è stato valutato attraverso la Maternal Antenatal Attachment Scale (MAAS).

Dal punto di vista analitico, sono state inizialmente condotte analisi descrittive per tutte le variabili considerate. Successivamente, sono state effettuate regressioni lineari univariate per esplorare l'associazione tra ciascun predittore e gli esiti psicopatologici (EPDS e PAMA), seguite da modelli multivariati volti a identificare i contributi specifici delle diverse variabili. Un ulteriore modello è stato testato su un sottocampione di 850 partecipanti con dati completi sulla relazione di coppia, al fine di migliorare l'accuratezza delle stime. Il livello di significatività statistica è stato fissato a $p < .05$.

Le analisi descrittive hanno evidenziato una prevalenza del 24.7% di sintomi depressivi moderati o elevati e un rischio suicidario nel 2.4% delle partecipanti. Inoltre, il disagio psicologico valutato tramite PAMA ha mostrato una diffusione rilevante di sintomi ansiosi (38.7%), problematiche fisiologiche (37.1%), sintomi psicosomatici (37%) e stress (21.5%).

Per quanto riguarda le variabili contestuali, la maggior parte delle donne ha riportato livelli moderati o elevati di supporto sociale, mentre, nel sottocampione analizzato, la maggioranza ha evidenziato un buon adattamento diadico, pur in presenza di una quota di disagio relazionale.

Le analisi di regressione univariata hanno mostrato associazioni significative tra tutti i predittori considerati e gli esiti psicopatologici, con relazioni positive per le esperienze traumatiche infantili e negative per il supporto sociale, la qualità della relazione di coppia e l'attaccamento prenatale. Nei modelli multivariati, alcune variabili hanno mantenuto un ruolo particolarmente rilevante: l'abuso emotivo e la trascuratezza emotiva si sono confermati predittori significativi dei sintomi depressivi, mentre la qualità della relazione di coppia ha mostrato una forte associazione negativa con il disagio psicologico. Analoghi risultati sono emersi per il disagio psicologico generale, per il quale l'abuso emotivo e la qualità della relazione di coppia hanno rappresentato i principali predittori.

Infine, i modelli complessivi hanno evidenziato una significativa capacità esplicativa, confermando che il disagio psicologico perinatale è il risultato di una complessa configurazione di fattori di rischio e di protezione. In particolare, le esperienze traumatiche infantili e la qualità della relazione di coppia si configurano come elementi centrali nella comprensione dei processi di vulnerabilità e adattamento psicologico durante la gravidanza.

Capitolo 4

Il maltrattamento infantile e le sue implicazioni sulla salute mentale perinatale.

4.1 Esperienze avverse infantili e salute mentale perinatale: evidenze teoriche ed empiriche

L'Organizzazione Mondiale della Sanità definisce il maltrattamento infantile come l'insieme di abusi e forme di incuria che colpiscono individui di età inferiore ai 18 anni e che comprendono il maltrattamento fisico e/o emotivo, l'abuso sessuale, la negligenza, l'abbandono e lo sfruttamento. Tali esperienze possono produrre un danno reale o potenziale alla salute, allo sviluppo, alla sopravvivenza o alla dignità del bambino, e si verificano generalmente all'interno di relazioni caratterizzate da responsabilità, fiducia o asimmetria di potere. In questa prospettiva, anche l'esposizione del minore alla violenza tra i partner può essere considerata una forma di maltrattamento, in quanto il bambino, pur non essendo direttamente vittima della violenza, ne subisce gli effetti sul piano emotivo, relazionale e dello sviluppo psicologico (OMS, 2002).

Il maltrattamento infantile rappresenta un fenomeno complesso e multidimensionale che raramente si manifesta in forme isolate. Più frequentemente, esso si configura come un intreccio di esperienze traumatiche concomitanti e cumulative, che si sviluppano all'interno di contesti familiari caratterizzati da disfunzionalità relazionali, instabilità o carenze nelle capacità di accudimento. La letteratura clinica e psicosociale ha ampiamente documentato come le diverse espressioni della violenza all'infanzia – abuso fisico, psicologico e sessuale, nonché forme di neglect emotivo e fisico – tendano a coesistere all'interno degli stessi contesti familiari, amplificando in modo significativo il loro impatto sullo sviluppo del

bambino (Cirillo, 2005; Di Blasio, 2000; Malacrea & Lorenzini, 2002). In linea con la definizione proposta da Gilbert e colleghi (2009), il maltrattamento infantile può essere dunque inteso come l'insieme di comportamenti attivi o omissivi messi in atto da figure genitoriali o da altri adulti significativi che compromettono, in modo reale o potenziale, la salute fisica e mentale, lo sviluppo, la sopravvivenza o la dignità del minore.

Dal punto di vista dello sviluppo psicologico, numerosi contributi teorici, in particolare nell'ambito della letteratura psicodinamica e dell'attaccamento, hanno evidenziato come l'ambiente relazionale primario rappresenti la matrice fondamentale per la costruzione dell'identità psichica e per l'organizzazione dei modelli interni di funzionamento emotivo e relazionale (Bowlby, 1969; 1988). Le prime relazioni di accudimento, infatti, svolgono un ruolo cruciale nel fornire al bambino esperienze di sicurezza, riconoscimento e regolazione affettiva (Stern, 1992). Quando tali relazioni risultano caratterizzate da incoerenza, imprevedibilità, trascuratezza o trauma, il processo di sviluppo del Sé può subire arresti, distorsioni o deviazioni significative. In particolare, un contesto relazionale segnato da trascuratezza emotiva, invisibilità del bambino o incapacità genitoriale di riconoscere e rispondere adeguatamente ai suoi bisogni affettivi può compromettere profondamente lo sviluppo delle competenze di regolazione emotiva, dell'immagine di sé e della fiducia nelle relazioni (Fonagy, 2002). Un contributo fondamentale alla comprensione delle conseguenze a lungo termine delle esperienze traumatiche infantili è rappresentato dal costrutto delle *Adverse Childhood Experiences* (ACEs), introdotto da Felitti e collaboratori (1998). Questo modello ha ampliato la prospettiva di analisi delle esperienze traumatiche infantili, includendo una vasta gamma di eventi avversi e condizioni ambientali disfunzionali sperimentate durante l'infanzia. Le ACEs comprendono sia forme dirette di vittimizzazione, come l'abuso fisico, emotivo o sessuale e la trascuratezza, sia forme indirette di esposizione a contesti familiari disfunzionali, quali la violenza domestica, l'abuso di sostanze da parte dei genitori, la malattia mentale di un familiare o la separazione dei genitori.

Nello studio del 1998 (Felitti et al.) le analisi statistiche hanno evidenziato una relazione dose-risposta tra il numero di ACEs e il rischio di esiti avversi in età adulta, indicando che all'aumentare delle esperienze traumatiche precoci corrisponde un incremento significativo della probabilità di sviluppare problemi di salute mentale e comportamenti a rischio. In particolare, i soggetti con quattro o più ACEs presentavano un rischio significativamente maggiore di depressione, abuso di sostanze, tentativi di suicidio e disturbi psichiatrici rispetto a coloro senza ACEs. Studi successivi, effettuati dallo stesso gruppo (Dube, 2002; Williamson, 2002), hanno confermato la stabilità di tali associazioni, sottolineando come le esperienze avverse infantili esercitino un impatto duraturo sulla salute lungo l'intero arco di vita.

Uno studio recente di George Mildred-Short et al. (2025), basato sull'analisi delle classi latenti, ha esaminato l'associazione tra le ACEs e i differenti esiti psicopatologici in un campione adulto clinico (514 adulti (71 % female), età 18–85 ($M = 26.25$, $SD = 8.68$), con particolare attenzione alla depressione. L'analisi ha permesso di identificare tre distinti profili di avversità: una classe a bassa esposizione, una classe di maltrattamento, caratterizzata da elevati livelli di abuso fisico ed emotivo, e una classe di disfunzione familiare, contraddistinta principalmente dalla presenza di malattia mentale in famiglia e separazione genitoriale. Controllando per genere e comorbidità psicopatologica, i risultati hanno mostrato che gli individui appartenenti alla classe di maltrattamento presentavano livelli significativamente più elevati di sintomatologia depressiva rispetto alla classe a bassa avversità, indicando una relazione specifica tra esposizione a esperienze di abuso e vulnerabilità depressiva in età adulta. Al contrario, la classe di disfunzione familiare non mostrava un aumento significativo dei sintomi depressivi una volta considerata la co-occorrenza di altri disturbi, suggerendo che non tutte le forme di avversità infantile incidono allo stesso modo sul rischio depressivo. Questi risultati evidenziano l'importanza di considerare non soltanto il numero complessivo delle ACEs, ma anche la qualità, la tipologia

e la configurazione dei pattern di esposizione, al fine di comprendere in modo più accurato i percorsi di rischio che conducono allo sviluppo di sintomatologia depressiva. Un ampio corpus di ricerche ha infatti dimostrato che l'esposizione a forme di maltrattamento infantile rappresenta uno dei principali fattori di rischio per lo sviluppo di vulnerabilità psicopatologica persistente, includendo alterazioni nei sistemi di regolazione dello stress, difficoltà nei processi cognitivi ed emotivi e una maggiore suscettibilità all'insorgenza di disturbi mentali in età adulta (Cicchetti & Toth, 2005; Gonzalez, 2015). In particolare, numerosi studi longitudinali e meta-analitici hanno documentato associazioni robuste tra esperienze di abuso infantile e un ampio spettro di esiti psicopatologici, tra cui sintomatologia depressiva e ansiosa, disturbo post-traumatico da stress, abuso di sostanze e disturbi di personalità (Hipke, 2024; Brunton, 2024).

Tali evidenze suggeriscono come le esperienze di maltrattamento subite durante l'infanzia possano interferire profondamente con i processi di sviluppo dell'organizzazione psicologica dell'individuo, influenzando la strutturazione dei sistemi di regolazione affettiva, dei modelli operativi interni e delle modalità di elaborazione delle esperienze relazionali (Fonagy, 2002, 2005). Questo insieme di vulnerabilità può permanere nel corso del ciclo di vita e riemergere con particolare intensità in momenti evolutivi critici. Tra questi, la gravidanza rappresenta una fase particolarmente sensibile, in quanto comporta una profonda riorganizzazione dell'identità personale e relazionale e può riattivare memorie, rappresentazioni e modelli relazionali radicati nelle prime esperienze di accudimento (Mucci, 2020).

In questa direzione, la systematic review di Mamun (2023) ha esaminato l'associazione tra esperienze avverse infantili e sintomi di depressione e ansia nel periodo perinatale, evidenziando come la maggior parte degli studi inclusi riporti una relazione positiva significativa tra ACEs e psicopatologia durante la gravidanza (Fredriksen, 2017; Narayan, 2018; Young-Wolff, 2019). Ad esempio, un ampio studio di coorte condotto in Canada (Racine, 2020) ha mostrato che le ACEs risultano significativamente associate a un aumento

dei sintomi depressivi in gravidanza (aOR = 1.26; IC 95%: 1.12–1.43). In modo coerente, Letourneau (2019) ha rilevato che a ogni esperienza avversa materna corrisponde un incremento del rischio di sintomi ansiosi e depressivi nel periodo prenatale. Ulteriori evidenze emergono da uno studio osservazionale statunitense condotto da Hantsoo e collaboratori (2019), che ha documentato un effetto diretto delle ACEs sulla depressione in gravidanza ($B = 1.1$, $SE = 0.44$, $p = 0.01$).

La stessa definizione di abuso, così come proposta dall'Organizzazione Mondiale della Sanità (WHO, 2002), riflette la complessità e l'eterogeneità delle esperienze incluse sotto questa ampia categoria concettuale. Pur nella consapevolezza che ogni definizione comporta inevitabilmente una semplificazione di fenomeni complessi, la letteratura scientifica riconosce generalmente diverse principali forme di maltrattamento infantile, tra cui:

- abuso fisico;
- abuso sessuale (intrafamiliare ed extrafamiliare);
- abuso psicologico o emotivo;
- neglect emotivo e neglect fisico;
- violenza assistita intrafamiliare;
- patologia delle cure (incuria fisica, incuria emotiva, discuria e ipercura).

Nei paragrafi successivi, tali forme di maltrattamento verranno analizzate alla luce delle principali evidenze teoriche ed empiriche disponibili, con particolare attenzione alle loro implicazioni per lo sviluppo del funzionamento psichico e per la vulnerabilità psicologica nel periodo perinatale.

4.1.2 Abuso fisico e il rischio psicopatologico in gravidanza

Il National Center of Child Abuse and Neglect definisce il maltrattamento infantile come una condizione in cui comportamenti intenzionali o gravi omissioni da parte di figure adulte responsabili del bambino causano, o contribuiscono a mantenere, danni fisici o menomazioni

prevedibili ed evitabili (NCCAN, 1981). L'abuso fisico rientra in questa definizione e si riferisce all'uso intenzionale della forza fisica o alla grave trascuratezza che produce un danno alla salute, allo sviluppo o alla dignità del minore. Tale forma di violenza può determinare esiti estremi, come la morte, ma più frequentemente provoca lesioni, disabilità o danni fisici significativi.

L'abuso fisico può manifestarsi attraverso molteplici comportamenti, tra cui colpire, percuotere, prendere a calci, mordere, strangolare, bruciare, avvelenare o soffocare, così come attraverso gravi omissioni di cura. Sebbene agisca direttamente sul corpo, questa forma di maltrattamento ha profonde ripercussioni anche sul piano psicologico, incidendo sulla regolazione emotiva, sul senso di sicurezza di base e sulle modalità relazionali (Gruhn, 2020). Tali esiti, spesso duraturi, possono riattivarsi in età adulta, in particolare durante la gravidanza, fase in cui il corpo torna ad essere un luogo centrale dell'esperienza soggettiva. La letteratura scientifica evidenzia in modo consistente che una storia di abuso fisico infantile rappresenta un importante fattore di rischio per esiti psicopatologici e medici avversi durante la gravidanza. In particolare, lo studio di Akinbode (Akinbode, 2019) ha mostrato che l'abuso fisico predice sintomi depressivi in gravidanza e a 12 settimane postpartum. L'esperienza combinata di abuso fisico e abuso sessuale si associa inoltre a un aumentato rischio di depressione antenatale, mentre non emergono risultati significativi per la PPD. Tali dati suggeriscono una specifica vulnerabilità depressiva già in epoca prenatale nelle donne con una storia di maltrattamento fisico.

Ulteriori evidenze indicano che abuso fisico e abuso sessuale, considerati sia singolarmente sia congiuntamente, aumentano il rischio di sintomi depressivi e di Post-Traumatic Stress Disorder (PTSD) durante la gravidanza (Robertson-Blackmore, 2013). Robertson-Blackmore et al. (2013) hanno infatti rilevato un rischio significativamente maggiore di PTSD nel corso della vita per le donne con una storia di abuso sessuale (aOR = 9.21) o di abuso fisico associato a neglect (aOR = 12.16), anche dopo aver controllato per le variabili

sociodemografiche. Questi risultati sottolineano come il trauma fisico infantile possa contribuire a una persistente vulnerabilità psicologica che si riattiva in fasi evolutive critiche come la gravidanza.

Dal punto di vista somatico, l'abuso fisico risulta associato a una maggiore incidenza di dolore pelvico o sacrale in gravidanza, aree corporee frequentemente coinvolte negli episodi di abuso fisico. Tali risultati sono coerenti con l'ipotesi che l'esperienza traumatica determini una vulnerabilità duratura alla compromissione della salute mentale e fisica, inclusa la presenza di disturbi somatici o lamentele fisiche non completamente spiegate sul piano medico (Nelson, 2012). Inoltre, le donne multipare con una storia di abuso fisico mostrano una maggiore probabilità di parto cesareo d'urgenza; tuttavia, l'attenuazione di tale rischio dopo il controllo per precedenti cesarei suggerisce un possibile ruolo del trauma addominale pregresso (Brunton, 2024).

L'abuso fisico è inoltre associato a un incremento di comportamenti a rischio durante la gravidanza, in particolare il mantenimento del fumo di sigaretta. Blalock et al. (2011) hanno rilevato che fumare entro cinque minuti dal risveglio è più che doppio nelle donne incinte con una storia di abuso fisico e abuso emotivo. Racine et al. (2020) hanno inoltre mostrato che la violenza familiare infantile (abuso fisico, abuso emotivo ed esposizione alla violenza domestica) aumenta significativamente le probabilità di fumo, binge drinking e uso di droghe in gravidanza.

Per quanto riguarda l'uso di sostanze, sebbene un numero inferiore di studi abbia indagato il consumo di alcol o droghe durante la gravidanza, le evidenze disponibili indicano che una storia di abuso fisico o abuso sessuale aumenta il rischio di uso di sostanze, inclusa la cocaina, sia nel corso della vita sia nel periodo perinatale (Jantzen, 1998 altri). Racine et al. (2018) hanno inoltre osservato che le donne con una storia combinata di abuso fisico e abuso emotivo entrano più frequentemente in gravidanza con fattori di rischio per la salute e difficoltà psicosociali rispetto alle donne non abusate, mentre Lukasse ed altri (2015) hanno

rilevato che abuso fisico o abuso sessuale incrementano i rischi psicosociali, come la genitorialità single, nelle donne in gravidanza.

Nel complesso, questi risultati delineano come l'abuso fisico costituisca un fattore di vulnerabilità multidimensionale che coinvolge la salute mentale, il benessere fisico e i comportamenti di salute durante la gravidanza, contribuendo a un aumento del rischio depressivo antenatale e a potenziali esiti avversi per la madre e il bambino.

4.1.3 Abuso sessuale: esiti traumatici e vulnerabilità nel periodo perinatale

Per abuso sessuale si intende il coinvolgimento di un minore in attività sessuali finalizzate alla gratificazione di un adulto, in assenza della capacità o possibilità del bambino di prestare un consenso informato. Le forme di abuso sessuale comprendono rapporti con penetrazione orale, anale o vaginale, molestie sessuali senza penetrazione e pratiche che non implicano contatto fisico diretto, quali l'esibizionismo, l'esposizione a materiale pornografico o il coinvolgimento del minore nella produzione di contenuti a sfondo sessuale (WHO, 2002).

Quando l'abuso sessuale si verifica all'interno del contesto familiare, le conseguenze psicologiche tendono ad essere particolarmente gravi. La dimensione del tradimento della fiducia, unita alla dipendenza affettiva dal caregiver abusante, rende estremamente complesso per il bambino riconoscere e mentalizzare l'esperienza traumatica (Fonagy, 2002). Spesso l'abuso viene mascherato come gioco o segreto condiviso, generando vissuti di confusione, paura e ansia anticipatoria (Ferenczi, 1932). La ricerca clinica evidenzia che la gravità dell'impatto aumenta in presenza di un legame affettivo intenso con l'abusante, della cronicità dell'abuso, della sua segretezza e dell'impossibilità per il minore di parlarne. È possibile distinguere tre principali forme di abuso sessuale: intrafamiliare intradomestico, intrafamiliare extradomestico ed extrafamiliare. Indipendentemente dalla tipologia, l'abuso sessuale rappresenta un fattore di rischio significativo per lo sviluppo di psicopatologia in età adulta (Stea, 2023; Strathearn, 2020).

Inoltre, la letteratura evidenzia in modo ampio e convergente che una storia di abuso sessuale infantile rappresenta un importante fattore di rischio per numerosi esiti avversi durante la gravidanza, coinvolgendo dimensioni psicologiche, comportamentali, biologiche e ostetriche (Brunton, 2021).

Per quanto concerne la salute mentale materna, un ampio corpo di evidenze empiriche indica che l'abuso sessuale infantile rappresenta un rilevante fattore di rischio per la depressione durante la gravidanza. In particolare, Barrios et al. (2015) hanno evidenziato come una storia di abuso infantile, di abuso fisico o di esposizione congiunta ad abuso fisico e abuso sessuale sia associata a un rischio più che raddoppiato di depressione nelle prime fasi della gravidanza. Tali risultati sono stati ampiamente confermati da studi successivi (Corona, 2022; Samia, 2020), che documentano un aumento significativo della vulnerabilità depressiva nelle donne con una storia di abuso sessuale, con un incremento del rischio che può arrivare fino a quattro volte nei casi di forme di abuso moderate-severe (Galbally, 2019). Oltre alla sintomatologia depressiva, l'abuso sessuale risulta associato a un aumento dell'ansia correlata alla gravidanza, dei disturbi mentali comuni (CMDs) (Lydsdottir, 2019), dell'ideazione suicidaria (Zhang, 2020) e dei sintomi di disturbo post-traumatico da stress (PTSD), con livelli di rischio particolarmente elevati nelle donne esposte a esperienze di abuso multiple o combinate, come la co-occorrenza di abuso fisico e abuso sessuale (Sanchez, 2017).

Accanto agli esiti psicopatologici, la letteratura segnala che l'abuso sessuale è associato anche a una compromissione significativa della salute generale e del funzionamento psicosociale durante la gravidanza. Le donne con una storia di abuso sessuale mostrano una maggiore probabilità di adottare comportamenti di salute a rischio, quali il mantenimento del fumo in gravidanza e l'uso di sostanze, inclusa la droga, con un rischio aumentato di uso di cocaina nelle donne con una storia di abuso fisico o abuso sessuale rispetto a quelle senza esperienze di abuso (Nerum, 2013; Racine, 2020). Parallelamente, l'abuso sessuale risulta

associato a un incremento significativo dei fattori di vulnerabilità psicosociale, tra cui la disoccupazione, la limitata disponibilità di supporto sociale e una minore partecipazione attiva al percorso perinatale. In particolare, le donne con una storia di abuso sessuale tendono a percepirsi come meno preparate ad affrontare il travaglio e il parto, a essere meno coinvolte nei processi decisionali di tipo medico e a partecipare con minore frequenza ai corsi di accompagnamento alla nascita, spesso senza il supporto del partner o di altre figure significative (Lukasse, 2015; Nerum, 2013; Racine, 2020).

Sul piano ostetrico, l'abuso sessuale è stato associato a una maggiore incidenza di esiti avversi, tra cui un aumento del rischio di parto complicato, un'intensa paura del parto, una valutazione negativa dell'esperienza di nascita e, in alcuni studi, una maggiore probabilità di basso peso alla nascita (Leeners, 2013). Tuttavia, le evidenze relative alla modalità del parto risultano meno univoche: mentre alcuni studi non evidenziano differenze significative rispetto alle donne senza una storia di abuso (Schei, 2014), altri indicano una maggiore probabilità di ricorso al taglio cesareo intrapartum o un più frequente desiderio di parto cesareo nelle donne con anamnesi di abuso sessuale (Bailit, 2025).

Dal punto di vista biomedico e fisiologico, le donne con una storia di abuso sessuale presentano un aumento dei rischi medici in gravidanza, tra cui il diabete gestazionale (Madigan, 2017), alterazioni dei processi infiammatori, evidenziate da variazioni più marcate del *neutrophil-lymphocyte ratio* (NLR) (Bublitz, 2022), e una disfunzione dell'asse dello stress, con livelli più elevati di *cortisol awakening response* (CAR) nelle fasi avanzate della gravidanza (Stephens, 2021). L'esposizione combinata ad abuso fisico e sessuale è stata inoltre associata a livelli più elevati di cortisolo nei capelli, sebbene tale associazione sia emersa in modo specifico in alcuni gruppi etnici (Schreier, 2015).

Numerosi studi hanno inoltre documentato una peggiore percezione dello stato di salute generale e una maggiore incidenza di disturbi somatici nelle donne con una storia di abuso sessuale. Tra questi si rilevano una maggiore frequenza dei disturbi comuni della gravidanza

(Lukasse, 2009), sintomi somatici più severi mediati dalla depressione (Shin, 2025), un aumento delle ospedalizzazioni, una riduzione dell'adesione alle visite prenatali e una maggiore incidenza di complicanze ostetriche, come l'insufficienza cervicale (Pingeton, 2024; Leeners, 2013). Inoltre, una storia di abuso sessuale è stata associata a un aumentato rischio di emicrania (Gelaye, 2016) e a una maggiore probabilità di problematiche ginecologiche (Yampolsky, 2010), delineando complessivamente un quadro di vulnerabilità somatica e sistemica che accompagna la gravidanza nelle donne esposte a violenza sessuale in età evolutiva. Nel complesso, tali risultati delineano l'abuso sessuale infantile come un fattore di vulnerabilità perinatale complesso e multidimensionale, i cui effetti si estendono alla salute mentale, ai comportamenti di salute, al funzionamento psicosociale e agli esiti ostetrici, contribuendo ad accrescere il rischio lungo l'intero percorso gravidico.

4.1.4 Abuso psicologico: modelli interni disfunzionali e psicopatologia prenatale

La violenza psicologica attraversa trasversalmente tutte le forme di maltrattamento, poiché ogni esperienza traumatica che coinvolge il bambino intacca la sua soggettività e il senso di valore personale. L'abuso psicologico comprende un insieme di atteggiamenti e comportamenti volti a umiliare, intimidire, svalutare o controllare il minore, compromettendone la possibilità di esprimere emozioni e bisogni. Impedire al bambino di manifestare tristezza, rabbia o paura, ad esempio attraverso il ritiro dell'affetto o l'indifferenza, lo espone a uno stato di tensione emotiva cronica che ostacola l'apprendimento della regolazione affettiva.

Come sottolineato da Miller (2011), una delle forme più dannose di crudeltà consiste nel non permettere al bambino di esprimere il proprio dolore senza temere la perdita dell'amore genitoriale. Il ritiro affettivo, il silenzio punitivo o l'ignorare il bambino come forma di disciplina possono generare vissuti profondi di colpa, annichilimento e paura di non esistere per l'altro. In una condizione di totale dipendenza, il bambino è portato a idealizzare il

genitore e a interpretare qualsiasi comportamento, anche violento, come una forma distorta di amore. È proprio questa fiducia assoluta, unita all'impossibilità di riconoscere l'abuso, a rendere l'abuso psicologico particolarmente insidioso e a favorire l'interiorizzazione di modelli relazionali disfunzionali che possono riemergere nella relazione con il proprio figlio durante la gravidanza.

Per quanto riguarda l'abuso emotivo infantile, la letteratura evidenzia un impatto significativo e specifico sulla salute mentale materna e sull'esperienza perinatale. In particolare, Kang et al. (2022) hanno dimostrato, in un ampio studio condotto in Turchia, che l'abuso infantile quasi raddoppia il rischio di depressione peripartum. Risultati convergenti emergono dallo studio di Li et al. (2017), che ha rilevato come le donne con una storia di abuso sessuale o abuso emotivo presentino una probabilità oltre quattro volte maggiore di sviluppare depressione antepartum rispetto alle donne non abusate. In modo peculiare, le donne con una storia di abuso emotivo mostravano punteggi depressivi più elevati durante la gravidanza, che tendevano a ridursi nel periodo perinatale, mentre nelle donne senza abuso emotivo i livelli depressivi, inizialmente più bassi, aumentavano nel postpartum; a quattro settimane dal parto, i punteggi depressivi risultavano inferiori nelle donne con abuso emotivo rispetto a quelle senza una storia di abuso. Oltre alla depressione, l'abuso emotivo è stato associato a un aumento del rischio di ansia perinatale, sebbene i risultati appaiano meno consistenti rispetto ad abuso fisico e abuso sessuale, probabilmente a causa dell'eterogeneità degli strumenti di misurazione utilizzati (Malta, 2012).

L'abuso emotivo infantile riveste un ruolo particolarmente rilevante anche in relazione al funzionamento genitoriale e alle dinamiche relazionali. La letteratura evidenzia come le esperienze di maltrattamento in età evolutiva costituiscano un importante fattore di rischio per una bassa responsività genitoriale (Malta, 2012) e siano associate a una ridotta percezione di autoefficacia, soprattutto in presenza di neonati difficili da consolare (Kunseler, 2016).

In continuità con tali evidenze, come già riportato, diverse forme di maltrattamento infantile, tra cui abuso fisico, abuso sessuale e abuso emotivo, sono risultate predittive di una maggiore esposizione o di un potenziale incremento del rischio di comportamenti dannosi nei confronti del figlio. In particolare, l'uso di sostanze e la depressione post-partum (PPD) sembrano mediare la relazione tra abuso emotivo e l'esposizione del bambino a comportamenti disfunzionali tra i cinque e i dodici anni di età (Brunton, 2024). Questo dato suggerisce che la persistenza della sintomatologia depressiva oltre il periodo post-partum possa contribuire alla trasmissione intergenerazionale della violenza, attraverso meccanismi di apprendimento vicario (Bandura, 1977).

Ulteriori evidenze indicano che l'abuso emotivo è associato a una maggiore vulnerabilità cognitiva ed emotiva durante la gravidanza. Zhang et al. (2021) hanno rilevato che le diverse forme di abuso infantile (fisico, sessuale ed emotivo) sono associate a un peggior funzionamento della memoria prospettica e retrospettiva; tuttavia, nelle analisi aggiustate, solo l'abuso emotivo si è confermato indipendentemente associato a entrambe le forme di compromissione mnestica. Gli stessi autori (Zhang et al., 2021) hanno inoltre evidenziato che le donne in gravidanza con una storia di abuso infantile presentano un rischio superiore a tre volte di ideazione suicidaria; tale rischio risulta particolarmente elevato nel caso dell'abuso emotivo, avvicinandosi a un incremento di cinque volte. Anche sul piano dei sintomi post-traumatici, l'abuso emotivo emerge come una forma di maltrattamento particolarmente pervasiva: Diestel et al. (2023) hanno infatti evidenziato che, sebbene tutte le tipologie di abuso infantile siano associate a sintomi di PTSD, le associazioni più forti riguardano proprio l'abuso emotivo, in particolare in relazione all'isolamento sociale.

Infine, l'abuso emotivo infantile è stato associato anche a esiti ostetrici e perinatali sfavorevoli. Shambraw et al. (2021) hanno evidenziato che le donne con una storia di abuso emotivo o sessuale presentano un rischio circa doppio di complicanze ostetriche e perinatali rispetto a quelle senza esperienze di maltrattamento. Inoltre, le donne primipare con una

storia di abuso fisico, sessuale o emotivo risultano maggiormente esposte allo sviluppo di una paura severa del parto, con un incremento del rischio proporzionale alla gravità dell'abuso. In particolare, l'esposizione concomitante a più forme di maltrattamento, e soprattutto una storia combinata di abuso fisico, sessuale ed emotivo, è risultata associata ai livelli più elevati di timore del parto.

4.1.5 Neglect emotivo e neglect fisico: deprivazione affettiva e rischio psicologico in gravidanza

Accanto alle forme di abuso caratterizzate da comportamenti attivi di violenza, la letteratura riconosce il neglect emotivo e fisico come una dimensione cruciale del maltrattamento infantile. A differenza dell'abuso, il neglect si configura come una forma di violenza per omissione, in cui i bisogni fondamentali del bambino (emotivi, relazionali o fisici) non vengono adeguatamente riconosciuti o soddisfatti dalle figure di accudimento. Questa assenza cronica di cure, protezione e responsività compromette profondamente i processi di sviluppo, incidendo sulla costruzione del senso di sé, sulla regolazione affettiva e sulla percezione di sicurezza di base (Bowlby, 1958; Stern, 1974).

Il neglect fisico si riferisce alla sistematica mancata soddisfazione dei bisogni primari del bambino, quali un'adeguata nutrizione, l'igiene, l'accesso alle cure sanitarie e la protezione da situazioni potenzialmente pericolose. Il neglect emotivo, invece, concerne una persistente indisponibilità affettiva del caregiver, caratterizzata dall'assenza di sostegno emotivo, di validazione e di sintonizzazione, nonché dal mancato riconoscimento e dalla scarsa responsività ai segnali di disagio e alle richieste di aiuto del minore (De Zulueta, 2006). Sebbene tali forme di trascuratezza risultino spesso meno visibili e meno prontamente riconosciute rispetto alle manifestazioni di abuso esplicito, numerose evidenze indicano che esse sono associate a esiti evolutivi avversi di pari, se non maggiore, gravità, soprattutto

quando si presentano in modo precoce, cronico e cumulativo (Cicchetti & Toth, 2005; Norman et al., 2012).

Un ampio corpus di contributi teorici e clinici sottolinea come il neglect, e in particolare quello emotivo, possa esercitare un impatto profondamente disorganizzante sullo sviluppo della mente relazionale del bambino. In una prospettiva dell'attaccamento, la persistente assenza di responsività genitoriale interferisce con la costruzione di modelli operativi interni coerenti e affidabili, compromettendo le aspettative di disponibilità e di regolazione interpersonale (Bowlby, 1969; 1982; 1988). In tale contesto, risultano particolarmente vulnerabili i processi di mentalizzazione, intesi come la capacità di comprendere e rappresentare i propri stati mentali e quelli altrui, che si sviluppano all'interno di relazioni caratterizzate da sintonizzazione affettiva e rispecchiamento contingente (Fonagy et al., 2002).

Diversi autori hanno evidenziato che l'assenza di un adeguato rispecchiamento emotivo possa ostacolare lo sviluppo della regolazione affettiva e dell'integrazione mente-corpo, favorendo modalità di funzionamento implicite, scarsamente simbolizzate e maggiormente ancorate a risposte somatiche o dissociative (Schore, 2001; 2012). In linea con tali modelli, Lyons-Ruth e Jacobvitz (2016) hanno sottolineato che le esperienze di neglect relazionale precoce sono strettamente connesse a pattern di attaccamento disorganizzato e a difficoltà persistenti nella regolazione emotiva e nella rappresentazione degli stati interni.

Queste vulnerabilità evolutive, spesso silenti e difficilmente accessibili sul piano narrativo, tendono a riattivarsi in fasi di transizione evolutiva e di intensa riorganizzazione identitaria, come la gravidanza, periodo in cui i modelli di attaccamento e le rappresentazioni di sé come genitore vengono profondamente rielaborati (Ammaniti et al., 2014). In tale prospettiva, il neglect infantile si configura come un fattore di rischio rilevante per il benessere psicologico perinatale.

La letteratura empirica ha da tempo documentato che sia la trascuratezza fisica sia quella emotiva esperite durante l'infanzia rappresentino predittori significativi della sintomatologia depressiva nel periodo perinatale (Norman et al., 2012; Li et al., 2017). In particolare, nello studio di Ianici et al. (2017), la trascuratezza fisica risulta associata in modo indipendente a un incremento significativo del rischio di depressione perinatale ($B = 0,215$; $\text{Exp}(B) = 1,20$; $p = 0,001$), mentre la trascuratezza emotiva emerge come un predittore anch'esso significativo e indipendente ($B = 0,149$; $\text{Exp}(B) = 1,16$; $p = 0,001$). Particolarmente illuminante ed esaustivo risulta, a tal proposito il lavoro di Li e colleghi (2017).

Nel campione studiato da Li et al. (2017), composto da 276 donne in gravidanza reclutate presso un ambulatorio prenatale in Cina, il neglect fisico emerge come la forma di maltrattamento infantile più frequentemente riportata. In particolare, il 40,52% delle partecipanti supera il cut-off clinico per il neglect fisico, mentre il 6,69% riferisce esperienze di neglect emotivo. Al contrario, le percentuali relative alle altre forme di maltrattamento risultano significativamente inferiori, con tassi di abuso fisico, emotivo e sessuale compresi tra il 5,58% e il 6,32%. Tali dati suggeriscono che il neglect, soprattutto nella sua dimensione fisica, rappresenti una componente centrale della storia traumatica materna in questo campione, configurandosi come un'esperienza ampiamente diffusa ma potenzialmente sottostimata rispetto alle forme di abuso più manifeste.

Un ulteriore elemento rilevante riguarda l'elevata co-occorrenza tra le diverse forme di neglect: oltre il 70% delle donne che riportano neglect emotivo riferisce anche esperienze di neglect fisico. Questo dato è coerente con la letteratura che descrive la trascuratezza come un'esperienza relazionale complessa e multidimensionale, raramente confinata a un'unica area di funzionamento genitoriale, e rafforza l'ipotesi di un'esposizione cumulativa a condizioni di deprivazione precoce.

Lo studio adotta un disegno longitudinale con tre rilevazioni dei sintomi depressivi mediante la *Edinburgh Postnatal Depression Scale* (EPDS): nel terzo trimestre di gravidanza (T1), a

una settimana dal parto (T2) e a quattro settimane dal parto (T3). Le analisi condotte tramite *Generalized Estimating Equations* (GEE) mostrano che sia il neglect fisico sia il neglect emotivo sono associati a livelli significativamente più elevati di sintomi depressivi complessivi lungo l'intero periodo perinatale ($P < 0.05$). In particolare, il neglect fisico risulta associato a un incremento medio del punteggio EPDS pari a $\beta = 1,34$ (IC 95%: 0,07–2,60; $p < .05$), mentre il neglect emotivo mostra un'associazione di maggiore ampiezza ($\beta = 3,05$; IC 95%: 0,16–5,94; $p < .05$). Tali associazioni permangono significative anche dopo l'aggiustamento per potenziali fattori confondenti di natura socio-demografica e ostetrica, tra cui lo stress socioeconomico cumulativo, la gravidanza non pianificata, la primiparità e la presenza di complicanze gravidiche.

Analisi temporali più approfondite indicano che l'effetto del neglect si manifesta in modo particolarmente evidente durante la gravidanza. Le donne con una storia di neglect fisico o emotivo presentano punteggi EPDS significativamente più elevati nel periodo antenatale, mentre non emergono differenze significative nei livelli medi di sintomi depressivi a una e a quattro settimane dal parto, quando i sintomi vengono considerati come variabili continue. Questo risultato suggerisce che la gravidanza possa rappresentare una finestra di particolare vulnerabilità psicologica per le donne con esperienze di trascuratezza infantile, probabilmente in relazione alla riattivazione di rappresentazioni relazionali precoci e di schemi affettivi impliciti.

Tuttavia, quando l'attenzione si sposta dal livello sintomatologico continuo al rischio clinico di depressione, definito da un punteggio EPDS ≥ 12 , emerge un quadro più articolato. Le analisi di regressione multinomiale mostrano infatti che il neglect fisico costituisce il predittore più robusto del rischio depressivo perinatale. Le donne con una storia di neglect fisico presentano una probabilità 2,79 volte maggiore di sviluppare depressione antenatale (OR = 2,79; IC 95%: 1,28–6,11) e un rischio significativamente aumentato di depressione postnatale (OR = 2,47; IC 95%: 1,22–4,97). Anche dopo l'aggiustamento per i fattori

confondenti, il neglect fisico continua a predire in modo significativo la depressione postnatale (OR = 2,84; IC 95%: 1,38–5,85), indicando un effetto persistente e clinicamente rilevante.

Il neglect emotivo, invece, risulta specificamente associato al rischio di depressione durante la gravidanza, con un'odds ratio pari a 4,45 (IC 95%: 1,31–15,08), ma non alla depressione post-partum. Questo pattern differenziato suggerisce che le due forme di neglect possano esercitare un impatto distinto nelle diverse fasi della transizione alla maternità. In particolare, il neglect emotivo sembra incidere in modo più marcato sul periodo antenatale, fase caratterizzata da un'intensa riorganizzazione identitaria e relazionale, mentre il neglect fisico appare associato a una vulnerabilità depressiva più stabile, in grado di estendersi anche al periodo postnatale.

Nel complesso, i risultati dello studio di Li et al. (2017) rafforzano l'ipotesi che le esperienze di trascuratezza infantile, pur essendo spesso meno riconosciute rispetto alle forme di abuso, rappresentino un determinante cruciale della psicopatologia perinatale, con effetti differenziati in funzione della tipologia di neglect e della fase temporale della gravidanza.

Ulteriori dati provengono da uno studio cross-sectional condotto su un campione di 253 donne nel periodo postnatale (Camargo, 2024), in cui la prevalenza di depressione post-partum risulta pari al 36,8% (IC 95%: 30,8–42,7%). In questo campione, l'analisi dell'associazione tra l'esperienza di almeno un tipo di trauma e la presenza di depressione post-partum ha evidenziato che tutti i tipi di abuso e trascuratezza erano significativamente correlati alla depressione post-partum. Nei modelli bivariati, gli odds ratio hanno mostrato che le donne che avevano vissuto almeno un tipo di trauma infantile avevano una probabilità significativamente maggiore di sviluppare depressione post-partum (OR: 5,10; IC95%: 2,87-9,06; $p<0,001$). Tra i diversi tipi di trauma, l'abuso emotivo era quello con il rischio più alto di depressione post-partum (OR: 9,18; IC95%: 4,54-14,71; $p<0,001$), seguito da trascuratezza emotiva (OR: 4,24; IC95%: 2,36-7,62; $p<0,001$), abuso fisico (OR: 3,81;

IC95%: 1,95-7,42; $p < 0,001$), abuso sessuale (OR: 2,46; IC95%: 1,35-4,47; $p = 0,003$) e trascuratezza fisica (OR: 2,39; IC95%: 1,34-4,26; $p = 0,003$).

Le evidenze disponibili indicano, quindi, che la letteratura scientifica ha riconosciuto il ruolo centrale del *neglect* infantile, sia emotivo sia fisico, nell'esordio e nel mantenimento della sintomatologia depressiva durante la gravidanza.

Alla luce di tutte le precedenti evidenze, il lavoro di ricerca condotto durante il percorso di dottorato si è proposto di contribuire all'approfondimento dell'associazione tra le diverse forme di abuso e il disagio psichico nel peripartum, con particolare attenzione all'influenza specifica del neglect emotivo sulla sintomatologia depressiva perinatale, nonché al ruolo dell'attaccamento prenatale nel mediare e definire la qualità della relazione genitore–feto.

4.2 Studio 2. Understanding the relationship between childhood emotional abuse and neglect and psychological distress in pregnant women: the role of prenatal attachment.

Maria Rita Infurna, Leonardo Fazio, Eleonora Bevacqua, Giulia Costanzo, Giorgio Falgares, Antonio Maiorana, Francesca Giannone and Linda Antonella Antonucci

Il paragrafo introduce i principali contenuti dello studio omonimo, pubblicato nel 2024 sulla rivista *BMC Psychology*. Per una trattazione esaustiva degli aspetti metodologici e dei risultati empirici, si rinvia all'Allegato 2, dove è riportato il testo integrale dell'articolo.

Come ampiamente evidenziato nella letteratura contemporanea, le esperienze traumatiche infantili rappresentano un fattore di vulnerabilità di primaria rilevanza per lo sviluppo psicologico lungo l'intero arco di vita. In particolare, le forme di maltrattamento psicologico, quali l'abuso emotivo e la trascuratezza affettiva, sono state progressivamente riconosciute come determinanti cruciali nello sviluppo di difficoltà nella regolazione emotiva, nella costruzione di modelli relazionali disfunzionali e nell'aumentato rischio di psicopatologia in età adulta. Tali esperienze precoci, infatti, incidono profondamente sui processi di costruzione del sé e dell'altro, contribuendo alla formazione di rappresentazioni interne caratterizzate da aspettative di non disponibilità, rifiuto o incoerenza nelle relazioni significative.

Alla luce di tali evidenze, il periodo della gravidanza assume una rilevanza peculiare, configurandosi come una fase di profonda riorganizzazione identitaria e relazionale, durante la quale vengono riattivate rappresentazioni interne legate alle esperienze precoci di attaccamento e alle modalità di accudimento ricevute. La transizione alla maternità implica, infatti, non solo cambiamenti biologici e sociali, ma anche un complesso processo di rielaborazione della propria storia evolutiva, in cui la donna è chiamata a integrare le proprie esperienze passate con le nuove aspettative legate al ruolo genitoriale. In questo senso, la

gravidanza può costituire un momento di particolare vulnerabilità psicologica, in cui memorie emotive e modelli operativi interni derivanti dalle esperienze infantili vengono riattivati e possono influenzare sia il benessere emotivo sia la qualità della relazione emergente con il bambino.

In tale cornice teorica si inserisce lo studio condotto da Infurna et al. (2024), che si propone di approfondire il ruolo specifico dell'abuso psicologico infantile, con particolare riferimento all'abuso emotivo e alla trascuratezza, nel determinare il disagio psicologico durante la gravidanza, esplorando al contempo il possibile ruolo mediatore dell'attaccamento prenatale. Più nello specifico, gli autori hanno ipotizzato che le esperienze di neglect e abuso emotivo fossero associate a maggiori livelli di sofferenza psicologica e a una minore qualità del legame prenatale, e che quest'ultimo potesse configurarsi come un meccanismo esplicativo nella relazione tra esperienze precoci e adattamento psicologico nel periodo perinatale. Tale ipotesi si colloca all'interno di un modello teorico che attribuisce all'attaccamento prenatale una funzione centrale nei processi di transizione alla genitorialità, considerandolo un indicatore precoce della qualità della relazione madre-bambino e, al contempo, un possibile mediatore dei processi intergenerazionali.

Lo studio ha coinvolto un campione di 128 donne in gravidanza (età compresa tra 21 e 46 anni; $M = 33.4$; $DS = 6.10$), reclutate attraverso servizi sanitari e reti di supporto territoriale. Le partecipanti, prevalentemente caratterizzate da un buon livello socioeconomico, da una condizione relazionale stabile e da un adeguato livello di istruzione, hanno compilato una batteria di questionari autosomministrati in formato digitale. La procedura di raccolta dati è stata condotta nel rispetto dei principi etici della ricerca psicologica, garantendo anonimato, riservatezza e consenso informato.

Le esperienze di maltrattamento infantile sono state valutate mediante strumenti validati quali il Childhood Experience of Care and Abuse Questionnaire (CECA.Q) e il Childhood Trauma Questionnaire–Short Form (CTQ-SF), che consentono una rilevazione articolata e

retrospettiva delle diverse forme di abuso e trascuratezza. L'attaccamento prenatale è stato misurato attraverso la Maternal Antenatal Attachment Scale (MAAS), che indaga sia la qualità del legame emotivo con il feto sia l'intensità del coinvolgimento materno, permettendo di distinguere tra componenti più affettive e più comportamentali del legame emergente. Il disagio psicologico perinatale è stato infine valutato mediante il Perinatal Assessment of Maternal Affectivity (PAMA), strumento multidimensionale che esplora diverse componenti del funzionamento emotivo, tra cui sintomi depressivi, ansia, stress, rabbia e manifestazioni psicosomatiche, offrendo una valutazione ampia e integrata del benessere psicologico materno.

Dal punto di vista analitico, sono state inizialmente condotte analisi di correlazione di Pearson, al fine di esaminare le associazioni tra le variabili in studio, seguite da analisi di mediazione basate su procedure di bootstrapping, considerate particolarmente robuste per la stima degli effetti indiretti, con l'obiettivo di testare il ruolo dell'attaccamento prenatale come possibile meccanismo esplicativo del legame tra trascuratezza infantile e disagio psicologico durante la gravidanza.

I risultati hanno evidenziato un pattern differenziato tra le diverse forme di maltrattamento considerate. In particolare, la trascuratezza infantile è risultata significativamente associata a maggiori livelli di disagio psicologico perinatale, mostrando una correlazione positiva con i punteggi di sofferenza emotiva. Parallelamente, essa ha evidenziato una correlazione negativa con l'attaccamento prenatale, sia in termini di qualità del legame ($r = -0.31$) sia di intensità del coinvolgimento emotivo ($r = -0.19$), suggerendo che esperienze precoci di neglect siano associate a una minore capacità di costruire un legame emotivo con il feto.

Coerentemente, il disagio psicologico perinatale ha mostrato una relazione inversa significativa con l'attaccamento prenatale, sia rispetto al punteggio totale ($r = -0.27$) sia, in misura più marcata, rispetto alla dimensione qualitativa ($r = -0.43$), indicando che livelli più elevati di sofferenza psicologica sono associati a una minore qualità della relazione

emergente con il bambino. Al contrario, l'abuso emotivo infantile non ha mostrato associazioni statisticamente significative con le altre variabili considerate, suggerendo la possibilità che i suoi effetti si manifestino attraverso traiettorie più complesse o mediate da ulteriori dimensioni non incluse nel modello analizzato.

Le analisi di mediazione hanno ulteriormente chiarito i meccanismi sottostanti tali associazioni, evidenziando che l'attaccamento prenatale media significativamente la relazione tra trascuratezza infantile e disagio psicologico perinatale. In particolare, le esperienze di neglect sembrano influenzare la sofferenza psicologica durante la gravidanza non solo in modo diretto, ma anche indirettamente, attraverso il loro impatto sulla capacità della donna di sviluppare un legame emotivo con il feto. Questo risultato suggerisce che la difficoltà nel costruire una relazione affettiva con il bambino possa rappresentare un passaggio cruciale attraverso cui le vulnerabilità precoci si traducono in esiti psicopatologici nel periodo perinatale.

Questi risultati supportano un modello interpretativo coerente con le teorie dell'attaccamento e con le prospettive sullo sviluppo intergenerazionale del rischio, secondo cui le esperienze relazionali precoci contribuiscono alla formazione di modelli operativi interni che guidano il funzionamento emotivo e relazionale dell'individuo. Durante la gravidanza, tali modelli vengono riattivati e rinegoziati, influenzando sia il benessere psicologico della madre sia la qualità della relazione prenatale. In questa prospettiva, l'attaccamento prenatale emerge come un costrutto chiave, non solo come indicatore della relazione madre-feto, ma anche come potenziale meccanismo attraverso cui le esperienze traumatiche infantili esercitano i loro effetti sul funzionamento psicologico nel periodo perinatale.

Tali evidenze assumono una rilevanza significativa anche sul piano clinico, suggerendo l'importanza di interventi di screening e supporto psicologico mirati alle donne in gravidanza con una storia di trascuratezza infantile. In particolare, interventi focalizzati sul potenziamento della capacità di mentalizzazione e sulla promozione di un attaccamento

prenatale più sicuro potrebbero contribuire a interrompere la trasmissione intergenerazionale del rischio, favorendo traiettorie di sviluppo più adattive sia per la madre sia per il bambino.

Capitolo 5

Bonding e attaccamento: meccanismi di sviluppo e implicazioni per la salute mentale perinatale

5.1 Verso una definizione integrata di attaccamento prenatale

La teoria dell'attaccamento ha da sempre evidenziato che le basi della vita affettiva si costituiscono nel dialogo emotivo che si instaura tra il bambino e i suoi caregiver primari. In tal senso, John Bowlby concepì il comportamento di attaccamento non come un mero insieme di risposte riflesse o isolate, bensì come un sistema motivazionale biologicamente preordinato a mantenere la vicinanza alla figura di cura per garantire la sopravvivenza e promuovere l'esplorazione dell'ambiente. Nelle sue prime formulazioni, Bowlby descrisse i comportamenti di attaccamento come risposte inizialmente parziali e indipendenti, che progressivamente si integrano e si focalizzano sulla madre nel corso dello sviluppo. Con il tempo egli ampliò la propria prospettiva, riconoscendo che l'attaccamento non soddisfa soltanto un'esigenza di prossimità fisica, ma svolge anche una funzione psicologica centrale, regolando l'esperienza affettiva e l'organizzazione delle relazioni interpersonali nel soggetto in crescita (Bowlby, 1958; 1969).

Benché la teoria di Bowlby si concentri sugli esiti psicologici dell'attaccamento nei primi anni di vita, la radice di molti processi relazionali trova fondamento già nella vita fetale. Proprio da questa prospettiva si sono sviluppate linee di ricerca che considerano l'attaccamento prenatale come un fenomeno psicologico e relazionale significativo, che anticipa e predispone le dinamiche affettive postnatali (Siddiqui, 2000; Silahli, 2021). È importante sottolineare che l'attaccamento prenatale non va inteso semplicemente come una preparazione biologica alla maternità, ma come un processo psicodinamico in cui la donna, lungo i nove mesi di gravidanza, investe emotivamente energie psichiche nel feto e costruisce rappresentazioni mentali di sé come madre e del bambino come soggetto interpersonale.

Questa prospettiva ha avuto alcune delle sue prime formulazioni nel pensiero psicoanalitico delle autrici Deutsch (1945), Benedek (1958) e Bibring (1961), che negli anni Cinquanta avanzarono l'idea secondo cui la gravidanza attiva un'intensa vita psichica simbolica nella donna. Secondo queste autrici, l'oggetto fetale non rimane un'entità anonima, ma progressivamente acquisisce umanità nella fantasia materna, divenendo al tempo stesso un'estensione del Sé e una figura distinta verso cui si sviluppano affetti e aspettative. Le emozioni investite nel feto, non costituiscono quindi un semplice preludio alla maternità, ma una relazione affettiva in divenire, che trova espressione in fantasie, desideri, timori e rappresentazioni interiori (Deutsch, 1945; Benedek, 1958; Bibring et al., 1961).

Il lavoro di Kennel et al. (1970) offre un supporto clinico a tali ipotesi: osservando le reazioni emotive delle madri alla perdita neonatale prima del primo contatto fisico, gli autori notarono che il dolore manifestato non dipendeva dal tempo di contatto corporeo post-partum, ma dal legame affettivo già sviluppato durante la gravidanza. Questa evidenza suggerisce che le rappresentazioni interne costruite prima della nascita si traducono in risposte emotive profonde e non contingenti alla sola esperienza sensoriale post-natale.

Il passaggio da osservazioni cliniche e aneddotiche a una teoria più sistematica ebbe importanti sviluppi grazie a Rubin (1967, 1975), un'infermiera specializzata in assistenza materna. Rubin esplorò come le donne acquisissero progressivamente la *maternal role* e concluse che i comportamenti materni osservabili dopo il parto non emergono ex novo, ma si radicano in processi psicologici già attivi durante la gestazione. Identificò quattro compiti psicologici fondamentali affrontati dalla donna incinta: (1) garantire un passaggio sicuro per sé e per il bambino, (2) assicurare che il bambino venga accolto da persone significative, (3) creare un legame e (4) donarsi al bambino. Questi compiti delineano un percorso trasformativo in cui si intrecciano investimenti corporei, emozioni relazionali e crescente consapevolezza del feto come oggetto affettivo, anticipando concetti centrali dell'attaccamento prenatale anche in assenza di misure psicometriche formali.

Negli stessi anni, Lumley (1972; 1982) condusse uno degli studi longitudinali pionieristici sull'attaccamento prenatale, indagando come la rappresentazione del feto evolvesse nel tempo. Intervistando donne primipare in diverse fasi della gravidanza, Lumley osservò che la capacità di concepire il feto come "persona reale" aumentava progressivamente con l'avanzare della gestazione: dal 30% nel primo trimestre, al 63% nel secondo, fino al 92% nelle ultime settimane. L'attaccamento prenatale non è quindi un evento statico, ma un processo dinamico e graduale di umanizzazione immaginativa, influenzato non solo dagli eventi biologici della gravidanza ma anche dai vissuti soggettivi, dal benessere psicologico e dal contesto interpersonale.

Il primo tentativo sistematico di definire e misurare l'attaccamento prenatale fu proposto da Cranley (1981), che lo descrisse come il grado in cui la donna si impegna in comportamenti rappresentativi di affiliazione e interazione con il bambino non ancora nato. Su questa base ideò la *Maternal Fetal Attachment Scale (MFAS)*, concependo l'attaccamento prenatale soprattutto come un insieme di comportamenti osservabili e replicabili. Cranley sottolineò che la gravidanza comporta due processi complementari: lo sviluppo fisico del feto e la trasformazione psicologica della donna in madre, che include l'elaborazione dell'identità materna e l'instaurarsi di una relazione mentale con il feto.

Questa definizione, pur innovativa, fu successivamente criticata da Müller (1990), che ravvisò nel focus comportamentale del MFAS una limitazione concettuale: non venivano, infatti, adeguatamente considerati i pensieri, le fantasie e i significati simbolici che la donna costruisce attorno al feto. Sulla base di questa impostazione più ampia e psicodinamica, Müller propose che l'attaccamento prenatale rappresenti una relazione unica e qualificata, distinta dai sentimenti generali della donna verso la gravidanza o verso se stessa come madre. Questa prospettiva incorporava l'idea che l'attaccamento prenatale si radichi nelle rappresentazioni interne formatesi nelle relazioni precoci di attaccamento della donna con i propri caregiver, influenzando non solo l'adattamento alla gravidanza, ma il modo in cui

essa mentalizza, desidera e sogna il proprio bambino. Müller (ibidem) sviluppò inoltre il *Prenatal Attachment Inventory (PAI)*, uno strumento progettato per cogliere la complessità delle dimensioni affettive e immaginative in gioco.

Nel suo modello, l'attaccamento prenatale non è riducibile a una somma di comportamenti, bensì emerge dall'integrazione di affetti, rappresentazioni mentali, fantasie e simbolismi che la donna costruisce attorno al feto. Questo processo è intimamente connesso alla storia relazionale della donna, alle sue strategie di regolazione emotiva e alla qualità dei suoi modelli operativi interni, che plasmano non solo le relazioni passate, ma anche le future relazioni genitoriali.

Negli ultimi decenni, la definizione di attaccamento prenatale è stata ulteriormente raffinata grazie a contributi teorici e strumenti psicometrici più sensibili alla complessità del legame emotivo tra la donna e il feto. In particolare, Condon e Corkindale (1997) hanno proposto che l'attaccamento prenatale rappresenti "il legame emotivo che normalmente si sviluppa tra il genitore in gravidanza e il suo bambino non ancora nato" (p. 359), sottolineando come esso costituisca una dimensione affettiva e relazionale distinta dal semplice interesse per la gravidanza o per la maternità. Per misurare specificamente questa dimensione, Condon sviluppò la *Maternal Antenatal Attachment Scale (MAAS)*, strumento che si concentra esclusivamente sui pensieri e sui sentimenti rivolti al feto. La scala distingue due componenti principali: la *qualità*, che riflette esperienze di vicinanza, tenerezza, piacere nell'interazione con il feto, angoscia per la perdita immaginata e la concezione del feto come una "piccola persona"; e l'*intensità*, che valuta quanto tempo la madre trascorra pensando, parlando, sognando o toccando il feto (Doan & Zimmerman, 2003).

L'analisi concettuale di Shieh et al. (2001) ha ulteriormente articolato l'attaccamento prenatale identificando tre attributi fondamentali: cognitivo, affettivo e altruistico. L'attaccamento cognitivo descrive il desiderio di conoscere il feto, comprenderne le caratteristiche e anticiparne le esigenze; l'attaccamento affettivo riguarda il piacere derivante

dall'interazione mentale o fisica con il feto; l'attaccamento altruistico rappresenta la motivazione a proteggere il bambino, prevenendo rischi e promuovendo il suo benessere. Queste dimensioni enfatizzano come l'attaccamento prenatale non sia unicamente emotivo, ma comprenda componenti cognitive e motivazionali che guidano comportamenti protettivi. Uno studio fenomenologico condotto da Sandbrook e Adamson-Macedo (2004) ha ampliato ulteriormente la comprensione della dimensione affettiva prenatale, mostrando che l'emozione predominante nelle madri non è necessariamente l'amore, quanto piuttosto un istinto innato di protezione. Le autrici sottolineano come questa disposizione protettiva si traduca in modificazioni comportamentali concrete, volte a garantire un ambiente intrauterino sicuro e a eliminare potenziali minacce al feto. In questo contesto, il sostegno sociale da parte del partner o di figure familiari significative risulta un elemento fondamentale per favorire la sicurezza emotiva della madre e, indirettamente, del feto stesso, rafforzando la relazione prenatale (Sandbrook & Adamson-Macedo, 2004).

Da un punto di vista psicodinamico, la costruzione dell'attaccamento prenatale si collega strettamente alla capacità della donna di sviluppare rappresentazioni interne del feto come entità separata, pur mantenendo una continuità con il Sé. Doan e Zimmerman (2003) hanno evidenziato che senza questa capacità di concettualizzazione, l'attaccamento prenatale risulta fragile e potrebbe tradursi in relazioni madre-bambino meno sicure dopo il parto. La capacità di distinguere il feto come soggetto distinto, insieme al riconoscimento del proprio ruolo materno, rappresenta dunque un prerequisito necessario, sebbene non sufficiente, per lo sviluppo di un attaccamento prenatale efficace.

Le manifestazioni comportamentali dell'attaccamento prenatale sono varie e comprendono azioni concrete e simboliche che riflettono cura e impegno verso il feto. Tra queste vi sono il nutrimento, inteso come attenzione a una dieta equilibrata e l'astensione da sostanze nocive come alcol e droghe; comportamenti di conforto, come accarezzare il ventre o parlare al feto; e preparazione pratica alla nascita, tra cui acquistare vestiti e attrezzature per il

neonato. Numerosi studi indicano che sia la frequenza sia l'intensità di tali comportamenti aumentano progressivamente con l'avanzare dell'età gestazionale, in particolare dopo il *quickening*, ossia i primi movimenti percepiti del feto, attorno alla 18-22a settimana di gravidanza (Salisbury et al., 2003).

In prospettiva psicodinamica, questi comportamenti non sono meri gesti pragmatici, ma espressioni di un investimento emotivo e simbolico: il corpo della madre diventa il luogo di mediazione tra Sé e feto, attraverso cui vengono regolati timori, desideri e rappresentazioni inconse. Il feto assume così un duplice ruolo: oggetto di cura e simbolo del Sé futuro, mediando la continuità della linea generativa e la costruzione della propria identità materna. La ricerca suggerisce inoltre che l'attaccamento prenatale abbia ripercussioni sulla relazione postnatale e sullo sviluppo emotivo del bambino, sottolineando la centralità della relazione affettiva sin dalle fasi intrauterine (Condon, 1993; Doan & Zimmerman, 2003; Sandbrook & Adamson-Macedo, 2004).

L'integrazione di approcci empirici, psicodinamici e comportamentali mostra chiaramente come l'attaccamento prenatale sia un costrutto multidimensionale, che combina componenti affettive, cognitive e relazionali. Non si tratta semplicemente di un legame biologico, ma di un fenomeno psicologico complesso, in cui la donna costruisce rappresentazioni interne del feto e del proprio ruolo materno, anticipando e facilitando l'instaurarsi di una relazione sicura e funzionale dopo la nascita.

5.2 Bonding e attaccamento: concetti distinti nella ricerca e nella clinica

Nel campo della psicologia perinatale, il concetto di bonding è frequentemente impiegato per descrivere il legame emotivo che si sviluppa tra genitore e bambino. Tuttavia, risulta fondamentale distinguere tale costrutto da quello di attaccamento, ampiamente teorizzato nella letteratura sullo sviluppo socio-affettivo. Secondo la teoria dell'attaccamento di Bowlby, infatti, l'attaccamento si configura come un sistema relazionale dinamico che regola

il comportamento del bambino in funzione della sicurezza interpersonale nel corso del tempo. Al contrario, il bonding è stato descritto come una connessione emotiva iniziale, spesso esperita in modo immediato, in particolare intorno al momento della nascita, pur avendo origine già in epoca prenatale, e centrata prevalentemente sulla prospettiva della figura genitoriale nei confronti del bambino (Frau, 2026).

La letteratura scientifica contemporanea distingue chiaramente il bonding dall'attaccamento, sottolineando come il primo riguardi principalmente le esperienze soggettive e affettive del genitore, quali fantasie, rappresentazioni e aspettative, nei confronti del bambino non ancora nato, piuttosto che il sistema comportamentale bidirezionale che emerge nel bambino in risposta ai processi di cura e regolazione interpersonale. Tale legame include sentimenti di protezione, affetto e responsabilità, ed è osservabile sia durante la gravidanza sia nel periodo postnatale precoce.

Sul piano concettuale, il bonding è generalmente considerato un fenomeno unidirezionale, centrato sui sentimenti e sulle percezioni della madre (o del caregiver) verso il bambino. L'attaccamento, invece, implica processi interpersonali dinamici, nei quali il comportamento del bambino, come la ricerca di vicinanza o la regolazione emotiva in presenza del caregiver, assume un ruolo centrale. Le evidenze empiriche supportano tale distinzione: il bonding materno può essere significativamente influenzato da fattori quali i sintomi depressivi e lo stress perinatale, e la sua qualità può variare nel corso della gestazione e nei primi mesi di vita del bambino, indipendentemente dalla formazione dei modelli di attaccamento nel bambino stesso (Tichelman, 2019).

La letteratura recente evidenzia, ad esempio, che il bonding prenatale, definito come la qualità dell'investimento affettivo e cognitivo nei confronti del feto, risulta associato alla qualità del mother-infant bonding nei mesi successivi alla nascita e può mediarne l'effetto su esiti comportamentali ed emotivi del bambino nella prima infanzia (Petri, 2018; Tichelman, 2019). In uno studio longitudinale, è emerso che l'ansia prenatale materna è

associata a problemi comportamentali del bambino a 28 mesi e che il bonding prenatale, insieme al successivo attaccamento postnatale, media tale associazione, evidenziando l'importanza di questi processi già prima della nascita per lo sviluppo psicologico del bambino (Henrichs, 2019).

Un recente studio longitudinale ha inoltre mostrato che le donne che presentavano una minore coerenza dello stato di bonding materno nel terzo trimestre, misurato mediante l'Adult Attachment Interview, riportavano livelli più elevati di stress nel periodo postnatale (T2); tale aumento dello stress risultava, a sua volta, associato a una minore qualità del *mother–infant bonding* al tempo T3. Tali risultati suggeriscono che, pur essendo costrutti strettamente correlati, attaccamento e bonding rimandino a livelli distinti del funzionamento psicologico: in particolare, una minore coerenza delle rappresentazioni di bonding materno in gravidanza sembra incidere sull'esperienza affettiva nei confronti del bambino in modo indiretto, attraverso un aumento dello stress nel periodo postnatale, che a sua volta compromette la qualità del *mother–infant bonding* (Frau, 2026).

Infine, la letteratura evidenzia in modo consistente come fattori psicologici, quali la depressione e l'ansia materna, siano negativamente associati alla qualità del bonding, sia in epoca prenatale sia nel periodo postnatale (Śliwerski, 2020). In particolare, sintomi depressivi possono compromettere la capacità della madre di investire emotivamente nel bambino, riducendo sentimenti di vicinanza, piacere e coinvolgimento, mentre livelli elevati di ansia possono interferire con la costruzione di rappresentazioni positive del feto e con la regolazione emotiva necessaria per sostenere un legame affettivo stabile (Rollè, 2020). Tali condizioni possono inoltre influenzare i processi attentivi e interpretativi della madre, favorendo una percezione distorta o meno sensibile dei segnali del bambino.

Queste evidenze sottolineano l'importanza di considerare il bonding come un costrutto sensibile alle condizioni psicologiche materne e, pertanto, come un potenziale indicatore precoce di vulnerabilità nella relazione genitore–bambino. Ne deriva la necessità di

implementare programmi di screening sistematico già durante la gravidanza, in grado di rilevare precocemente sintomi depressivi e ansiosi, e di integrare interventi mirati non solo alla promozione della sicurezza dell'attaccamento, ma anche al sostegno della qualità del legame emotivo e affettivo del caregiver con il bambino. Interventi di supporto psicologico, psicoeducazione e promozione della regolazione emotiva possono infatti contribuire a migliorare il bonding e, indirettamente, gli esiti di sviluppo del bambino.

5.3 Il Sé tra attaccamento, aggressività e maltrattamento infantile e implicazioni nel periodo perinatale

Il Sé si struttura a partire dalle prime esperienze interpersonali, in cui la relazione con l'Altro costituisce il fondamento imprescindibile della crescita psichica. La qualità della relazione primaria con il caregiver determina la capacità del bambino di costruire rappresentazioni positive di Sé e degli altri, di sviluppare fiducia e sicurezza e di esplorare l'ambiente circostante senza percepirlo come minaccioso (Bowlby, 1958). La relazione con il caregiver non è quindi un semplice contatto fisico o la soddisfazione di bisogni materiali, ma un processo complesso di scambio affettivo, contenimento emotivo e risposta coerente ai segnali di disagio del bambino (Bowlby, 1958). Quando la relazione primaria risponde adeguatamente ai bisogni di protezione e vicinanza, il bambino sviluppa un senso di sicurezza che funge da base per la costruzione dell'autonomia, della regolazione emotiva e della capacità di relazionarsi con gli altri.

John Bowlby (1958; 1969; 1988), attraverso la teoria dell'attaccamento, ha evidenziato come il bisogno di legame sia una funzione primaria, biologicamente e psicologicamente necessaria alla sopravvivenza del bambino. I suoi studi si sono avvalsi anche delle osservazioni sui macachi condotte da Harlow, i quali dimostrarono che i piccoli primati prediligono la figura materna calda e morbida rispetto a quella che fornisce solo nutrimento. Questi esperimenti evidenziarono che il contatto affettivo e la sicurezza emotiva hanno un

ruolo centrale nello sviluppo del comportamento esplorativo e nella regolazione emotiva, più del soddisfacimento immediato dei bisogni fisiologici. Harlow osservò inoltre che la separazione dai caregiver provoca disturbi comportamentali, affettivi e sociali, sottolineando la rilevanza di legami stabili e affettivamente significativi per la salute psichica.

Secondo Bowlby, il bambino possiede una predisposizione biologica a sviluppare un legame specifico con chi si prende cura di lui (monotropismo), che favorisce la vicinanza e la protezione dalle minacce. La progressiva discriminazione tra le figure di accudimento e gli altri adulti porta allo sviluppo di comportamenti di accostamento (proximity seeking) e di protesta alla separazione (separation protest), finalizzati al mantenimento della sicurezza e del legame. Tali comportamenti, definiti “collera funzionale”, svolgono una funzione adattiva, rafforzando il legame e scoraggiando la rottura del rapporto.

Tuttavia, esperienze traumatiche come maltrattamento fisico o psicologico, abusi sessuali, trascuratezza o rifiuto possono alterare questa dinamica, determinando forme di collera “non funzionale”. In questi casi, la reazione aggressiva del bambino non mira a ricercare la vicinanza, ma a difendersi da figure percepite come pericolose, producendo una compromissione del legame di attaccamento. Tale aggressività, apparentemente distruttiva, rivela la connessione intrinseca tra attaccamento e difesa, indicando che i comportamenti aggressivi possono assumere una funzione adattiva quando il legame primario fallisce nel garantire sicurezza e protezione.

Le prime esperienze relazionali determinano la formazione dei Modelli Operativi Interni (MOI), schemi cognitivi-affettivi che organizzano la percezione e la comprensione delle figure di attaccamento, guidano le aspettative e regolano il comportamento nelle relazioni significative (Stern, 2000). I MOI consentono al bambino di prevedere la disponibilità del caregiver, modulare le proprie reazioni emotive e sviluppare una rappresentazione coerente di Sé e degli altri. Esperienze di cura sensibile promuovono MOI sicuri, caratterizzati da fiducia e capacità di esplorare l’ambiente; esperienze di maltrattamento, trascuratezza o

deprivazione producono invece MOI insicuri, con ripercussioni su autostima, regolazione emotiva e competenze relazionali.

In questo contesto, la capacità riflessiva del bambino, ovvero la possibilità di comprendere e mentalizzare stati emotivi propri e altrui, emerge come un fattore cruciale: quando essa è compromessa, le emozioni intense, in particolare rabbia e paura, tendono a essere vissute in modo disorganizzato, sfociando in comportamenti aggressivi o in difficoltà di regolazione emotiva (Fonagy, 2002). La letteratura evidenzia che esperienze infantili traumatiche aumentano la probabilità di sviluppare attaccamenti insicuri di tipo ansioso o evitante, che si manifestano attraverso iperattivazione o soppressione dei segnali di bisogno e della vicinanza al caregiver.

Gli studi di Bowlby e di altri autori hanno inoltre mostrato che la deprivazione prolungata o il maltrattamento infantile hanno effetti duraturi, influenzando il comportamento relazionale e affettivo nell'età adulta. Bambini che hanno vissuto esperienze traumatiche tendono a sviluppare modelli di Sé negativi, scarsa fiducia negli altri e difficoltà nella regolazione emotiva, caratteristiche che si riflettono in relazioni interpersonali instabili e potenzialmente disfunzionali (Cicchetti, 2005). Questi effetti si manifestano anche nel contesto prenatale, influenzando la capacità dei futuri genitori di stabilire legami sicuri e promuovere uno sviluppo emotivo sano nei propri figli.

Per concludere, l'analisi teorica e clinica di Bowlby mostra come l'attaccamento costituisca la matrice su cui si fondano la regolazione emotiva, la capacità riflessiva, la costruzione del Sé e la capacità relazionale (Slade, 2005). Il maltrattamento infantile non solo compromette queste funzioni, ma può anche attivare forme di aggressività difensiva, alterando la percezione di sicurezza e la qualità dei legami. La comprensione di queste dinamiche è fondamentale per la ricerca sui fattori di rischio psicopatologico e per l'elaborazione di interventi preventivi mirati, sia in età infantile sia in contesti perinatali, in quanto le prime

esperienze relazionali pongono le basi per la salute emotiva futura e per lo sviluppo di attaccamenti sicuri nelle generazioni successive.

5.4 Il bonding nei padri

La letteratura sull'attaccamento prenatale è storicamente dominata dallo studio del legame tra madre e feto, mentre il contributo di fattori psicologici e relazionali nell'esperienza dei padri è stato trascurato. Ricercatori pionieristici come Cranley (1981a) e Condon (1985) hanno posto l'attenzione sullo sviluppo di misure valide per cogliere l'attaccamento materno al feto, mentre alcuni studi hanno esteso l'analisi all'attaccamento paterno (Weaver & Cranley, 1983; Condon, 1985). Negli ultimi anni, tuttavia, è cresciuto l'interesse per comprendere come anche i padri creino un legame emotivo significativo con il bambino non ancora nato, con implicazioni importanti per la loro identità genitoriale e per la qualità delle relazioni familiari future.

L'Organizzazione Mondiale della Sanità (WHO, 2007) ha sottolineato l'importanza di coinvolgere i padri sia durante la gravidanza sia dopo la nascita, enfatizzando la rilevanza del loro ruolo nelle dinamiche familiari e nello sviluppo socio-emotivo dei figli. Malgrado ciò, in molte culture persistono concezioni tradizionali secondo cui la riproduzione e i processi affettivi legati alla gravidanza siano "affari delle donne", riducendo l'attenzione clinica e scientifica sulle esperienze psicologiche dei padri (Natoli et al., 2012). Barriere strutturali e culturali, come stereotipi di ruolo, mancanza di modelli positivi di paternità e scarsa conoscenza delle esigenze emotive della partner in gravidanza, ostacolano ancora il pieno coinvolgimento degli uomini nella transizione alla genitorialità (Peltzer, Chao & Dana, 2009; WHO, 2002; UNPFA, 2009).

In questo contesto, sia Cranley sia Condon ipotizzarono l'esistenza di un attaccamento padre-feto (Paternal-Fetal Attachment, PFA), concepito come un intenso sentimento di interesse e affetto nei confronti del bambino non ancora nato, alla base dell'identità paterna

emergente (Condon & Corkindale, 1997). Condon condusse uno dei primi studi sistematici sulle coppie, utilizzando misure di attaccamento per valutare pensieri, sentimenti e comportamenti dei genitori verso il feto. Sebbene i pensieri e i sentimenti verso il feto risultassero simili tra madri e padri, emersero differenze significative nei comportamenti: i padri tendevano a parlare meno con il feto e a cercare meno informazioni riguardo al bambino, probabilmente in relazione a conflitti percepiti con gli stereotipi di ruolo maschile (Condon, 1985). In entrambi i sessi, inoltre, l'attaccamento verso il feto non si correlava necessariamente con l'atteggiamento nei confronti di "essere incinta", sottolineando la specificità del legame prenatale rispetto ad altri aspetti dell'esperienza perinatale.

Il legame paterno nei confronti del nascituro è oggi riconosciuto come un fenomeno multidimensionale e dinamico, distinto ma strettamente correlato all'attaccamento materno. Una recente scoping review, che ha analizzato 39 studi, ha evidenziato come il concetto di *paternal bonding* non disponga ancora di definizioni univoche e di strumenti standardizzati: molte ricerche utilizzano misure originariamente sviluppate per le madri, generando lacune nella comprensione dei processi specifici del legame padre-feto e padre-neonato (de Waal, 2025). Ciò che appare chiaro è che il bonding paterno comprende componenti affettive, cognitive e comportamentali, ed è modulato dalle convinzioni personali del padre, dalla sua storia di attaccamento e dalle esperienze relazionali pregresse. L'interazione diretta con il bambino emerge come un fattore cruciale nel rafforzamento del legame, sebbene i padri tendano a percepire una maggiore distanza emotiva rispetto alle madri, in particolare nel periodo immediatamente successivo alla nascita, e spesso riferiscano difficoltà legate all'inclusione nei contesti di cura perinatale (Suzuki et al., 2022).

Questa prospettiva concettuale è confermata da studi qualitativi sulle esperienze soggettive dei padri. In una ricerca su 30 uomini (10 in gravidanza, 11 con neonati fino a sei mesi e 9 con bambini di 2–3 anni), sono emersi due temi principali: le sensazioni di bonding e i fattori che ne facilitano lo sviluppo. I padri descrivono il processo come un'evoluzione progressiva

da una rappresentazione astratta del nascituro verso percezioni più concrete, accompagnata da emozioni positive ma anche da incertezze e preoccupazioni (Lagarto, 2022). Esperienze come sentire i movimenti fetali, osservare il volto del bambino dopo la nascita e interagire attivamente con lui sono state identificate come determinanti per rafforzare il legame emotivo (de Waal et al., 2025). Questi risultati indicano che il bonding paterno si sviluppa già durante la gravidanza e si consolida attraverso esperienze sensoriali e relazionali dirette, sottolineando l'importanza di coinvolgere attivamente i padri nelle fasi della gravidanza, del parto e del postpartum.

Ulteriori studi qualitativi approfondiscono gli aspetti specifici dell'attaccamento fetale nei padri. In alcune indagini, gli uomini descrivono esperienze definite "momenti scatenanti", eventi che rendono concreta la consapevolezza della futura paternità e stimolano l'intensificazione dei sentimenti di attaccamento. Dalle interviste emergono temi come la consapevolezza della responsabilità, la transizione verso l'identità paterna e conflitti emotivi legati al ruolo genitoriale. Nonostante il sostegno di familiari, amici e gruppi di educazione prenatale, molti padri segnalano una percezione di supporto insufficiente, in particolare per quanto riguarda salute mentale e inclusione nei percorsi di cura perinatale, suggerendo la necessità di interventi che valorizzino il ruolo paterno e promuovano l'attaccamento prenatale (Lagarto, 2022).

In linea con queste evidenze, numerosi studi indicano che anche gli uomini possono essere suscettibili a difficoltà psicologiche nel periodo perinatale, incluse depressione clinicamente significativa e sintomi affettivi rilevanti. La depressione perinatale paterna è stata associata a una riduzione della qualità del bonding con il bambino (de Waal et al., 2025; Nosrati et al., 2019; Vismara et al., 2016) e mostra una chiara correlazione negativa con l'attaccamento prenatale: padri con sintomi depressivi o ansiosi tendono a sviluppare un legame emotivo meno sicuro con il nascituro (Smythe, 2022).

Queste dinamiche possono innescare un circolo vizioso in cui bassi livelli di attaccamento prenatale aumentano la vulnerabilità del padre allo sviluppo di sintomi depressivi, i quali, a loro volta, possono compromettere la relazione futura con il bambino e influire negativamente sul suo sviluppo socio-emotivo (Wells, 2023; Vismara et al., 2016). Fattori relazionali e postnatali contribuiscono ulteriormente alla definizione del bonding paterno: la depressione paterna è spesso associata a quella materna, determinando un incremento dello stress genitoriale complessivo e una riduzione della qualità delle interazioni precoci con il bambino. Questa condizione aumenta il rischio di esiti evolutivi problematici nei figli, quali difficoltà comportamentali, iperattività e ridotta capacità paterna di supporto emotivo e regolazione comportamentale nei primi mesi di vita (De Conti, 2017; Vismara et al., 2016). La persistenza della sintomatologia depressiva paterna nel periodo postnatale è inoltre correlata a livelli elevati di ansia, stress genitoriale e alla presenza di depressione nella partner (Vismara et al., 2016).

Il bonding paterno si configura quindi come un costrutto multidimensionale e dinamico, influenzato dall'interazione di fattori psicologici, relazionali e biologici. In linea con l'obiettivo generale del progetto di ricerca, volto ad analizzare i processi relazionali alla luce delle esperienze precoci di maltrattamento, il paragrafo seguente presenta lo Studio 3: "The Impact of Childhood Maltreatment on Paternal Antenatal Bonding: The Mediating Role of Antenatal Depression", condotto da Bevacqua et al., finalizzato a indagare l'influenza delle esperienze di abuso e trascuratezza infantile sullo sviluppo del legame emotivo paterno durante la gravidanza, considerando il ruolo di mediazione della sintomatologia depressiva.

5.5 Studio 3. The Impact of Childhood Maltreatment on Paternal Antenatal Bonding: The Mediating Role of Antenatal Depression

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Il presente paragrafo offre una sintesi dello studio intitolato “*The Impact of Childhood Maltreatment on Paternal Antenatal Bonding: The Mediating Role of Antenatal Depression*”, pubblicato nel 2025 sulla rivista *BMC Psychology*.

Per una descrizione dettagliata del disegno di ricerca, delle analisi condotte e dei risultati ottenuti, si rimanda all’Allegato 3, in cui è riportato il testo integrale dell’articolo.

Nel complesso processo di transizione alla genitorialità, i futuri genitori iniziano a costruire rappresentazioni mentali ed emotive del bambino non ancora nato, gettando le basi della futura relazione genitore-figlio. Tradizionalmente, la ricerca in ambito perinatale si è concentrata prevalentemente sull’esperienza materna; tuttavia, negli ultimi anni è cresciuto l’interesse scientifico verso il ruolo dei padri e verso lo sviluppo del loro legame emotivo con il feto (Chua, 2025; Gümüşsoy, 2023).

Il legame emotivo tra genitore e bambino prima della nascita viene generalmente definito bonding prenatale, inteso come l’insieme di pensieri, emozioni e rappresentazioni mentali che il genitore sviluppa nei confronti del feto (Condon, 1997). Tale legame costituisce una dimensione fondamentale della relazione genitoriale e contribuisce a orientare l’investimento affettivo e la futura qualità dell’interazione con il bambino (Altaweli, 2010). Sebbene evidenze recenti dimostrino che anche i padri sviluppano un coinvolgimento emotivo nei confronti del feto già durante la gravidanza, il livello di bonding paterno

presenta una considerevole variabilità individuale (Nakić Radoš, 2024). Diversi fattori psicologici e contestuali sembrano influenzare tale processo, tra cui il benessere psicologico, il supporto sociale e la qualità della relazione di coppia. Parallelamente, alcune condizioni di vulnerabilità, come gravidanze non pianificate o complicazioni ostetriche, sono state associate a livelli inferiori di coinvolgimento emotivo paterno (Schaber, 2021).

Oltre a questi fattori situazionali, un crescente filone di ricerca suggerisce che le esperienze relazionali precoci possano influenzare profondamente il modo in cui gli individui affrontano la transizione alla genitorialità (Christie, 2017). In particolare, le esperienze avverse nell'infanzia (Adverse Childhood Experiences, ACEs), come l'abuso emotivo o la trascuratezza emotiva, sono state associate a esiti negativi in termini di salute mentale e qualità delle relazioni affettive in età adulta.

Durante la transizione alla genitorialità, tali esperienze precoci possono riattivare conflitti emotivi irrisolti e aumentare la vulnerabilità a sintomi depressivi nel periodo perinatale (Infurna, 2024). A loro volta, i sintomi depressivi possono interferire con la capacità del genitore di sviluppare un legame emotivo con il bambino non ancora nato. Nonostante l'evidenza di questi meccanismi nelle madri, la letteratura relativa ai padri è ancora limitata. Alla luce di queste considerazioni, lo studio esaminato si propone di indagare se due specifiche forme di maltrattamento infantile (abuso emotivo e trascuratezza emotiva) influenzino lo sviluppo del bonding paterno prenatale e se tale relazione sia mediata dalla presenza di sintomi depressivi durante la gravidanza.

Lo studio ha coinvolto 278 futuri padri italiani con un'età media di 36,5 anni ($SD = 5,6$), reclutati principalmente durante controlli ostetrici prenatali, in centri nascita e attraverso reti di supporto alla genitorialità. La maggioranza dei partecipanti risiedeva nelle città di Palermo (45%), Lecce (32%), Messina (11%) e Bari (12%).

I partecipanti dovevano avere almeno 18 anni e una buona conoscenza della lingua italiana.

I questionari sono stati somministrati sia in presenza, tramite dispositivi elettronici presso l'ospedale "Civico – Di Cristina – Benfratelli" di Palermo, sia online.

Il protocollo di ricerca è stato approvato dai comitati etici competenti ed è stato condotto in conformità con la Dichiarazione di Helsinki.

Per la raccolta dei dati sono stati utilizzati tre strumenti principali:

Paternal Antenatal Attachment Scale (PAAS): questionario composto da 19 item che misura il bonding paterno prenatale lungo due dimensioni:

- qualità dell'attaccamento
- intensità della preoccupazione o coinvolgimento emotivo.

Edinburgh Postnatal Depression Scale (EPDS): scala di autovalutazione di 10 item utilizzata per misurare i sintomi depressivi nelle ultime settimane. I punteggi più elevati indicano maggiore distress emotivo.

Childhood Trauma Questionnaire – Short Form (CTQ-SF): strumento di 28 item che valuta le esperienze di maltrattamento infantile. Ai fini dello studio sono state considerate in particolare le sottoscale di abuso emotivo e trascuratezza emotiva.

L'analisi dei dati è stata condotta attraverso una procedura articolata in diverse fasi, con l'obiettivo di esplorare in modo sistematico le relazioni tra esperienze di maltrattamento infantile, sintomi depressivi nel periodo prenatale e sviluppo del bonding paterno con il feto.

In una fase preliminare sono state effettuate analisi descrittive delle principali variabili oggetto di studio, al fine di esaminare la distribuzione dei dati e verificare la presenza di eventuali valori anomali. Gli outlier sono stati individuati attraverso il test di Grubbs, mentre la normalità delle distribuzioni è stata valutata mediante gli indici di asimmetria (skewness) e curtosi (kurtosis), considerando come criteri di accettabilità valori di asimmetria inferiori a 2 e valori di curtosi inferiori a 7.

I risultati hanno indicato che la maggior parte delle variabili presentava una distribuzione adeguata; tuttavia, le dimensioni relative alle esperienze di trauma infantile, in particolare abuso emotivo e trascuratezza emotiva, hanno mostrato livelli più elevati di asimmetria e curtosi, suggerendo una distribuzione meno uniforme all'interno del campione.

Le statistiche descrittive hanno evidenziato che il livello medio di sintomi depressivi, misurato tramite la Edinburgh Postnatal Depression Scale (EPDS), era relativamente contenuto nel campione ($M = 4$; $DS = 4$). Per quanto riguarda le esperienze di maltrattamento infantile rilevate tramite il Childhood Trauma Questionnaire, i partecipanti hanno riportato un punteggio medio di 6,3 ($DS = 2,8$) per l'abuso emotivo e 8,5 ($DS = 4,2$) per la trascuratezza emotiva. In riferimento al bonding paterno prenatale, valutato tramite la Paternal Antenatal Attachment Scale, i punteggi medi risultavano pari a 22,4 ($DS = 3,6$) per la dimensione della qualità dell'attaccamento (PAAS-QA) e 33,1 ($DS = 2,8$) per la dimensione relativa all'intensità della preoccupazione nei confronti del feto (PAAS-IC).

Successivamente è stata analizzata l'eventuale influenza di variabili socio-demografiche e contestuali che avrebbero potuto agire come fattori confondenti. A tal fine sono state esaminate le associazioni tra le variabili principali dello studio e alcune caratteristiche dei partecipanti, tra cui età, trimestre di gravidanza e luogo di raccolta dei dati. Le analisi hanno evidenziato un'associazione significativa tra l'età dei partecipanti e i sintomi depressivi ($\tau = -0,13$; $p = .004$), suggerendo che i padri più giovani tendevano a riportare livelli più elevati di sintomatologia depressiva. Inoltre, il sito di raccolta dei dati è risultato associato ai punteggi relativi all'abuso emotivo ($H(3) = 7,5$; $p = .047$) e alla trascuratezza emotiva ($H(3) = 33,6$; $p < .001$). È stata inoltre osservata un'associazione tra il trimestre di gravidanza e la dimensione dell'intensità della preoccupazione paterna nei confronti del feto ($H(2) = 15,17$; $p < .001$).

Alla luce di tali risultati, queste variabili sono state successivamente incluse come covariate nelle analisi successive, al fine di controllarne l'effetto nei modelli statistici.

In una fase successiva sono state condotte analisi correlazionali per esaminare le relazioni bivariate tra le variabili principali dello studio. Considerata la presenza di alcune deviazioni dalla normalità nelle distribuzioni dei dati, è stato utilizzato il coefficiente di correlazione Kendall's Tau, particolarmente indicato per dati non parametrici. Le analisi hanno evidenziato che entrambe le dimensioni del maltrattamento infantile risultavano positivamente associate ai sintomi depressivi nel periodo prenatale. In particolare, l'abuso emotivo ha mostrato una correlazione positiva con i sintomi depressivi ($\tau = 0,22$; $p < .001$), mentre la trascuratezza emotiva ha mostrato una relazione analoga ($\tau = 0,19$; $p < .001$).

Parallelamente, i sintomi depressivi sono risultati negativamente associati alle dimensioni del bonding paterno prenatale. In particolare, è emersa una correlazione negativa con la qualità dell'attaccamento ($\tau = -0,20$; $p < .001$) e una correlazione negativa, sebbene di minore entità, con l'intensità della preoccupazione nei confronti del feto ($\tau = -0,12$; $p = .046$).

Le analisi correlazionali hanno inoltre evidenziato associazioni negative tra le esperienze di maltrattamento infantile e le dimensioni del bonding prenatale. In particolare, l'abuso emotivo è risultato negativamente associato sia alla qualità dell'attaccamento ($\tau = -0,205$; $p < .001$) sia all'intensità della preoccupazione paterna ($\tau = -0,173$; $p < .001$). Analogamente, la trascuratezza emotiva ha mostrato associazioni negative con la qualità dell'attaccamento ($\tau = -0,307$; $p < .001$) e con l'intensità della preoccupazione ($\tau = -0,221$; $p < .001$).

Al fine di approfondire la natura di tali relazioni e verificare la presenza di possibili effetti di mediazione, è stato successivamente adottato un approccio basato sui modelli di equazioni strutturali (Structural Equation Modeling, SEM). Questo approccio statistico consente di esaminare simultaneamente relazioni complesse tra più variabili, permettendo di valutare sia effetti diretti sia effetti indiretti tra i costrutti considerati. L'analisi è stata condotta utilizzando il software R, tramite il pacchetto statistico lavaan, applicando il metodo di

stimam “Maximum Likelihood Robust”, particolarmente indicato in presenza di possibili deviazioni dalla normalità dei dati.

Sono stati confrontati due modelli teorici distinti. Nel primo modello è stato ipotizzato che le esperienze di maltrattamento infantile e i sintomi depressivi influenzassero direttamente il bonding paterno prenatale. Nel secondo modello è stata invece introdotta una relazione aggiuntiva tra maltrattamento infantile e sintomi depressivi, ipotizzando quindi che questi ultimi potessero svolgere un ruolo di variabile mediatrice nella relazione tra esperienze traumatiche infantili e sviluppo del legame emotivo con il feto.

Il confronto tra i modelli ha evidenziato un adattamento significativamente migliore per quelli che includevano la mediazione dei sintomi depressivi. In particolare, per la dimensione dell’abuso emotivo il modello diretto (Modello 1A) ha mostrato un adattamento insoddisfacente ai dati (RMSEA = 0,17; CFI = 0,74; TLI = 0,33; AIC = 4642,23). Al contrario, il modello che includeva il percorso mediato attraverso i sintomi depressivi (Modello 2A) ha mostrato un adattamento eccellente (RMSEA = 0,04; CFI = 0,99; TLI = 0,97; AIC = 4598,92; SRMR = 0,03), indicando che l’inclusione della depressione antenatale migliorava in modo sostanziale la capacità del modello di rappresentare i dati osservati.

Un andamento simile è stato osservato anche per la dimensione della trascuratezza emotiva. In questo caso il modello diretto (Modello 1N) ha mostrato un adattamento non soddisfacente (RMSEA = 0,14; CFI = 0,83; TLI = 0,56; AIC = 4784,86), mentre il modello che includeva il percorso mediato (Modello 2N) ha evidenziato un adattamento significativamente migliore (RMSEA = 0,07; CFI = 0,96; TLI = 0,89; AIC = 4760,34).

Nel complesso, i risultati delle analisi SEM indicano che i modelli che includono la relazione tra maltrattamento infantile e sintomi depressivi rappresentano in modo più accurato le relazioni tra le variabili considerate. Ciò suggerisce che le esperienze di abuso e trascuratezza emotiva durante l’infanzia possano influenzare il bonding paterno prenatale

non solo attraverso effetti diretti, ma anche indirettamente, aumentando la vulnerabilità alla sintomatologia depressiva durante il periodo perinatale.

I risultati dello studio indicano che le esperienze di maltrattamento emotivo nell'infanzia sono associate a livelli inferiori di bonding paterno prenatale. In particolare, sia l'abuso emotivo sia la trascuratezza emotiva sono risultati collegati a una minore qualità dell'attaccamento e a un minor coinvolgimento emotivo nei confronti del feto.

Inoltre, tali esperienze sono risultate associate a un aumento dei sintomi depressivi durante la gravidanza. La depressione perinatale paterna, a sua volta, è risultata correlata a livelli inferiori di bonding prenatale.

Le analisi SEM suggeriscono che i sintomi depressivi svolgono un ruolo di mediazione tra esperienze infantili avverse e difficoltà nello sviluppo del legame emotivo con il bambino non ancora nato. In altre parole, le esperienze traumatiche precoci sembrano aumentare la vulnerabilità alla depressione durante la gravidanza, la quale può ostacolare lo sviluppo di un legame affettivo con il feto.

Tra le due forme di maltrattamento analizzate, la trascuratezza emotiva è emersa come il predittore più forte di difficoltà nel bonding prenatale. Ciò potrebbe essere spiegato dal fatto che la deprivazione affettiva cronica nelle prime relazioni di attaccamento interferisce con lo sviluppo delle competenze socio-emotive e con la capacità di stabilire relazioni intime e sicure in età adulta.

Lo studio evidenzia come le esperienze di abuso e trascuratezza emotiva durante l'infanzia possano influenzare negativamente lo sviluppo del bonding paterno prenatale, sia direttamente sia indirettamente attraverso l'aumento dei sintomi depressivi nel periodo perinatale.

Questi risultati sottolineano l'importanza di considerare la storia relazionale e il benessere psicologico dei futuri padri nei programmi di assistenza perinatale. Lo screening precoce delle esperienze traumatiche infantili e dei sintomi depressivi potrebbe contribuire a

identificare i padri maggiormente vulnerabili e a sviluppare interventi mirati volti a promuovere un coinvolgimento emotivo più sano nella relazione con il bambino fin dalle fasi iniziali della genitorialità.

Note conclusive

Nel presente elaborato sono stati presentati alcuni degli articoli scientifici derivanti dal percorso di dottorato e dalla relativa attività di raccolta dati, condotta su un campione di donne in gravidanza e dei loro partner. Ulteriori contributi, già esitati in pubblicazioni scientifiche, verranno riportati sotto forma di elenco nella presente sezione e inclusi integralmente come allegati nella sezione successiva.

Tali lavori rappresentano l'esito di un programma di ricerca articolato, volto ad approfondire i principali fattori di rischio e di protezione nel periodo perinatale, con particolare attenzione alle dimensioni psicologiche e relazionali che caratterizzano la transizione alla genitorialità.

Nel complesso, gli studi inclusi offrono una prospettiva integrata sul ruolo delle esperienze pregresse, della sintomatologia depressiva e delle competenze riflessive genitoriali, evidenziando come tali dimensioni interagiscano nel determinare la qualità dell'attaccamento prenatale e il benessere psicologico dei futuri genitori. I risultati contribuiscono ad arricchire la letteratura esistente e forniscono indicazioni rilevanti sia per la pratica clinica sia per lo sviluppo di interventi preventivi mirati nell'ambito della salute perinatale.

La presentazione complessiva degli articoli consente, pertanto, di restituire in modo sistematico e coerente il percorso di ricerca svolto, mettendo in luce la continuità teorica e metodologica tra i diversi studi e il loro contributo alla comprensione dei processi psicologici coinvolti nella genitorialità emergente.

Il seguente elenco riporta gli articoli esitati in pubblicazioni scientifiche. La numerazione corrisponde alla sequenza con cui verranno presentati i relativi allegati nella sezione successiva.

1. Guarneri, C., Sottile, J., Bevacqua, E., Leone, M. C., Mineo, R., Rini, C., Riolo, M., Maiorana, A., & Infurna, M. R. (2025). When a Parent Is Born: An Integrated Approach to Perinatal Mental Health and Early Risk Screening. *European journal of investigation in health, psychology and education*, 15(10), 193. <https://doi.org/10.3390/ejihpe15100193>

Questo articolo corrisponde allo Studio 1 precedentemente descritto.

2. Infurna, M. R., Fazio, L., Bevacqua, E., Costanzo, G., Falgares, G., Maiorana, A., Giannone, F., & Antonucci, L. A. (2024). Understanding the relationship between childhood emotional abuse and neglect and psychological distress in pregnant women: the role of prenatal attachment. *BMC psychology*, 12(1), 520. <https://doi.org/10.1186/s40359-024-02024-w>

Questo articolo corrisponde allo Studio 2 precedentemente descritto.

3. Bevacqua, E., Fazio, L., Riolo, M., Sottile, J., Guarneri, C., Mineo, R., Rini, C., Falgares, G., Costanzo, G., Gelo, O. C. G., Maiorana, A., Mento, C., Antonucci, L. A., Garthus-Niegel, S., & Infurna, M. R. (2025). The impact of childhood maltreatment on paternal antenatal bonding: the mediating role of antenatal depression. *BMC psychology*, 14(1), 58. <https://doi.org/10.1186/s40359-025-03784-9>

Questo articolo corrisponde allo Studio 3 precedentemente descritto.

4. Infurna, M. R., Bevacqua, E., Costanzo, G., Falgares, G., & Giannone, F. (2023). Psychosocial risk factors and psychopathological outcomes: Preliminary findings in Italian pregnant women. *Women*, 3(1), 121-131. <https://doi.org/10.3390/women3010010>

5. Costanzo, G., Barberis, N., Cannavò, M., Infurna, M. R., Bevacqua, E., Guarneri, C., Sottile, J., Tomba, E., & Falgares, G. (2025). Exploring the Association Between Childhood Emotional Maltreatment and Eating Disorder Symptoms During Pregnancy: A Moderated Mediation Model with Prenatal Emotional Distress and Social Support. *Nutrients*, 17(5), 902. <https://doi.org/10.3390/nu17050902>

6. Costanzo, G., Barberis, N., Bevacqua, E., Infurna, M. R., & Falgares, G. (2025). Romantic Relationship Quality and Eating Disorder Symptoms in Late Pregnancy: The Serial Mediating Role of Depression and Body Dissatisfaction. *Behavioral Sciences*, 15(10), 1392. <https://doi.org/10.3390/bs15101392>

7. Infurna, M.R., Bevacqua, E., Costanzo, G., Falgares, G., Gelo, O., Giannone, F., Guarneri, C., Lagetto, G., Maiorana, A., Mento, C., Sottile, J., Fazio, L., Antonucci, L.A. Beyond the past: the mediating role of reflective functioning between childhood maltreatment subtypes and perinatal depression. (Under review).

8. Bevacqua, E., Fazio, L., Infurna, M.R. Couple Satisfaction During Pregnancy: Actor–Partner Effects of Reflective Functioning and Perinatal Depressive Symptoms (Under review).

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Article

When a Parent Is Born: An Integrated Approach to Perinatal Mental Health and Early Risk Screening

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Abstract

This article presents the “When a Parent is Born” project, focused on early identification and intervention for psychological distress during pregnancy and postpartum. It addresses the perinatal vulnerability to depression, and psychological distress, providing psychological support for high-risk cases within a clinical setting. The sample included 997 pregnant women (Mean_{age} = 32.75; SD = 5.33). The protocol encompassed psychological distress (EPDS, PAMA), social support (MSSS), couples’ relationship (DAS), childhood maltreatment (CTQ-SF), and prenatal attachment (MAAS). Univariate and multivariate linear regression models were employed for the analyses. This study highlighted the prevalence of depressive symptoms in 24.7% of the sample, a non-clinical population, and suicidal risk in 2.4%. All predictors were associated with EPDS and PAMA scores in univariate regressions ($p < 0.005$). In the multivariate model of childhood trauma predictors, emotional abuse and neglect were significant for EPDS ($F = 19.584, p < 0.001$) and PAMA ($F = 17.876, p < 0.001$). In the multivariate regression models, the main significant associations (EPDS; $F = 17.708, p < 0.001$) (PAMA; $F = 19.346, p < 0.001$) remained for DAS ($p < 0.001$) and emotional abuse (EPDS $p = 0.005$; PAMA $p < 0.001$). These findings revealed factors associated with perinatal psychological distress and highlighted the importance of psychological screening during pregnancy to support holistic care through a multidisciplinary team. However, the study presents limitations, including the use of self-report measures, the cross-sectional nature of the data, and the limited generalizability of the findings, as the sample is restricted to Southern Italy.

Keywords: pregnancy; depression; psychological distress; screening; early intervention



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1. Introduction

This article presents the ongoing project “When a parent is born”, which proposes a multidisciplinary approach to promoting well-being during the perinatal period. The project is carried out within the Department of Obstetrics and Gynecology at the Civico Hospital in Palermo and is promoted by the Department of Psychology, Educational Science, and Human Movement of the University of Palermo. Specifically, the project promotes the importance of screening psychological and social risk factors during pregnancy and

highlights the value of integrating medical and psychological perspectives for a more comprehensive vision of all dimensions that affect women during pregnancy and postpartum. Pregnancy represents a critical window of vulnerability and opportunity, during which the quality of care and support can significantly influence not only maternal health but also fetal development and the couple's well-being. The WHO ([World Health Organization, 1946](#)) asserts that health is “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. This holistic definition of health is particularly relevant during pregnancy, as it is a period marked by profound biological, psychological, and social changes. From this perspective, the study—and the broader project—adopts a biopsychosocial model, with particular emphasis on the psychological well-being of pregnant women, and its impact on the child and family system. However, despite the recognition of health as a multidimensional construct, perinatal research has often remained fragmented, with a stronger focus on biomedical risk factors than on psychological or relational ones ([Alhusen & Alvarez, 2016](#); [Woody et al., 2017](#)). For instance, while systematic reviews have consistently emphasized the prevalence of perinatal depression and its detrimental consequences ([Woody et al., 2017](#); [Al-Abri et al., 2023](#)), relatively few studies have examined how different psychosocial risks interact with protective resources in line with the WHO's biopsychosocial model.

From a clinical perspective, recent guidelines ([World Health Organization, 2016](#)) emphasize the importance of prenatal care, including the promotion of health through screening, diagnosis, and prevention. According to these guidelines, a positive pregnancy experience and a fulfilling transition to motherhood are supported by several key factors: the preservation of physical, psychological, and sociocultural well-being; the maintenance of a healthy pregnancy for both mother and baby, which includes the prevention and management of risks, illnesses, and fatalities; a successful transition to positive labor and delivery; and the development of maternal self-esteem, competence, and autonomy. These ideal conditions, however, are not always achieved.

The perinatal period, which typically begins with pregnancy and extends to one year after childbirth, involves substantial physiological and emotional adaptations. For many women, coping with the complex and demanding nature of this transition may contribute to increased vulnerability to mental health difficulties. Indeed, the perinatal period is recognized as a high-risk period for developing depression, anxiety, and other mental disorders, especially in the presence of specific risk factors ([Biaggi et al., 2016](#)). A recent meta-analysis provides an overview of the main biological, psychological, and social risk factors associated with perinatal depression ([Yang et al., 2022](#)). It particularly emphasizes the importance of not considering these factors in isolation, as some, such as low educational level, poor economic status, and a history of mental illness, are shown to be intrinsically and closely interrelated.

In the Italian context, approximately one in five women experienced some form of perinatal depression (PND). Literature defines perinatal depression as a mood disorder characterized by the onset of depressive symptoms during pregnancy and/or the postpartum period ([Terrone et al., 2023](#); [Wikman et al., 2020](#)). Moreover, results from a meta-analysis reported the prevalence of perinatal depression to be approximately 12% ([Woody et al., 2017](#)) with a global incidence ranging from 10–20% ([Nisar et al., 2020](#); [Wang et al., 2021](#)). Despite its frequency, perinatal depression is frequently underdiagnosed and undertreated, particularly during pregnancy. For example, a study conducted in the United States found that nearly 60% of women experiencing depressive symptoms do not receive a diagnosis, and 50% of women with a diagnosis do not receive adequate treatment ([Ko et al., 2012](#)). Similarly, in Italy, the National Institute of Health (Istituto Superiore di Sanità, ISS) has developed guidelines outlining best practices for the screening, prevention, and treatment

of perinatal depression ([Istituto Superiore di Sanità, 2024](#)). However, these remain recommendations and are, in most cases, not integrated into routine prenatal care, largely due to a predominant focus on medical and obstetric aspects.

From a research perspective, the focus has traditionally been placed on postpartum disorders. However, antenatal depression has been consistently identified in the literature as one of the strongest predictors of postpartum depression ([Qi et al., 2023](#)). This implies that implementing screening procedures and providing timely interventions during pregnancy may significantly reduce the likelihood of depressive symptoms persisting or worsening after childbirth ([Al-Abri et al., 2023](#); [McGarry et al., 2009](#); [Sidebottom et al., 2021](#)).

Furthermore, antenatal depressive symptoms have been found to not only predict postpartum depression (PPD) but also be associated with obstetric complications such as preterm birth ([Jesse et al., 2003](#)), low birth weight ([Rahman et al., 2007](#)), and a higher rate of cesarean sections ([Chung et al., 2001](#)).

A literature review ([Ko, 2017](#)) determined that the current risk factors for antenatal depressive symptoms primarily involved biological, psychological, and social aspects. Biological risks included genetic factors ([Mahon et al., 2009](#)), endocrine dysregulation ([Yim et al., 2009](#)), and epigenetic factors ([Meltzer-Brody, 2011](#)). Meanwhile, sociodemographic and psychosocial characteristics included low socioeconomic status (low level of education, poverty, low income, unemployment), lack of social and partner support, exposure to stressful life events, and depression and anxiety during pregnancy ([Beck, 1996](#); [Vesga-López et al., 2008](#)).

The dimension of social support encompasses the individual's surrounding network, including family members, friends, and partners. Even after childbirth, a woman's family and social network continue to be a significant resource. According to several studies, social support is a crucial protective factor against the development of antenatal and postnatal depressive symptoms and psychological distress ([Dennis & Letourneau, 2007](#); [Dennis & Ross, 2006](#)). Specifically, women who received strong support from their partners during pregnancy tend to present lower levels of postpartum distress ([Stapleton et al., 2012](#)).

In this regard, another important aspect is the level of relational well-being between partners. Some studies have shown that a poor relationship constitutes a psychosocial risk factor for the development of antenatal depressive symptoms. Moreover, women who perceived their partners as supportive tended to experience increased well-being in their roles as women, mothers, and partners ([Hopkins et al., 1987](#); [Misri et al., 2000](#)). Relationship satisfaction and dyadic adjustment were key factors for maintaining psychological well-being ([Thomas et al., 2017](#)). Consequently, mothers experiencing difficulties in their relationships with their partners were at a higher risk of developing PND ([Mangialavori et al., 2019](#)).

Furthermore, the literature indicates that childhood trauma experiences are significant risk factors for the development and persistence of antenatal depressive symptoms and psychological distress ([Chapman et al., 2004](#); [Wajid et al., 2020](#)). Childhood trauma encompasses a wide variety of negative early-life experiences that can have lasting psychological, emotional, and physical effects. These traumas include physical, sexual, and emotional abuse and emotional and physical neglect. Some of the consequences of childhood trauma experiences extend beyond an increased risk of suicidality and depressive symptoms during pregnancy ([Farber et al., 1996](#)), complications affecting both maternal and infant health postpartum ([Möhler et al., 2008](#)). These complications may include adverse birth outcomes like preterm birth, low birth weight ([Smith et al., 2016](#)), and the occurrence of physical health problems during pregnancy ([Lukasse et al., 2009](#)). Another important dimension that may be related to antenatal depressive symptoms is prenatal attachment ([Alhusen, 2008](#); [Misri & Kendrick, 2008](#)). Attachment is the emotional connection and concern that

typically develops between the pregnant woman (or parents in general) and the unborn child (Condon & Corkindale, 1997). This bond is regarded as the most fundamental form of human intimacy, representing the initial internalized conception of the fetus, which both parents typically develop and refine throughout pregnancy. The quality of the parent–infant relationship is a crucial factor that significantly influences the child’s subsequent cognitive and emotional development (Pisoni et al., 2014). A review suggested that, despite contrasting opinions present in the literature, there was an association between prenatal attachment and depression, particularly prenatal depression (Rollè et al., 2020). Indeed, depressive symptoms were strongly associated with a sense of detachment from the child (Condon & Corkindale, 1997), but it is not clear from an analysis of the literature which of the aspects determines the other.

In summary, this project aims to investigate aspects, as identified in the literature, that are significantly linked to the onset of psychological distress during the perinatal period, with a focus on prevention and mental health promotion. This project involves the comprehensive screening and management of potentially high-risk situations.

In line with the overarching aims of the project, the present study specifically seeks to examine how the selected variables interact and jointly influence the development of perinatal psychological distress. While previous research has often explored these factors in isolation, such as the impact of childhood trauma on antenatal depression, less is known about how these variables combine and interact to influence psychological outcomes in the perinatal context. By aligning with WHO’s 2016 recommendations on antenatal care, the present study adopts a critical stance: it seeks to identify specific pathways of vulnerability and resilience that may inform preventive interventions and ultimately operationalize the WHO’s holistic vision of maternal health.

The central hypothesis of this study is that specific combinations of risk and protective factors may better predict the presence of perinatal psychological distress. In particular, it is hypothesized that experiences of childhood maltreatment (including abuse and neglect) will be associated with increased vulnerability to perinatal depressive symptoms and psychological difficulties. Conversely, protective factors such as strong perceived social support, secure prenatal attachment, and high-quality couple relationships are expected to buffer against such distress. This integrative approach may contribute to a more nuanced understanding of perinatal mental health, adopting a psychodynamic perspective, and inform the development of targeted preventive interventions.

2. Materials and Methods

2.1. Project Presentation

The project, “When a Parent is Born—Information, Screening, Prevention, and Early Treatment of Psychological Distress in Pregnancy and Postpartum Depression” (PSN2020 CUP D73C23000010003), conducted in collaboration between the Department of Psychology, Educational Science and Human Movement of the University of Palermo and the Complex Operative Unit (U.O.C.) of Obstetrics and Gynecology at the “Civico—Di Cristina—Benfratelli” Hospital of Palermo, is based on screening for psychosocial risk factors during pregnancy. Data collection occurs at two time points: during pregnancy (T0) and approximately 6 months postpartum (T1). A longitudinal approach was utilized; however, only data from T0, corresponding to the pregnancy period, were presented here. A screening protocol was developed to assess psychosocial dimensions identified in the scientific literature as relevant risk factors for the development of psychopathological outcomes during the perinatal period. This protocol was administered to patients within the hospital’s full-term pregnancy and high-risk pregnancy clinics, in addition to the routine medical assessment. The project targets pregnant women, who are invited to participate in the screening as-

assessment with the active involvement of psychologists and healthcare workers. Data was primarily collected through self-report instruments, using the “Google Forms” platform.

The project aims to identify and intervene early and effectively in high-risk situations, such as the presence of moderate to elevated levels of depressive symptoms, high suicide risk, and the presence of moderate to elevated levels of childhood trauma. The intervention oversees the psychological management of these patients through the support of a psychotherapist within the clinic. This aspect reflects the necessity of integrating figures like psychologists and psychotherapists into a medical equipe to ensure comprehensive care for the pregnant woman’s overall well-being.

2.2. Procedure and Ethical Aspects

The data collection was preceded by the completion and signing of informed consent forms, which briefly explained the study’s objectives and specified that individual information and responses provided were anonymous and confidential. The patients were guided and supported by the psychologists in completing the screening questionnaire. The screening protocol comprised various areas: socio-demographic information, pregnancy-related information, psychological distress, perceived social support, quality of the couple’s relationship, childhood trauma experiences, and prenatal attachment. At the end of each week, the data obtained through the screening was analyzed by psychologists to generate a list of patients in high-risk situations, which was then disclosed to medical personnel and the psychotherapist. Subsequently, those patients were contacted by the psychotherapist and followed on their course of labor, delivery, hospital stay, and postpartum.

All procedures in this study were conducted in accordance with the 2024 Declaration of Helsinki. The protocol was approved by the Bioethics Committee at the University of Palermo (167/2023) and the Ethics Committee at the “Civico—Di Cristina—Benfratelli” Hospital of Palermo (142/2022).

2.3. Sample

The sample of this study, from the beginning of the project to date, includes 997 pregnant women ($\text{Mean}_{\text{age}} = 32.75$; $\text{SD} = 5.33$), predominantly of Italian nationality and residing in the Palermo area. To be eligible, participants met three criteria: were at least 18 years old, were pregnant, and spoke fluent Italian. Most of the pregnant women in the sample (91.0%) were in their third trimester and 70.8% of pregnancies were planned. Twin pregnancies were rare (1.0%) and 5.8% of the participants had used Assisted Reproductive Technology. 27.4% of the pregnancies were considered at high obstetric risk. Previous high obstetric-risk pregnancies were reported by 4.9% of the women, 22.8% had experienced a miscarriage, 0.5% had an intrauterine death, and 5.5% had undergone a voluntary termination of pregnancy.

Sociodemographic characteristics (Table 1) showed that 36.2% of the women had a high school diploma, 27.5% had a Bachelor’s degree, and 20.3% a postgraduate degree or a master’s degree. Regarding occupational status, 51.6% had stable paid work, 21.6% were housewives, and 15.3% were unemployed. Marital status was predominantly cohabiting/married at 89.6%, with 9.6% single and 0.8% separated. 61.4% had a modest standard of living, and 29.7% perceived their status as medium-upper class, owning homes and affording travel.

The sociodemographic profile of our sample closely mirrors national statistics on perinatal mental health, as documented in the ISTISAN 23/16 report (Camoni et al., 2023b). The mean age is 33 years, 61.1% of women report a modest economic condition, 61.4% are in stable paid employment, and the majority are cohabiting or married. This alignment

with national data suggests that the study population is broadly representative of the wider context, thereby strengthening the external validity of the findings.

Table 1. Characteristics of the study population (Women N = 997).

Variable	Pregnant Women
Age	N (%)
<29 years old	231 (23.5%)
36–30 years old	532 (54.1%)
48–37 years old	220 (22.4%)
data missing	14 (1.4%)
Nationality	
Italy	983 (98.6%)
Other	14 (1.4%)
Education	
None	4 (0.4%)
Primary School certificate	8 (0.8%)
Middle school certificate	148 (14.8%)
High School diploma	361 (36.2%)
Bachelor's degree	274 (27.5%)
Postgraduate specialization/Master's degree	202 (20.3%)
Employment status	
Unemployed	78 (15.3%)
Housewife	215 (21.6%)
Student	19 (1.9%)
Precarious employment	98 (9.8%)
Stable employment	514 (51.6%)
Disability pension	1 (0.2%)
Marital status	
Single	96 (9.6%)
Married/Cohabitant	893 (89.6%)
Separated/Divorced	8 (0.8%)
Economic status	
Severe problems (debts, unable to pay rent, etc.)	4 (0.4%)
Some problems (limitation of daily expenses, cannot afford vacations)	85 (8.5%)
Modest standard, but without particular difficulties	612 (61.4%)
Medium-high (own a house, frequent vacations, etc.)	296 (29.7%)
Gestational age	
First trimester	14 (1.4%)
Second trimester	76 (7.6%)
Third trimester	907 (91%)
Pregnancy	
Planned pregnancy	706 (70.8%)
Unplanned pregnancy	291 (29.2%)
First pregnancy	
Yes	611 (61.3%)
No	386 (38.7%)
Other children	
Yes	386 (38.7%)
No	611 (61.3%)
High-risk pregnancy	
Yes	273 (27.4%)
No	724 (72.6%)

Table 1. Cont.

Variable	Pregnant Women
Medically Assisted Procreation	
Yes	58 (5.8%)
No	938 (94.1%)
Psychopharmacotherapy	
Yes	13 (1.3%)
No	984 (98.7%)
Previous high-risk pregnancies	
Yes	49 (4.9%)
No	948 (95.1%)
Miscarriage	
Yes	227 (22.8%)
No	770 (77.2%)
Voluntary termination of pregnancy	
Yes	55 (5.5%)
No	942 (94.5%)
IUFD Intrauterine fetal death	
Yes	5 (0.5%)
No	992 (99.5%)
Prenatal class	
Yes	465 (46.6%)
No	532 (53.4%)
Type of pregnancy	
Single pregnancy	987 (99%)
Twin pregnancy	10 (1.0%)

2.4. Measures

- A questionnaire on the sociodemographic characteristics of the participants was administered to collect essential information such as the status of the pregnancy and any previous pregnancies, the current trimester, the estimated due date, and details about the current pregnancy to determine if it is single or multiple and if it is a high-risk pregnancy. The information collected also included educational level and the status of the romantic relationship between the parents. Additionally, it included questions on previous miscarriages, perinatal deaths, previous high-risk pregnancies, and voluntary terminations of pregnancy. Finally, it investigated the pre-existence of psychological distress (e.g., anxiety, depression) and inquired if any psychological treatment had ever been undertaken.
- Edinburgh Postnatal Depression Scale (EPDS) ([Benvenuti et al., 1999](#); [Cox et al., 1987](#)): EPDS is a self-report questionnaire that assesses psychological distress and emotional state over the past week. It consists of 10 items with responses on a 4-point Likert scale (0–3). Item 10 is particularly significant as it evaluates the risk of suicidal ideation. Higher scores indicate greater distress (possible range 0–30): scores from 0 to 8 are categorized as no risk, 9–11 as medium risk, and 12–30 as high risk. The validated Italian translation by [Benvenuti et al. \(1999\)](#) was used, demonstrating favorable psychometric properties (Cronbach’s Alpha = 0.7894).
- Perinatal Assessment of Maternal Affectivity (PAMA) ([Baldoni et al., 2018, 2023](#)): PAMA is a self-report questionnaire used to assess perinatal affective disorders. It consists of 11 items: the first eight items explore specific dimensions of emotional and behavioral challenges using a 4-point scale (0–3); the final three items examine whether the reported experiences are associated with parenthood. The areas covered include anxiety, depression, perceived stress, irritability/anger, relationship problems (including those with partners, family, friends, and work colleagues), abnormal illness

behavior (such as somatization, functional medical syndromes, and hypochondriacal complaints), physiological issues (like sleeping, eating, or sexual desire), addictions (including smoking, alcohol consumption, drug use, gambling, and compulsive Internet use), and other risky behaviors. A higher score indicates a greater risk for an affective disorder. The Italian version demonstrates adequate internal consistency (Cronbach's Alpha = 0.78).

- Maternity Social Support Scale (MSSS) (Dabrassi et al., 2009; Webster et al., 2000): The MSSS is a self-report questionnaire to be administered to both pregnant women and their partners. It allows the assessment of the perceived quantity of care (affection, support, etc.) women receive from their families, partners, and friends. The questionnaire consists of 6 items, and responses are on a 5-point Likert scale ranging from 1 (never) to 5 (very much) to determine how much they felt their significant others' support. The total score can range from 6 to 30. According to the cut-offs established by the authors who developed the scale (Webster et al., 2000), a score between 6–18 indicates a low level of support; a score between 19–24 indicates an intermediate level of support; and a score above 24 indicates an adequate level of support. This instrument exhibits good psychometric properties.
- Dyadic Adjustment Scale (DAS) (Garbarini et al., 2014; Gentili et al., 2002): The DAS measures relationship satisfaction through a 32-item questionnaire divided into four scales. Scores under 21 typically indicate relational distress. In this study, only the "Dyadic Cohesion" and "Dyadic Satisfaction" scales are used. This instrument is the most commonly used tool for assessing the quality of romantic relationships through responses on a 6-point scale ranging from "All the time" to "Never," which allows for the evaluation of relational well-being or distress. In the Italian version, the "Dyadic Cohesion" scale shows a Cronbach's Alpha of 0.67, while the "Dyadic Satisfaction" scale has a Cronbach's Alpha of 0.82.
- Childhood Trauma Questionnaire—Short Form (CTQ-SF) (Bernstein et al., 2003): The CTQ-SF consists of 28 items designed to assess experiences of childhood trauma, rated on a 5-point Likert scale (1 = never true, 2 = rarely true, 3 = sometimes true, 4 = often true, 5 = very often true). The questionnaire includes five clinical subscales: Physical Abuse, Emotional Abuse, Sexual Abuse, Physical Neglect, and Emotional Neglect. Moderate-severe cutoff scores for each subscale are ≥ 13 for Emotional Abuse; ≥ 10 for Physical Abuse; ≥ 8 for Sexual Abuse; ≥ 15 for Emotional Neglect; and ≥ 10 for Physical Neglect. For our study, we used the Italian version of the CTQ-SF, as translated by Sacchi and colleagues (Sacchi et al., 2018). All subscales demonstrate excellent psychometric properties, with a Cronbach's alpha > 0.87.
- The Maternal Antenatal Attachment Scale (MAAS) (Condon, 1993): MAAS is a questionnaire designed to assess prenatal attachment. The scale consists of 19 items and uses a 5-point Likert scale to evaluate the parent's feelings towards the child along two dimensions: the quality of attachment and the intensity of concern. Higher scores indicate higher levels of attachment. This instrument exhibits good psychometric properties.

All standardized questionnaires used are summarized in Table 2.

Table 2. Summary of instruments.

Instrument	Purpose	Dimensions	Cut-Off/Interpretation
Edinburgh Postnatal Depression Scale (EPDS)	Assesses emotional distress over the past week	Single scale (10 items); item 10 screens for suicidal ideation	0–8: No risk; 9–11: Medium risk; 12–30: High risk
Perinatal Assessment of Maternal Affectivity (PAMA)	Screens for perinatal affective disorders	Emotional and behavioral difficulties (e.g., anxiety, depression, stress, addictions)	No standardized cut-off available; higher scores indicate greater risk
Maternity Social Support Scale (MSSS)	Assesses perceived social support	Single scale (support from family, partner, friends)	6–18: Low; 19–24: Intermediate; >24: Adequate support
Dyadic Adjustment Scale (DAS)	Measures romantic relationship satisfaction	Dyadic Satisfaction, Dyadic Cohesion (only these used)	<21: Relational distress
Childhood Trauma Questionnaire—Short Form (CTQ-SF)	Assesses childhood abuse and neglect	5 subscales: Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect, Physical Neglect	EA $\geq$ 13; PA $\geq$ 10; SA $\geq$ 8; EN $\geq$ 15; PN $\geq$ 10 (moderate–severe trauma)
Maternal Antenatal Attachment Scale (MAAS)	Evaluates prenatal attachment	Quality of attachment; Intensity of concern	Higher scores = Higher levels of attachment

2.5. Data Analysis

Descriptive statistics were calculated for all sociodemographic and clinical characteristics, as well as for all psychological dimensions assessed. Linear regressions using the total scores of the instruments (PAMA total score, EPDS total score, MSSS total score, DAS total score, CTQ which includes Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional neglect, Physical neglect, and MAAS total score) were conducted, in order to investigate associations between each independent variables (MSSS, DAS, CTQ, MAAS) and the outcome variables (EPDS and PAMA). Each predictor was initially considered separately in a series of univariate regression models. A subsequent multivariate regression model was then performed, incorporating the CTQ subscales to differentiate among various forms of abuse and neglect in relation to the outcomes. Finally, a more complex multivariate regression model was implemented, in which all independent variables were simultaneously included as a set of predictors of the outcome variables. This model was tested on a subsample of 850 women who reported data on the quality of their couples' relationship, in order to ensure greater accuracy of the analyses. Consequently, the results will be presented on two separate tables. The selected criterion of statistical significance is $p < 0.05$. Model assumptions were assessed, and no relevant violations were observed.

This study aims to explore the strength and direction of the associations between a set of independent variables—conceptualized as potential risk factors—and two outcome measures: depressive symptoms (EPDS) and psychological distress (PAMA) during pregnancy. By identifying the most significant predictors, this research seeks to highlight key areas of psychological vulnerability, thereby informing the development of targeted prevention strategies and tailored clinical interventions to reduce the risk of PND.

3. Results

3.1. Descriptive Results

The EPDS showed that 24.7% of pregnant women presented moderate to high levels of depressive symptoms (Table 3).

Table 3. Descriptive assessment instruments.

Variable	Pregnant Women
MSSS	N (%)
Low	76 (7.6%)
Moderate	327 (32.8%)
High	594 (59.6%)
CTQ	
Emotional Abuse	20 (2.0%)
Physical Abuse	21 (2.1%)
Sexual Abuse	14 (1.4%)
Emotional Neglect	30 (3%)
Physical Neglect	11 (1.1%)
MAAS	
Low (<72)	42 (4.2%)
Moderate (72–84)	555 (55.7%)
High (>84)	400 (40.1%)
EPDS	
None/low	750 (75.2%)
Moderate	113 (11.3%)
High	134 (13.4%)
EPDS	
Yes	24 (2.4%)
No	973 (97.6%)
PAMA	
Anxiety	386 (38.7%)
Depression	89 (8.9%)
Stress	215 (21.5%)
Irritability	183 (18.3%)
Relational Problems	85 (8.5%)
Psychosomatic Problems	369 (37%)
Physiological Problems	370 (37.1%)
Addictions	33 (3.3%)
DAS	
Relational well-being	805 (93.2%)
Relational distress	45 (5.3%)
Data missing	147 (14.7%)

The PAMA also revealed the potential presence of psychological distress across various domains. In this regard, the presence of anxiety was reported in 38.7% of the sample, making it the most frequently observed condition. Physiological problems, reported by 37.1% of the sample, also represented a notable finding. These results represented our primary variables of interest, as they provide a measure of the psychological distress experienced by the pregnant women in our sample.

The dimension of perceived social support, measured through the MSSS, indicates that most mothers perceived a moderate level of support (32.8%). Furthermore, the dimensions of the Dyadic Adjustment Scale (DAS) revealed a high prevalence of perceived relational well-being (93.2%) in a subsample of 850 women. However, relational distress was still present (5.3% women) and should not be overlooked.

Through an analysis of the different subscales of the CTQ, it was observed that 2.1% of women experienced physical abuse during their childhood, and 1.4% experienced sexual abuse. Of the dimensions related to neglect, emotional neglect appeared to be the most prevalent (3%).

The MAAS revealed that more than half of the pregnant women in the sample (55.7%) presented a moderate level of prenatal attachment. A low level of prenatal attachment was reported by only 4.2% of the women.

3.2. Univariate and Multivariate Models

Table 4 presents the results of the univariate and multivariate linear regression models conducted to examine the associations between the proposed predictors and the outcome variables. Specifically, the univariate regressions, each performed separately, revealed that all predictors were significantly and strongly associated with both EPDS and PAMA scores ($p < 0.005$). These associations were positive for childhood trauma dimensions and negative for social support, prenatal attachment, and couple relationship quality.

Table 4. Univariate and multivariate linear regression.

Independent Variables	Univariate Analyses			Multivariate Analyses (CTQ Subscales)		
	β	95% CI	p -value	β	95% CI	p -value
Association with EPDS						
MSSS Total score	−0.110	−0.20; −0.05	0.001 **			
MAAS Total score	−0.234	−0.25; −0.14	<0.001 ***			
Emotional abuse	0.205	0.28; 0.51	<0.001 ***	0.106	0.05; 0.35	0.006
Physical abuse	0.106	0.11; 0.44	0.001 **	−0.032	−0.30; 0.13	0.441
Sexual abuse	0.108	0.14; 0.51	0.001 **	0.057	−0.06; 0.41	0.152
Emotional neglect	0.253	0.27; 0.44	<0.001 ***	0.209	0.18; 0.40	<0.001 ***
Physical neglect	0.140	0.24; 0.62	<0.001 ***	−0.014	−0.27; 0.18	0.709
DAS Total score	−0.278	−0.28; −0.17	<0.001 ***			
Association with PAMA						
MSSS Total score	−0.090	−0.17; −0.03	0.004 *			
MAAS Total score	−0.184	−0.19; −0.09	<0.001 ***			
Emotional abuse	0.252	0.35; 0.57	<0.001 ***	0.165	0.16; 0.44	<0.001 ***
Physical abuse	0.147	0.21; 0.52	<0.001 ***	0.014	−0.16; 0.23	0.736
Sexual abuse	0.115	0.15; 0.51	<0.001 ***	0.033	−0.13; 0.32	0.413
Emotional neglect	0.235	0.23; 0.39	<0.001 ***	0.171	0.12; 0.33	<0.001 ***
Physical neglect	0.113	0.14; 0.51	<0.001 ***	−0.043	−0.34; 0.09	0.261
DAS Total score	−0.262	−0.25; −0.15	<0.001 ***			

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The multivariate model focusing exclusively on childhood trauma predictors demonstrated that only emotional abuse and emotional neglect remained significant when predicting EPDS ($F = 16.156$, $p < 0.001$) and PAMA ($F = 17.876$, $p < 0.001$). In particular, emotional neglect showed strong significance in both models ($p < 0.001$), while emotional abuse was highly significant for PAMA ($p < 0.001$) and marginally substantial for EPDS ($p = 0.006$). All other maltreatment dimensions did not reach statistical significance in the multivariate context.

A further, Table 5 presents a more comprehensive multivariate model, tested on a subsample of 850 pregnant women, including all predictors simultaneously and provides additional insight. In the model predicting EPDS ($F = 19.584$, $p < 0.001$), the variables that remained significant were prenatal attachment (MAAS; $p < 0.001$), couple relationship quality (DAS; $p < 0.001$), and emotional neglect ($p < 0.005$). The emotional abuse dimension falls at the borderline of statistical significance ($p = 0.006$). Additionally, the model predicting PAMA ($F = 19.346$, $p < 0.001$) showed significant effects only for emotional abuse ($p < 0.001$) and DAS ($p < 0.001$).

Table 5. Multivariate linear regression (subsample: N = 850).

Independent Variables	Multivariate Analyses (N = 850)		
Association with EPDS	β	95% CI	<i>p</i> -value
MSSS Total score	−0.048	−0.141; 0.020	0.143
MAAS Total score	−0.120	−0.164; −0.047	<0.001 ***
Emotional abuse	0.125	0.072; 0.429	0.006
Physical abuse	−0.074	−0.483; 0.025	0.077
Sexual abuse	0.048	−0.107; 0.469	0.218
Emotional neglect	0.125	0.056; 0.310	0.005 *
Physical neglect	−0.022	−0.321; 0.176	0.565
DAS Total score	−0.226	−0.305; −0.165	<0.001 ***
Association with PAMA			
MSSS Total score	−0.032	−0.113; 0.038	0.328
MAAS Total score	−0.081	−0.122; −0.012	0.017
Emotional abuse	0.222	0.249; 0.584	<0.001 ***
Physical abuse	−0.024	−0.308; 0.168	0.564
Sexual abuse	0.019	−0.205; 0.336	0.634
Emotional neglect	0.061	−0.035; 0.204	0.167
Physical neglect	−0.068	−0.439; 0.027	0.083
DAS Total score	−0.233	−0.293; −0.161	<0.001 ***

* $p < 0.05$; *** $p < 0.001$.

The variables included in both the univariate and multivariate regression models were selected not only based on statistical considerations, but also due to their strong clinical relevance. Consequently, the statistically significant associations identified highlight key areas warranting focused attention and improvement in order to provide effective support for the prevention and management of perinatal psychological distress.

4. Discussion

In this study, we examined the dimensions highlighted in the scientific literature as potential risk factors linked to antenatal depressive symptoms and psychological distress during pregnancy.

Our results for the two main variables of interest indicated that a substantial portion of our sample, which was not a clinical sample, exhibited a moderate to high level of psychological distress. Specifically, 24.7% of women presented a moderate to elevated presence of antenatal depressive symptoms, and anxiety symptoms were present in nearly 38.7% of the sample. 24 women (2.4%) presented a suicide risk. Finding elevated levels of antenatal depressive symptoms and psychological distress during pregnancy is clinically concerning, not only because it reflects a compromised state of maternal well-being in the present, but also because antenatal depression has been widely recognized in the literature as a robust predictor of postpartum depression (PPD) (Verreault et al., 2014). The prevalence of PPD is estimated to be around 14% globally (Liu et al., 2022), and around 11% in Italy (Camoni et al., 2023a). Nevertheless, the prevalence rate goes up to 27.5% when the cutoff score > 9 for the EPDS is utilized (Benvenuti et al., 1999).

The transition from antenatal to postnatal depression is well documented, with numerous studies demonstrating that depressive symptoms during pregnancy frequently persist or even worsen in the postpartum period if left unaddressed. A comprehensive literature review by Underwood and colleagues (Underwood et al., 2016) further substantiates this strong association, highlighting the predictive value of antenatal depressive symptoms for the onset of PPD across various populations and contexts. Notably, their review includes findings from longitudinal studies, which emphasize the temporal continuity between antenatal and postnatal depressive conditions and reinforce the importance of early iden-

tification and intervention during pregnancy to prevent the escalation of symptoms in the postpartum period. Indeed, raising awareness and implementing targeted prevention efforts helps our team to identify at-risk women early, including those whose psychological suffering may be less visible, yet still clinically significant.

The results of our study confirm the initial hypothesis, indicating that it is the interaction between different psychological dimensions, rather than the effect of individual variables, that is most associated with symptoms of perinatal psychological distress. The exception is the dimension of Social Support, which requires further investigation. This study's innovative contribution lies in its integration of risk and protective factors within a single analytical model, enabling a more comprehensive understanding of their interplay adopting a psychodynamic perspective. This approach provides a more nuanced perspective on the complexities of perinatal mental health by moving beyond reductionist models and emphasizing the importance of considering dynamic, multifactorial influences.

4.1. Association Between Childhood Maltreatment and Perinatal Outcomes

Regarding the role of childhood maltreatment as a risk factor for antenatal depressive symptoms and psychological distress, our data demonstrated that emotional neglect is the most commonly reported form of childhood trauma, followed by physical abuse and emotional abuse. It is crucial to consider due to their long-term impact, also during the perinatal period (Racine et al., 2021). Indeed, literature has shown that exposure to traumatic experiences, particularly those affecting emotional and relational domains within the family context, increase vulnerability to antenatal depressive symptoms (Choi et al., 2022; Choi & Sikkema, 2016; Racine et al., 2020; Tebeka et al., 2021).

Recent studies have demonstrated that women who early experienced emotional neglect presented higher levels of depressive symptoms during pregnancy (Can Caglayan et al., 2023; Infurna et al., 2024; Li et al., 2017) and immediately postpartum (Li et al., 2017; Tebeka et al., 2021). This may be due to the fact that pregnancy represents a unique psychological moment in which a woman is simultaneously confronted with the memory of being a child and the emerging responsibility of caring for one. For those who lack adequate caregiving experiences, this dual perspective can activate unresolved emotional wounds and internal conflicts. The absence of a reliable model of care may make it more difficult to imagine oneself as a caregiver, thereby increasing vulnerability to psychological distress during this transitional period.

In contrast, women without histories of emotional abuse or neglect are more likely to develop a coherent sense of self, effective emotional regulation skills, and the capacity to provide sensitive and attuned care to their child. This is consistently supported by the literature, which emphasizes that the development of positive internal working models (MOI) is strongly promoted by supportive caregiving experiences (Bowlby, 1988; Mikulincer & Shaver, 2007). Such positive models are fundamental for fostering the quality of the mother-child relationship and for promoting secure attachment representations, which in turn serve as a foundation for healthy relational patterns and caregiving behaviors in adulthood.

Building on this theoretical framework and the evidence highlighting the lasting impact of early relational experiences on maternal functioning, our empirical findings further support these associations. Our univariate regression models revealed a significant association for all predictors examined. This would suggest that all the dimensions may be considered potential risk factors could indeed be related to the presence of antenatal depressive symptoms and psychological distress during pregnancy. In particular, the dimensions of emotional abuse and emotional neglect maintained a strong association with the presence of perinatal distress, in line with existing literature (Li et al., 2017). The

finding that emotional abuse and emotional neglect are the most significant childhood adversities associated with perinatal outcomes highlights the critical role of emotional and relational components in the experience of pregnancy (Fu et al., 2024; Talmon et al., 2019). According to the literature, early experiences that compromise the parent–child attachment relationship may impair a mother’s ability to recognize and respond sensitively to her child’s need for care (Bowlby, 1982; Solomon & George, 2011). Women who experienced love and emotional support during childhood are generally more likely to offer similar care to their own children. In contrast, adverse childhood experiences such as emotional neglect can negatively affect their self-perception as capable and worthy parents (Kohlhoff & Barnett, 2013). Furthermore, individuals who have experienced childhood maltreatment often develop insecure internal working models, marked by mistrust and difficulty relying on others. In the context of parenting, these insecure models may lead to defensive and negatively skewed interpretations of a child’s behavior (Cassidy et al., 2013), thereby increasing the likelihood of adopting maladaptive parenting strategies (Bugental et al., 2002). From a clinical perspective, this view underscores the importance of early interventions aimed at improving emotional regulation, fostering a coherent sense of self, and consequently promoting more adaptive and functional behaviours during the transition to parenthood and in caregiving practices.

While the framework linking adverse childhood experiences to perinatal distress and later parenting difficulties is well supported, it may risk a somewhat deterministic interpretation, potentially underestimating resilience and the role of compensatory experiences or psychosocial support. Alternative explanations, such as genetic predispositions, socioeconomic stressors, and the buffering effects of partner or community support, may also contribute to the observed associations. A balanced perspective should therefore acknowledge variability in outcomes and the potential for positive change, avoiding the pathologization of individuals with adverse childhood histories.

According to the literature, which did not link physical abuse with the development of depressive risk before or after childbirth, our results confirm this aspect (Li et al., 2017; Robertson-Blackmore et al., 2013).

4.2. Social Support and Couple Relationship

In contrast to the existing literature, which consistently reports an inverse association between social support and antenatal depressive symptoms, where higher levels of perceived or received support are linked to lower levels of psychological distress during pregnancy (Dennis & Letourneau, 2007; Dennis & Ross, 2006), the present study did not identify a significant relationship between social support and antenatal depressive symptoms and psychological distress. One possible explanation for this discrepancy may lie in the characteristics of our sample, in which the majority of participants reported adequate to high levels of perceived social support. This limited variability could have reduced the likelihood of detecting statistically significant associations. Alternative explanations may derive from the use of an instrument that did not demonstrate adequate sensitivity within our specific sample, particularly considering our clinical experience, where relationships with the family of origin are commonly perceived as a pervasive and robust source of social support. One study (Laudani et al., 2014) indeed refers to the Mediterranean Model of Family Functioning, highlighting that families in Southern Europe tend to maintain stronger familial bonds, greater economic and psychological interdependence, and view the family as central to individual life. Furthermore, according to Santarelli and Cottone (2009), intergenerational support and proximity dynamics in Italy are distinctive, reflecting the tendency of young adult to leave the parental home at a relatively late age, which often results in sustained closeness and intensive support even after their marriage.

On the other hand, the dimension of relational well-being within the couple appears to be especially linked to psychological distress. Women who perceive their partner as emotionally supportive tend to report better psychological adjustment during pregnancy (Thomas et al., 2017); whereas those involved in an unsatisfactory or conflictual relationship are more likely to exhibit elevated levels of PND (Çankaya & Alan Dikmen, 2022). Furthermore, it is crucial to emphasize that the presence of depressive symptoms in one partner significantly increases the risk of the other partner developing similar difficulties (Thiel et al., 2020). Both maternal and paternal depression, though often expressed in different ways, can negatively affect parenting capacities and the ability to provide sensitive and responsive care to the child (Rollè et al., 2020). During the transition to parenthood the couple's ability to mobilize their internal and relational resources plays a key role in promoting both parental adjustment and infant well-being. Our findings were consistent with this perspective, indicating that a satisfying couple relationship may function as a significant protective factor against the onset of perinatal psychological distress. In our sample, we identified approximately 5.3% of relational distress within the couples' relationships.

4.3. The Partner Dimensions

It is important to acknowledge that the present study did not include data from partners, which represents a relevant limitation when interpreting our findings.

Given the reciprocal influence between maternal and paternal psychological well-being, and the evidence that depressive symptoms in one partner can exacerbate vulnerability in the other (Thiel et al., 2020; Rollè et al., 2020), excluding partners' perspectives limits our ability to capture the bidirectional and dyadic nature of perinatal adjustment.

Including fathers' perspectives would be particularly valuable, given that the transition to parenthood involves psychological, relational, and identity changes for men.

These include changes to roles, adjustments to intimate relationships, and an increase in financial and caregiving responsibilities.

These dynamics may in turn affect maternal health, paternal health, and the overall quality of the couple's relationship. Future research, including both members of the couple, would therefore be essential to provide a more comprehensive understanding of the interplay between individual vulnerabilities, couple functioning, and perinatal psychological outcomes.

4.4. The Protective Role of Prenatal Attachment

Moreover, we found that the quality of prenatal attachment was a strong predictor of antenatal depressive symptoms. The emotional connection and the relationship quality with the unborn child are a considerable part of the child's development in all aspects (Pisoni et al., 2014). Investigating this aspect, therefore, enables us to address various perspectives: in the realm of the mother's psychological distress, as well as in the domain of the child's well-being and that of the entire family.

Women who exhibit low levels of prenatal attachment combined with high levels of antenatal depressive symptoms tend to show low interest in the unborn child, focusing primarily on their own psychological distress and neglecting the development of a bond with the baby (Rollè et al., 2020). As noted by Seimyr et al. (2009), maternal awareness of the fetus, along with the feelings and perceptions directed toward the unborn child, contributes to increased maternal attentiveness to the child's future well-being. Greater maternal awareness and emotional connection to the fetus facilitates the establishment of a secure attachment bond, which plays a crucial protective role in safeguarding both maternal mental health and the child's emotional development from the risk of psychological distress (McNamara et al., 2019). In line with existing literature and supported by our findings,

which suggest a potential protective role of prenatal attachment, it may be appropriate to consider the inclusion of this dimension into prenatal screening. Clinical screening tools for the assessment of prenatal attachment include standardized instruments such as the Maternal Antenatal Attachment Scale (MAAS) (Condon, 1993), which was employed in this study, as well as the Prenatal Attachment Inventory (PAI) (Muller, 1993). Integrating prenatal attachment assessment into clinical practice would facilitate the implementation of targeted psychoeducational interventions. These interventions aim to foster the development of a coherent maternal mental representation of the fetus, improve the mother's understanding of fetal development, and encourage behaviors that enhance the early maternal–fetal bond throughout pregnancy. All these findings are cause for concern from a clinical perspective and suggest the need to look carefully at women's well-being during pregnancy, starting with the attention that must be directed towards the various psychosocial risk factors that may contribute to its onset. Indeed, the most important element of screening these factors and managing high-risk situations lies precisely in its clinical relevance in terms of preventing distress and promoting physical, mental, and social well-being.

4.5. Clinical Implications

This work had highly significant clinical implications, as the data collection phase of patient screening directly informs clinical outcomes. Specifically, pregnant women who scored highly on the EPDS and PAMA scales, that evaluated perinatal depression (PND), were promptly referred for psychological support with a psychotherapist. This intervention was perceived as highly supportive by the patients, who appreciated the opportunity to receive continuous care during late pregnancy and the immediate postpartum period. The inclusion of psychologists within the obstetric and medical equipe enables targeted support for high-risk patients, as well as comprehensive care for all women both in the delivery room and postpartum. This approach facilitates a more holistic treatment of patients from both physical and psychological perspectives.

An important way to implement preventive and health-promoting interventions is through the provision of psychoeducational programs, such as prenatal education and birth preparation classes, which support expectant parents in developing coping skills and fostering emotional well-being during the transition to parenthood. In our project, these sessions are conducted within a multidisciplinary framework and involve the collaboration of various professionals, including psychologists, gynecologists, obstetricians, nutritionists, and neonatologists. Specifically, the program consists of nine sessions, four of which are led by psychologists. The first session addresses the psychological experiences of pregnancy; the second focuses on perinatal psychological distress and the significance of early attachment; the third explores couple dynamics, the changes associated with the transition to parenthood and in sexuality, as well as the redefinition of family roles; the fourth and final session discusses parental competences in the postpartum period, such as the management of crying and sleep. Each session includes experiential activities aimed at fostering participant reflection. The primary objective is to provide a supportive space for dialogue and guidance on key areas, including infant care, parenting roles, couples' relationship quality, and the emotional and practical management of labor and childbirth.

Finally, by following up with patients approximately six months after childbirth, we can monitor their well-being and provide further psychological support if necessary. Future studies will provide additional results concerning the data collected six months postpartum with a particular focus on the role of partners.

4.6. Strengths and Limitations

This study presents preliminary findings collected during the first nine months following the launch of the project at the “Civico—Di Cristina—Benfratelli” Hospital in Palermo. As such, only data from the initial time point (T0), corresponding to the pregnancy period, have been included in the current analysis. The decision to report exclusively on T0 data at this stage was due to the ongoing nature of the study and the current sample size, which remains insufficient to support more advanced or longitudinal analyses. The data were collected through self-report questionnaires, administered under the careful supervision of clinical psychologists. While self-report measures may introduce certain biases, this method was considered the most appropriate to safeguard participants’ privacy and to reduce the intrusiveness of the assessment process. One important limitation of the present study lies in its cross-sectional design, which does not allow for causal inferences to be made. Although the results point to a potential causal association between the two dimensions examined, the lack of longitudinal data prevents us from establishing a direct cause-and-effect relationship.

It is also important to note that the present results refer exclusively to pregnant women. Although a screening protocol for partners was designed and initiated, the data collected to date are insufficient for inclusion in this initial analysis. The exclusion of partner data constitutes a limitation in relation to the project’s stated aim of investigating family and couple dynamics. Future analyses will incorporate partner data to provide a more comprehensive understanding of the dyadic and familial dimensions of perinatal mental health. Finally, potential selection bias should be acknowledged. Participation was voluntary and limited to a single hospital in southern Italy, which may have influenced the sociodemographic composition of the sample and limit the generalizability of the findings. Broader recruitment strategies and comparative analyses with national data will be pursued in the subsequent phases of the project.

5. Conclusions

In conclusion, this study, based on the project “When a Parent is Born,” presented preliminary results of data collection that is ongoing and which will be finalized approximately six months postpartum from a longitudinal perspective.

The preliminary evidence offered insight into the risk factors most closely associated with psychological distress during the perinatal period. By screening these factors during pregnancy, it is possible to consider interventions aimed at prevention and support. Recognizing women at high risk during pregnancy is essential and can contribute to ensuring optimal maternal and family health outcomes. In such cases, targeted clinical interventions, as outlined in this project, are implemented to provide comprehensive support and address the unique psychological and emotional experiences of these women. This proactive approach suggests potential benefits in mitigating the long-term consequences of postpartum depression and broader psychological distress, with an emphasis on promoting the well-being of the woman, her partner, the child, and the family as a whole.

According to the World Health Organization, caring for individuals, especially pregnant women and their children, necessitates attention not only to medical aspects but also to the overall well-being of the individual, including psychological, physical, and social factors. For this reason, it would be useful to have more concrete and practical guidelines, to be implemented through training programs aimed at health care personnel involved in perinatal care. This could facilitate the identification of any signs of distress, ensure more effective care of pregnant women, and improve overall management during this sensitive period.

This project aims to implement a collaborative effort among various professionals working as a team to provide optimal care to each patient, without overlooking how psychological factors can influence medical outcomes, and vice versa. This initiative represents a significant advancement within the Palermo area, and it is hoped that these findings may be generalizable to the broader Italian national context. The general aim is to establish a unified metric evaluation and develop a protocol for pregnancy management. Designed for implementation within a multidisciplinary framework, the protocol aims to promote overall maternal and infant well-being by integrating it into routine health service practices. Future research will generate comprehensive data across the various components of the project and further elucidate its clinical implications. Building upon the findings presented herein, subsequent studies will integrate the perspectives of partners and employ a longitudinal design, thereby enhancing the robustness of the current models and contributing additional nuanced insights.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Written informed consent has been obtained from the patients to publish this paper.

Data Availability Statement: The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

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Abbreviations

The following abbreviations are used in this manuscript:

PND Perinatal Depression
PPD Postpartum Depression

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RESEARCH

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Understanding the relationship between childhood emotional abuse and neglect and psychological distress in pregnant women: the role of prenatal attachment

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Abstract

Background Childhood abuse and neglect pose important risk factors for the development of psychopathology during pregnancy. However, only a few studies have assessed the effects of a specific type of abuse during the perinatal period, namely, psychological maltreatment, which includes emotional abuse and neglect. These studies have found that women who have experienced psychological maltreatment exhibit higher levels of antenatal depressive symptoms and greater difficulties forming attachment with their babies than women who have not experienced this kind of adversity. The aim of this study was to examine how emotional abuse and neglect experiences may favor the occurrence of psychological distress in pregnant women, and whether prenatal attachment might explain this association.

Methods Participants comprised 128 Italian pregnant women ranging in age from 21 to 46 years ($M_{age} = 33.4$; $SD = 6.10$). Women responded to the following self-report instruments: CECA-Q and CTQ-SF, for the assessment of psychological maltreatment experiences; MAAS, for the evaluation of prenatal attachment; and PAMA, for the assessment of perinatal psychological distress.

Results Pearson correlations revealed a positive association between childhood neglect and perinatal psychological distress and a negative association between childhood neglect and prenatal attachment scores. No significant correlations were found for emotional abuse. Perinatal psychological distress was negatively associated with prenatal attachment. Mediation analyses showed significant associations between childhood neglect and the dimensions of perinatal affectivity and prenatal maternal attachment. Prenatal maternal attachment mediated the relationship between neglect and perinatal psychological distress.

Conclusions The transition to motherhood is a sensitive period, particularly for women who have experienced abuse and neglect during childhood. These experiences may negatively impact a woman's disposition to emotionally

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and behaviorally engage in the formation of a bond with their unborn baby. These results may have important prevention and clinical implications and thus warrant further exploration.

Keywords Pregnancy, Perinatal period, Childhood psychological maltreatment, Emotional abuse, Neglect, Prenatal Attachment, Maternal psychological distress

Background

Pregnancy is a vulnerable period in which the negative consequences of adverse previous experiences may occur, as becoming a mother can activate emotional responses related to childhood experiences of abuse and neglect [67]. Literature has shown that women with histories of childhood trauma reported higher levels of depression [23], post-traumatic stress disorder, personality disorders, and dissociation during pregnancy [11] and postpartum [52] compared to non-exposed women. However, these studies have focused mainly on cumulative childhood maltreatment, and research on the effects of childhood maltreatment in the perinatal period has on centered on sexual and physical abuse, and not specifically on psychological maltreatment, which includes emotional abuse (EA) and/or neglect.

EA refers to the inability to provide children with an emotional environment that adequately supports their psychological and physical development [24]. It is characterized by the parents' hostility and intention to scare and humiliate the child, constantly disapproving, reprimanding, and yelling at him, suggesting that he is without value [15]. Neglect, in contrast, is commonly described as an omissive abuse in which the environment neither confirms nor meets the child's basic needs (emotional and/or developmental) and is not capable of providing emotional support or warmth to the child [56]. Bifulco [13] adds and specifies that neglect also includes parents' disinterest in their child's material care, health, social functions, and schoolwork.

EA and neglect are particular forms of maltreatment that rather than being point-like as physical and sexual abuse, represent relational modes of a chronically dysfunctional family atmosphere characterized by episodes of abuse or omission, which are pervasive, occur daily, and contribute to structuring the quality of the relationship. EA and neglect create a chronically dysfunctional family atmosphere that negatively impacts the construction and representation of themselves and significant others.

Having a history of childhood neglect and EA exposes women to psychological distress during pregnancy [46] and the postpartum period [14], possibly affecting their emotional and caregiving abilities as mothers [57]. Perinatal psychological distress is a condition that arises from a maladaptive response to stressors related to the

transition to motherhood [18]. It is a state of maternal emotional suffering that encompasses a wide range of psychological dimensions, such as anxiety, depressive symptoms, anger, stress, and somatization [4]. Although this condition is not among the recognized mental disorders, it may expose a woman to several negative psychopathological outcomes during the postpartum period [55].

Regarding the association between adverse childhood experiences and psychological distress, the literature has mostly focused on perinatal depressive symptoms. For instance, findings from a longitudinal study conducted by Li [46] revealed that women who had encountered neglect or EA demonstrated significantly elevated symptoms of antenatal depression in comparison to women with no history of physical or emotional neglect.

Experiences of neglect in childhood have also been linked to mothers experiencing significantly greater difficulties in bonding with their children compared to women who have not experienced maltreatment [54]. A recent longitudinal study [68] confirmed that exposure to childhood neglect, in particular, has an important influence on women's experiences of attachment to their babies and that these maternal difficulties predict postpartum depression.

Attachment between mother and infant starts during pregnancy and continues to increase daily after birth. Although most literature has examined this bond after the infant's birth, recent studies have revealed that this bond starts during pregnancy when women begin to develop both a cognitive and affective a mental representation of their unborn children [21]. Prenatal attachment refers to this specific bond between the mother and her fetus [25]. The concept of prenatal attachment originally focused on maternal behavior during pregnancy. Cranley [27], however, was the first to define this concept as the mother's interest in establishing a relationship with her unborn child, which manifests through behaviors that demonstrate emotional investment and bonding. Later, some authors also emphasized the emotional aspect [26], and Doan and Zimmerman [31] focused on both components of the concept, redefining prenatal attachment as the emotional bond between a parent and fetus that is connected to the cognitive and emotional capacity to understand and connect with another person. This bond evolves within a larger environmental context.

Recent studies have consistently shown that the quality of prenatal attachment is closely and positively related to the quality of postnatal mother–child attachment [64]. Specifically, evidence suggests that a suboptimal prenatal attachment is associated with a lack in a mother's care of herself and her baby during pregnancy, which can result in potential complications and risks during pregnancy and delivery [47]. These findings align with literature reporting that the quality of prenatal attachment is also strongly correlated with the quality of maternal adult attachment. Indeed, mothers that demonstrate a secure adult state of mind with respect to their childhood experiences with their caregivers have a better and early occurring prenatal attachment during pregnancy [30]. Notably, maternal attachment security has also been strongly correlated with maternal distress [53], sensitive parenting [40], and improved developmental outcomes in children [2]. In light of this literature, it might be hypothesized that prenatal attachment could act as a pivotal protective factor for several maternal and dyadic unfavorable outcomes, thus warranting further investigation.

In this framework, it is not surprising that a suboptimal prenatal attachment is also linked with maternal psychological distress, particularly prenatal depressive symptoms [38, 50, 63]. However, the direction of this link between prenatal depressive symptoms and prenatal attachment remains unclear. Studies have suggested that prenatal depressive symptoms may constitute a risk factor for a lack of maternal attachment and depressive symptoms during the postpartum period [32, 38]. The direction of this relationship might also be reversed, especially if symptoms are measured prenatally. Indeed, insecure adult attachment representations, whether attachment is measured prenatally or not, derive from the perceived quality of childhood experiences [49]. In the context of childhood trauma, the literature has shown that specific memories of inadequate parenting as well as rejection, violence, and neglect, may result in the mother fearing the repeating of a painful past and a perception of the “child-as-threat” [62]. These feelings, in turn, might potentially be associated with feelings of inadequate parenting abilities, low self-esteem and, ultimately, reduced psychological well-being.

Models of the relationship between childhood trauma, prenatal attachment, and psychological distress have been proposed. Berthelot et al. [11] proposed that mental health levels could buffer the relationship between childhood abuse and neglect experiences of future mothers and the quality of their prenatal attachment. Although they did not find a direct relationship between childhood maltreatment and prenatal attachment, they did find pairwise associations between poor mental health and

childhood maltreatment or between poor mental health and prenatal attachment.

Given:

- that this hypothesis-driven model does not support the existence of a mediation role of mental health between childhood trauma and prenatal attachment;
- the paucity of literature on prenatal attachment;
- the unclear direction of the relationship between mental health and prenatal attachment;
- that childhood trauma has been rarely investigated in its sub-dimensions;

Building on extant literature (Bertherlot et al., 2019), the aim of the present study was to test complementary models of the relationship between childhood trauma, psychological distress, and prenatal attachment by investigating (i) the relationship between two specific and diverse childhood trauma experiences (namely, EA and neglect) and the presence of psychological distress in pregnant women, and (ii) whether prenatal attachment might act as a potential protective factor within this relationship. We hypothesized the following:

1. Pregnant women's childhood experiences of EA and neglect are positively associated with prenatal psychological distress.
2. Pregnant women's childhood experiences of EA and neglect are negatively associated with prenatal maternal attachment.
3. Prenatal maternal attachment is negatively associated with prenatal psychological distress.
4. Antenatal maternal attachment mediates the relationship between EA and neglect and psychological distress.

Methods

Participants

A total of 128 pregnant women ranging between 21 and 46 years of age ($M=33.4$; $SD=6.10$) participated in the study. The participants were recruited at the ARNAS Civico Hospital of Palermo, thanks to a research agreement protocol with the Department of Psychology, Educational Science and Human Movement, University of Palermo, Italy. The participants completed the questionnaires during their first hospital visit. The visits involved routine check-ups or pregnancy traces. In this hospital, psychological distress evaluation, conducted by trained psychologists, was a standard component of a comprehensive assessment of general women's health during pregnancy. Data for this study were collected from November 2023 to February 2024.

Inclusion criteria were: a) being pregnant; b) being at least age 18; and c) able to understand and speak the Italian language. Participation in the research was voluntary, and all participants gave informed consent prior to inclusion in the study. Participants completed self-report questionnaires on either their smartphone, computer, or tablet.

A total of 91.4% of participants had a romantic relationship and lived with a partner. Most participants (64.1%) were in the third trimester of pregnancy, had no other children (78%), and had planned the currently pregnancy (80.3%). Detailed information on demographic and clinical characteristics is reported in Table 1.

Ethical approval for this study was obtained from the Bioethics Committee at the University of Palermo (prot.n.153791–2023 of 26/10/2023), and the procedures used adhere to the principles of the Declarations of Helsinki.

Measures

Participants underwent a psychological assessment consisting of the following instruments:

Questionnaire on sociodemographic characteristics and pregnancy-related variables

This questionnaire is suitable for gathering sample information such as age, educational and economical status, marital status, and pregnancy details such as primiparity, month of pregnancy, and single versus twin pregnancy.

Childhood Experience of Care and Abuse Questionnaire (CECA.Q) [12]

This is a self-report measure whose purpose is to collect objective information relating to adverse experience in childhood, before age 17. More specifically, CECA.Q assesses antipathy (defined as coldness, rejection, or hostility) and neglect (defined in terms of parents' disinterest in material care, health, friendships, and schoolwork) expressed by parents toward the child, parental physical abuse, sexual abuse by any adult. In this study, we considered only the subscales antipathy (8 items) and neglect (8 items), assessed using a 5-point Likert scale ranging from (1) 'yes definitely' to (5) 'no, not at all'. We considered the antipathy and neglect scores of both parents, which were input into the calculation of an overall emotional abuse and neglect score, as described below. The questionnaire shows high reliability and validity, achieving satisfactory internal scale consistency for the antipathy ($\alpha=0.81$) and neglect ($\alpha=0.80$) scales.

Childhood Trauma Questionnaire-Short Form (CTQ-SF) [10, 58]

Table 1 Characteristics of the study population (N = 128)

Variable	n	%
Age		
< 29 years old	36	28.12
36–30 years old	70	54.69
45–37 years old	22	17.19
Education		
Primary School	3	2.34
Hight School	40	31.25
University degree	47	36.72
Post-degree	38	29.69
Employment status		
Unemployed	8	6.25
Housewife	8	6.25
Student	3	2.34
Precarious employment	27	21.1
Stable employment	82	64.06
Marital status		
Single	11	8.59
Married/Cohabitant	117	91.41
Economic status		
Low	18	14.06
Middle	71	55.47
Medium–high	39	30.47
Gestational age		
First trimester	9	7.03
Second trimester	42	32.81
Third trimester	77	60.16
Pregnancy		
Planned pregnancy	102	80.31
Unplanned pregnancy	25	19.69
First pregnancy		
Yes	59	46.46
No	68	53.54
Other children		
Yes	28	22.05
No	99	77.95
High-risk pregnancy		
Yes	37	28.91
No	91	71.09
Medically Assisted Procreation		
Yes	9	7.09
No	118	92.91
Psychopharmacological treatment		
Yes	0	0
No	128	100

This 28-item self-report questionnaire on childhood trauma was developed to assess five types of early maltreatment experiences [10]. The five type of abuse are emotional abuse, physical abuse, emotional neglect, physical neglect, and sexual abuse [9]. Each type corresponds to a subscale, and each subscale is composed of five questions that are rated on a 5-point Likert Scale (from 1 = Never true to 5 = Very often true). The total possible score is 125, with cutoff points suggested by Aas et al. [1] of ≥ 10 for physical abuse, ≥ 8 for sexual abuse, ≥ 13 for emotional abuse, ≥ 15 for emotional neglect, and ≥ 10 for physical neglect. High scores suggest more severe abuse experiences. The emotional abuse and neglect subscale scores obtained from this instrument were entered into the calculation of an overall emotional abuse and neglect score, described below. The Italian version of the CTQ-SF questionnaire has adequate psychometrics properties. Internal consistence is excellent in each subscale: emotional abuse ($\alpha=0.88$), physical abuse ($\alpha=0.95$), emotional neglect ($\alpha=0.91$), physical neglect ($\alpha=0.87$), and sexual abuse ($\alpha=0.96$) [58].

Maternal Antenatal Attachment Scale (MAAS) [17, 25]

This self-report questionnaire assesses maternal prenatal attachment. It is a 19-item questionnaire that uses a 5-point Likert Scale to analyze what the mother felt and thought about her unborn child and her daily behaviors towards the child/fetus. The total possible score is 95 and the minimum possible score is 19. Higher scores suggest a stronger bonding. The MAAS has two subscales that assess the intensity and quality of attachment. Specifically, the Quality of Attachment subscale measures the mother's emotional experiences toward the fetus (i.e., closeness, pleasure, tenderness, and distress over imagined loss), while the Intensity of Concern subscale measures the extent of time spent dreaming about, talking to, or palpating the fetus. We used the Italian version of the questionnaire, which demonstrated good internal consistency for the scale of MAAS total score ($\alpha=0.71$) and Intensity of Concern subscale ($\alpha=0.62$). The Quality of Attachment subscale, however, exhibited poor internal consistency, with an α of 0.57 [17]. In this study we used both the scores of Quality of Attachment (MAAS-QA) and Intensity of Concern (MAAS-IC), and the overall score (MAAS-TOT), obtained by summing the MAAS-QA and MAAS-IC scores.

The Perinatal Assessment of Maternal Affectivity (PAMA) [4]

PAMA is an 11-item self-reported screening measure that assesses perinatal maternal distress. The first eight items correspond to eight subscales. These eight

subscales correspond to a dimension: anxiety, depression, perceived stress, irritability/anger (excitability, anger attacks, disputes with others), relationship problems, psychosomatic reaction, physiological problems (with sleeping or eating), addictions (smoking, taking drugs, drinking alcohol), and other risky behaviors (such as driving fast after drinking alcohol). The last three items are open-ended questions relating to motherhood and cultural factors. The PAMA scores range from 0 to 3. The higher scores indicate a greater risk of developing symptoms related to psychological distress. In this study we used the total score (PAMA_TOT), given by the sum of the subscale scores, which allows a global assessment of maternal affectivity during the perinatal period. PAMA scores showed adequate internal consistency reliability ($\alpha=0.76$).

Descriptive statistics for all the variables of interest are shown in Table 2

Statistical analysis

To evaluate childhood experiences of emotional abuse and neglect, we assessed 61 (48%) pregnant women with the CECA.Q, and the remaining 67 (52%) with the CTQ.

To integrate the scores of both questionnaires, the overall emotional abuse score (EAS) was calculated by considering, for participants who had completed the CECA.Q, a Z-score-standardized sum of the maternal and paternal antipathy scores, whereas for participants who had completed the CTQ, the emotional abuse subscale scores, standardized in Z points. Similarly, to obtain the overall neglect score (NS), we used the scores of maternal and paternal neglect for the CECA.Q and the physical and emotional neglect subscales of the CTQ and transformed all scores into Z scores.

To facilitate comparison among all the variables included in the study, we standardized each variable into

Table 2 Descriptive statistics of the variables of interest

	Mean	SD	Range
PAMA-TOT	6.98	4.24	0–22
MAAS-QA	46.56	2.75	38–50
MAAS-IC	29.92	3.84	18–38
MAAS-TOT	81.11	5.75	64–92
CTQ Emotional Abuse	6.3	3.28	5–21
CTQ Emotional Neglect	10.48	4.1	5–25
CTQ Physical Neglect	6.64	2.33	5–16
CECA-Q Antipathy Mother	8.48	3.9	4–22
CECA-Q Antipathy Father	3.74	4.27	0–16
CECA-Q Neglect Mother	3.59	4.51	0–24
CECA-Q Neglect Father	5.75	6.42	0–25

Z-scores, subsequently transforming them into T-scores. All variables were tested for the possible presence of outliers using Grubb's test ($p < 0.05$). We identified one outlier for the variable NS and one outlier for the variable PAMA-TOT. Both values were removed from the dataset and were not used in subsequent analyses. Skewness and kurtosis were used to assess the normality of the variables. We adopted the conservative criterion of skewness and kurtosis < 2 [36] to identify deviations from normality. All variables showed acceptable normality except NS, which showed marked kurtosis (NS: skewness = 1.8; kurtosis = 3.8). Given the effectiveness of the Log10 transformation for variables with marked kurtosis [41], we computed the Log10 transformations of the NS obtaining acceptable distribution parameters (skewness = 1.1; kurtosis = 1.3).

To assess the potential impact of confounding factors, we tested the association between the variables of interest and age using Pearson correlation ($p < 0.05$), as well as the association between the variables of interest and the trimester of pregnancy at the time of the survey using ANOVA statistics ($p < 0.05$).

Using Pearson correlation ($p < 0.05$), we investigated the possible association between childhood experiences of neglect and EA, as measured by the NS and EAS scores, and the dimensions of perinatal affectivity and prenatal maternal attachment as measured by the PAMA and MAAS scales. In addition, also using Pearsons correlation ($p < 0.05$), we explored the possible association between the PAMA and MAAS scales. All correlations were corrected for multiple comparisons using the False Discovery Rate procedure (Benjamini–Hochberg method) [7].

The possible relationships between childhood experiences of neglect and EA, and the dimensions of perinatal affectivity and prenatal maternal attachment were further analyzed with mediation analysis to explore the potential mediating role of prenatal maternal attachment [6]. For this purpose, separate models were created using the measure of exposure to childhood experiences of neglect and EA (NS and EAS) as the predictor, the total score on the Perinatal Affectivity Scale (PAMA) as the outcome, and the measures of perinatal affectivity (MAAS-TOT,

MAAS-QA, MAAS-IC) as the mediator. All models were bootstrapped for 1000 repetitions. The statistical significance of the mediation models was set at $p < 0.05$.

Results

Correlation analyses between exposure to childhood of neglect and EA and the dimensions of perinatal affectivity and prenatal maternal attachment showed a positive correlation between NS and PAMA-TOT ($r = 0.22$, $FDRp = 0.02$), as well as a negative correlation between NS and the measures of MAAS-TOT ($r = -0.28$, $FDRp = 0.004$), MAAS-QA ($r = -0.31$, $FDRp = 0.004$) and MAAS-IC ($r = -0.19$, $FDRp = 0.03$). There was no significant correlation for the EAS ($p > 0.05$). The PAMA-TOT was also negatively associated with the dimensions of MAAS-TOT ($r = -0.27$, $FDRp = 0.002$) and MAAS-QA ($r = -0.43$, $FDRp = 0.002$). Analyses of the potential effect of age and trimester of pregnancy on the variables of interest indicated no effect of these variables (Table 3).

Mediation analyses performed on the variables showed significant associations between childhood exposure to neglect and abuse and the dimensions of perinatal affectivity and prenatal maternal attachment, which is in line with the Baron e Kenny (1986) assumptions.

Specifically, we found a total mediation of the MAAS-TOT on the relationship between NS and PAMA-TOT (direct effect Z: 1.8, $p = 0.7$; indirect effect Z: 2, $p = 0.04$; total effect Z: 2.6, $p = 0.01$, Fig. 1a). Similarly, the MAAS-QA scale was also found to fully mediate the relationship between NS and PAMA-TOT (direct effect Z: 1.3, $p = 0.2$; indirect effect Z: 2.9, $p = 0.004$; total effect Z: 2.6, 0.008, Fig. 1b). In contrast, no mediation was detected for the MAAS-IC scale.

Discussion

This study aimed to investigate the association between experiences of childhood EA and neglect, prenatal maternal attachment, and psychological distress in a non-clinical sample of pregnant women, also testing the mediating effect of prenatal attachment in the link between childhood EA and neglect and psychological distress.

Table 3 Results of correlation analyses

	PAMA-TOT		MAAS-TOT		MAAS-QA		MAAS-IC	
	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>
NS	0.22	0.02*	-0.28	0.004*	-0.31	0.004*	-0.19	0.03*
EAS	0.11	0.2	-0.17	0.054	-0.1	0.27	-0.15	0.09
			MAAS-TOT		MAAS-QA		MAAS-IC	
			<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>
PAMA-TOT	-	-	-0.27	0.002*	-0.43	0.002*	-0.08	0.36

* FDR *p-value*

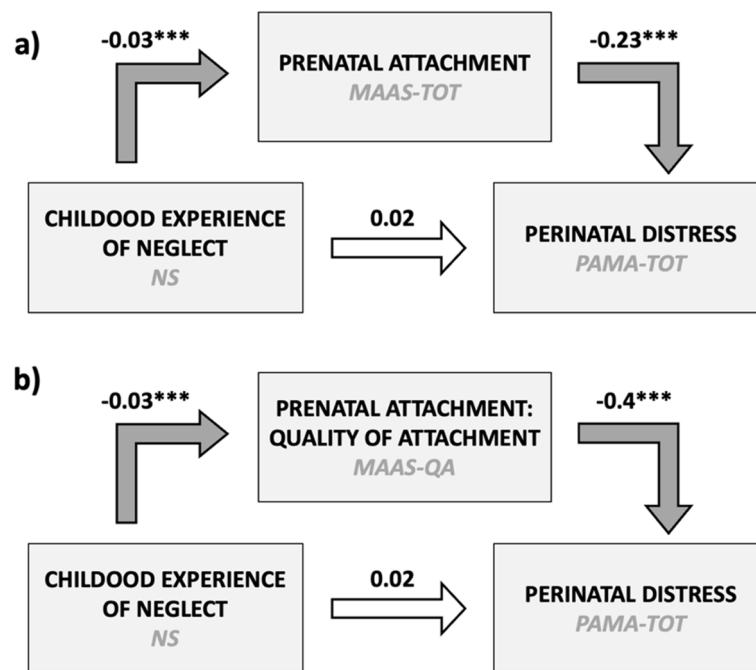


Fig. 1 Mediating role of prenatal attachment (**a**: total score; **b**: quality of attachment) on the relationship between maternal exposure to neglect in childhood and perinatal maternal distress. Note. The solid arrows between the blocks indicate the statistical significance of the path coefficient, while the values above each arrow indicate the standardized path coefficient estimates

Results first showed that participants who experienced childhood maltreatment were more likely to report psychological distress during pregnancy than non-exposed participants. Regarding the association between experiences of childhood EA and neglect, and psychological distress (hypothesis 1), we found that childhood neglect, but not EA, was positively associated with increased levels of perinatal psychological distress. This finding corroborates results from previous research which observed that experiences of physical or psychological neglect during childhood represented a significant risk factor for psychological distress during the perinatal period, particularly for depressive symptoms [14, 46]. The transition to motherhood involves a process in which women tend to recall memories of care that they experienced with their own parents during childhood. When these early experiences are marked by interpersonal adversities, such as neglect by a caregiver, traumatic memories may be reactivated and prompt the onset of negative affective responses, along with the intensification of underlying feelings of vulnerability [19]. Pregnancy is a particularly sensitive period characterized by an increase of a woman's physiological and emotional needs, such as those of care, support, and attention [44]. Pregnant women with histories of childhood neglect may expect that significant others will be unable to respond to these demands, as previous negative caregiving experiences may have

conveyed a representation of others as being inherently unavailable, unreliable, and detached [70]. In turn, this belief may promote feelings of loneliness, favoring the appearance of perinatal signals of psychological distress.

Results from our study highlight that childhood neglect is negatively associated with all the prenatal attachment scores (MAAS-QA, MAAS-IC, MAAS-TOT) (hypothesis 2), suggesting that having experienced this kind of childhood adversity may have deleterious effects on a woman's disposition to emotionally and behaviorally invest in the creation of a bond with her unborn baby. This result aligns with previous studies that found that childhood neglect [23, 66], as well as childhood maltreatment and early interpersonal trauma globally [19, 60, 62], were associated with lower maternal–fetal attachment. One possible explanation is that previous life events, particularly those occurring during childhood with one's own caregivers, shape the acceptance of and the adaptation to the experience of motherhood. Indeed, women start to forge their novel identities as mothers during gestation, developing specific expectations regarding their ability to effectively assume and adjust to this new role [48, 65]. Women who have grown up in warm, nurturing, and supportive family environments have more opportunities to develop a positive perception of self and an adequate sense of maternal efficacy, which in turn may positively affect their emotional investment towards their

babies [68]. These feelings may favor protective, sensitive, and caring mother–fetus interactions, with documented benefits for mothers' and children's physical and psychological well-being both during pregnancy and the postnatal period [19, 59]. Conversely, women who have lived in negligent families, in which their material and emotional needs as children were not recognized, may acquire a defective sense of self and thus perceive themselves as scarcely effective in responding to the demands of their new role, which can potentially have negative effects on their relationships with the fetus [68]. These women may also feel that they lack the emotional resources to fulfill their children's needs, and that may cause them to experience feelings of frustration and resentment towards the baby [16].

Our results show a negative association between prenatal attachment and psychological distress, specifically that lower levels of prenatal attachment are associated with higher levels of psychological distress in mothers. This finding is consistent with previous studies showing that distress experienced by mothers can negatively affect the establishment of adequate prenatal attachment bonding and the development of appropriate parenting attitudes [5, 11], although the literature is not fully consistent [37, 51]. Indeed, some studies report increased perinatal distress in mothers with greater sensitivity to the child's needs and richer bonding experiences [22, 43], while others point out that perceived good prenatal attachment bonding positively affects the dimensions associated with psychological well-being, such as self-care [34, 45], body self-perception [20], or self-efficacy [29]. The complexity of the scenario therefore justifies the adoption of specific, hypothesis-based statistical models, like mediation analyses. Through this analysis, we showed that prenatal attachment acts as a full mediator within the relationship between exposure to adverse events in childhood—particularly neglect—and perinatal distress. Given that prenatal attachment is negatively associated with both exposure to neglect in infancy and perinatal distress, it is conceivable that this mediation describes a potential protective role of prenatal attachment on prenatal distress from the harmful effects of exposure to childhood neglect.

Interestingly, this mediation emerged selectively with both general and quality of attachment MAAS dimensions rather than with the intensity of concerned MAAS dimension. This finding reflects the absence of an association between neglect dimensions and measures of perinatal distress in our dataset. Moreover, this finding is in line with previous work showing a stronger relationship with psychological distress dimensions for the attachment quality scale than for the worry intensity scale [42, 61, 69].

We believe that our mediation findings might have important clinical implications, especially when considered in the context of existing findings. Indeed, it should be noted that the relationship between prenatal distress and attachment has been more frequently investigated in terms of the influence of distress on attachment during pregnancy, although a full mediation of distress between childhood trauma and prenatal distress has not been found (see Berthelot et al., [11]). On the one hand, this existing literature has pointed out that prenatal distress might be a relevant proximal factor buffering the potential negative effects of childhood trauma on the parent–child relationship. On the other hand, we demonstrated that if the terms are reversed, prenatal attachment might also buffer the maladaptive effects of childhood trauma on prenatal distress, therefore potentially acting as a distal factor on the parent–child relationship. In this framework, our findings complement extant literature and point out the urgency of considering not only prenatal distress, but also prenatal attachment as relevant correlated protecting factors for postnatal psychological well-being of mothers and, in turn, of a secure mother–child relationship.

However, the lack of association with emotional abuse, which was consequently not investigated further in the mediation analysis, is surprising. Previous work suggested an effect of emotional abuse on prenatal attachment, albeit to a lesser degree than neglect [66], but the literature on this issue remains substantially sparse. Within this framework, our findings differentiating the effects of neglect and emotional abuse on prenatal attachment represent a point of novelty that deserves further study. Many works investigating parental adversity in childhood do not differentiate the dimensions of neglect and emotional abuse (e.g., Berthelot [11]), possibly underestimating the specific contribution of each dimension.

Limitations

Several limitations should be considered when interpreting the results of this study. First, the data were cross-sectional, so it was not possible to examine causal inferences between EA and neglect and psychological distress. Indeed, the experiences of EA and neglect and prenatal emotional distress were measured concurrently, precluding temporal conclusions. Thus, our cross-sectional mediation findings should not be interpreted in absolute causal terms, and are therefore intrinsically limited in their impact by the nature of our data and by our research design. Future research should employ a longitudinal design to elucidate how experienced EA and neglect during childhood may impact women emotional distress during pregnancy and whether our findings can

be generalized to a different temporal design. Furthermore, data about women's experiences of emotional abuse and neglect were collected retrospectively. Participants were required to recall experiences from their childhood, but the literature has demonstrated a good agreement between adverse childhood experiences and recall in adulthood [33]. Furthermore, the measures used in the present study were self-reported, which could be influenced by social desirability bias. Future research should adopt a multi-method approach, including qualitative interviews. It should be also noted that childhood trauma was assessed with two different instruments (namely, CECA Q and CTQ) across all the enrolled women. To maximize the sample size, neglect and abuse composite scores were derived based on Z-scores from both questionnaires obtained from subscales measuring overlapping constructs. These findings should therefore be replicated in larger and more consistent samples in which childhood trauma is univocally assessed with a single instrument.

Another important limitation of this study is the fact that the literature has reported several other variables and circumstances which characterize the pregnancy period and may affect perinatal distress, psychological and physical health of future parents (e.g., social support, personal attributes, pregnancy complications, stressful life events during pregnancy, marital satisfaction, psychiatric history (for a full review, see Alipour et al., [3])). Although our study specifically focused on childhood trauma, it cannot be ruled out that these factors might intervene in the relationship between childhood trauma, prenatal attachment, and prenatal distress, for example, as potential mediators. Future studies are warranted to test this hypothesis.

As a last relevant limitation issue, it must be pointed that our sample was mainly composed of women with a low-risk status. The participants were characterized by their higher education, higher economic status, stable marital situation, and lack of any pregnancy complications. In more heterogeneous samples, variability in such socio-demographic conditions might have affected the results. Thus, on the one hand, our findings should be considered as being related mainly to low-risk samples. On the other hand, future studies could be conducted in higher vs. lower socio-demographic risk status women employing a statistical design allowing control for such heterogeneity to fully understand the generalizability of our findings.

Strengths and clinical implications

The major strength of this study is that it addresses a gap in the current literature concerning the knowledge of the clinical consequences of EA and neglect. Previous studies

largely concentrated on the outcomes of sexual and physical abuse and have thus not paid attention to the specific effects of these types of maltreatment. Additionally, our study focused on a specific sample, namely, pregnant women. To our knowledge, only a few studies have specifically explored a variety of traumatic childhood experiences in pregnant women and how these experiences influence a woman's emotional distress during pregnancy.

Our findings show that neglect represents a significant risk factor for psychological symptoms during pregnancy. For this reason, clinicians working with pregnant women should consider that routinely asking about childhood family environment could provide crucial prognostic understanding for their assessment. It is relevant to implement prevention strategies to reduce the risk of depression and other emotional symptoms in pregnant women.

Another strength of the study is the comprehensive evaluation of women's emotional distress. In contrast to other studies that focused only on the risk of depression during pregnancy, our study examined the risk of psychological distress in pregnant women using PAMA, an instrument that is capable of assessing perinatal maternal affective disorders [4] through numerous psychological dimensions (e.g., anxiety, depressive symptoms, stress, anger, somatization). This may allow for a more extensive understanding of the general psychological distress experienced by women during pregnancy that could result in more severe psychopathological outcomes in the post-partum period. The assessment of psychological distress during pregnancy, in particular, may be crucial to preventing depression and psychopathology in the post-partum period. Indeed, several studies have found that among women with high depression scores in late pregnancy, almost half carried the symptoms with them into the postpartum period [39]. Moreover, a recent umbrella review revealed that antenatal depression is widespread, with a prevalence ranging from 15 to 65% [28].

Research has highlighted the need for more accurate information regarding specific risk factors for antenatal depression and psychological distress. With this information, we could target and prioritize healthcare expenditures more efficiently and thereby optimize preventive interventions [8, 35].

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Authors' contributions

MR: conception and design of the work, interpretation of data, manuscript drafting; LF and LAA: analysis and interpretation of data, critical revision of the manuscript; EB and GC: data acquisition, manuscript drafting; AM: support for data acquisition, critical revision of the manuscript; GF and FG: supervision,

critical revision of the manuscript. All authors have approved the submitted version of the manuscript.

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Availability of data and materials

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

All procedures performed in this study were in accordance with the ethical standards of the institutional and national research committee and with the 2013 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all participants included in the study. The study protocol has been approved by the Bioethics Committee at the University of Palermo (167/2023). Written informed consent has been obtained by each individual who took part in the study.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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The impact of childhood maltreatment on paternal antenatal bonding: the mediating role of antenatal depression

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Abstract

Background As fathers become more involved in pregnancy and early parenting, more research attention has been given to their emotional connection with their unborn child. The transition to fatherhood is a critical developmental phase involving psychological and relational changes that shape paternal identity and bonding with the fetus. However, the factors influencing prenatal father–infant bonding remain unclear. This study examines whether emotional abuse and neglect experienced in childhood impact paternal bonding during pregnancy, and whether antenatal depressive symptoms mediate this relationship.

Methods A total of 276 expectant fathers completed self-report questionnaires to assess childhood maltreatment (using the Childhood Trauma Questionnaire, CTQ), depressive symptoms (using the Edinburgh Postnatal Depression Scale, EPDS) and paternal antenatal attachment (using the Paternal Antenatal Attachment Scale, PAAS). Correlational analyses and structural equation modelling (SEM) were used to examine direct and indirect associations between these variables.

Results Emotional abuse ($\tau=0.22, p<.001$) and emotional neglect ($\tau=0.19, p<.001$) were both positively associated with antenatal depressive symptoms. Depressive symptoms were negatively related to two dimensions of paternal antenatal attachment - attachment quality ($\tau=-0.20, p<.001$) and intensity of concern ($\tau=-0.12, p=.046$). SEM analyses supported a mediation model in which depressive symptoms partially accounted for the link between childhood maltreatment and paternal antenatal attachment. Models including depressive symptoms as a mediator provided a better fit (Model 2 A: RMSEA=0.04, CFI=0.99, TLI=0.97; Model 2 N: RMSEA=0.07, CFI=0.96, TLI=0.89) than direct-only models (Model 1 A: RMSEA=0.17, CFI=0.74, TLI=0.33; Model 1 N: RMSEA=0.14, CFI=0.83, TLI=0.56).

Conclusions The findings suggest that emotional neglect and abuse during childhood may hinder expectant fathers' emotional bonding with their unborn child by making them more vulnerable to antenatal depression. Emotional

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neglect, in particular, emerged as a significant risk factor. These results emphasise the importance of screening expectant fathers for early adversity and depressive symptoms, in order to support paternal engagement and infant well-being.

Keywords Paternal antenatal bonding, Pregnancy, Fathers, Perinatal depression, Childhood maltreatment

Introduction

The transition to parenthood is a complex developmental process that begins well before the birth of a child. During pregnancy, expectant parents begin to construct emotional representations of their unborn baby, laying the foundations for the emerging parent–child relationship. While perinatal research has historically focused on mothers, recent studies underscore that fathers, too, develop early emotional bonds with the fetus [1, 2].

On the one hand, parental–fetal attachment has been defined as “the emotional tie or bond which normally develops between the pregnant parents and their unborn child” [3] (p. 359). On the other hand, parent–infant bonding is understood as an affective state of the parent toward the child, focused on the child’s safety and well-being [4]. Although the terms attachment and bonding are sometimes used interchangeably, they refer to distinct yet complementary processes within the parent–child relationship [5]. While attachment traditionally describes the infant’s behavioral and emotional orientation toward the primary caregiver [6], bonding refers to the parent’s internal emotional experience toward the child. Bonding involves the parent’s feelings of closeness, affection, and emotional investment, even in the absence of physical interaction, and plays a crucial role in shaping early relational dynamics. The concept of parental–infant bonding has been extended to include bonding with the fetus, encompassing the emotional and cognitive representations of the unborn child [7]. Studies on fathers also support this view, describing paternal bonding both after birth [8] and during pregnancy [9].

For this reason, in the present study, we use the term parental–fetus bonding to refer specifically to the parent’s emotional connection with the unborn child, as experienced during pregnancy. This bond encompasses a wide range of thoughts, feelings, and behaviors that reflect the parent’s investment in and concern for the fetus. Research indicates that expectant mothers and fathers share remarkably similar cognitive, emotional, and imaginative representations of the unborn child, despite their different physiological experiences of pregnancy [10, 11].

This similarity would suggest that both parents warrant equal scientific attention. However, despite this, the majority of research on antenatal bonding has focused on mothers, with the paternal experience often considered secondary or deferred until after birth [12, 13]. This bias may stem from the traditional view that fathers form a bond only once the child is born, in part due to their lack

of direct bodily involvement in gestation and the hormonal changes that shape maternal–fetal bonding [14]. However, recent evidence challenges this perspective, showing that many expectant fathers engage in an active psychological process of adaptation to parenthood that can begin as early as the first trimester [1, 15, 16].

Research on paternal antenatal bonding has produced mixed findings. Some studies suggest that the absence of direct physiological experiences during pregnancy, coupled with the lack of tangible signs of the fetus, may delay the formation of an emotional connection between fathers and their unborn child [17]. Conversely, longitudinal studies have shown that paternal antenatal bonding tends to strengthen over the course of pregnancy, following a developmental trajectory similar to that of mothers [11, 18]. In fact, maternal and paternal bonding have been found to correlate from the prenatal period through to two years postpartum [18], suggesting a shared relational trajectory.

While this trajectory appears robust, individual variation in paternal bonding is significant and influenced by multiple psychosocial factors. Higher levels of psychological well-being, perceived social support, and relationship satisfaction have all been linked to stronger paternal antenatal bonding [8, 11, 19, 20]. In contrast, unplanned pregnancies and obstetric complications have been associated with diminished engagement and lower bonding scores in expectant fathers [1, 2, 21]. These findings underscore the role of current interpersonal and contextual stressors in shaping paternal representations of the unborn child.

While these situational variables play a role, they represent only part of the picture. A growing body of literature highlights the need to consider how earlier relational experiences, especially adverse ones, may resurface during this period.

Transition to parenthood often reactivates unresolved emotional conflicts, making individuals more vulnerable to psychological distress and depressive symptoms, especially those with a history of childhood abuse or neglect [22]. Despite limited research, emerging findings suggest that paternal Adverse Childhood Experiences (ACEs), especially emotional neglect and abuse, may have profound consequences on adult mental health and parent–infant bonding, particularly in the perinatal period [23, 24]. Emotional neglect and abuse, unlike physical harm, often occur in the context of chronic relational disruption, such as a lack of parental responsiveness, validation,

or safety in early parent-infant bonding relationships. While the negative impact of maternal ACEs on prenatal perinatal depression and bonding has been widely documented, research on their effects in expectant fathers remains limited [25].

This research gap likely reflects the historically maternal-centric focus of perinatal psychology and enduring stereotypes minimizing fathers' emotional involvement. However, increasing attention to paternal perinatal mental health highlights the need to examine how unresolved ACEs may affect men's developing parental identity and bonding capacities, acknowledging that different forms of childhood maltreatment confer distinct risks [26, 27].

Several studies suggest that emotional abuse and neglect may be particularly damaging because they affect the child's emerging sense of self and others, undermining trust, emotional regulation, and expectations of relationships [28–30]. In the context of impending parenthood, these internalized models may re-emerge and interfere with the father's ability to envision a safe and loving relationship with his child, especially during the emotionally vulnerable transition to fatherhood [31, 32].

Emotional abuse and emotional neglect, although both classified as emotional maltreatment, represent distinct developmental negative experiences with divergent psychological consequences [33, 34]. Emotional abuse involves active forms of harm, such as verbal humiliation, rejection, or intimidation, often leading to heightened affective dysregulation and interpersonal sensitivity [35]. Emotional neglect, in contrast, reflects a failure to provide emotional attunement, validation, and responsiveness, and is more commonly associated with difficulties in emotional awareness [36].

These distinct profiles appear to differentially impact psychological functioning in the perinatal period. Emotional abuse may predispose individuals, including expectant fathers, to more overt affective symptoms such as irritability, guilt, and depressive symptoms, whereas emotional neglect may increase vulnerability to disengagement and reduced capacity to form affective bonds [23, 37]. Preliminary findings suggest that in men, emotional neglect in particular may undermine prenatal bonding by weakening empathic engagement with the unborn child and diminishing the psychological salience of the pregnancy [25].

Among expectant mothers, emotional neglect has been found to exert a stronger negative impact on prenatal bonding than other types of childhood adversity [23, 38].

One mechanism that may link early adversity to impaired bonding is the increased risk of perinatal depressive symptoms. Exposure to childhood maltreatment has been associated with higher rates of depression during the perinatal period [37], which can in turn compromise a parent's ability to emotionally engage with

their unborn child. Although perinatal depression in men remains under-recognized, it is increasingly acknowledged as a significant barrier to paternal involvement and prenatal bonding [39].

In parallel, increasing evidence underscores that men, much like women, are susceptible to psychological difficulties in the perinatal period, including clinically significant depressive symptoms [40–42]. Several studies have found that paternal perinatal depression is linked to reduced quality of father-infant bonding [43–45]. Notably, paternal perinatal depression tends to follow a different course compared to maternal perinatal depression, often characterized by a longer duration, slower remission, and distinct symptomatology - such as increased irritability, aggression, anhedonia, self-blame, worries, substance use, and risk-taking behaviors [46–49].

Although paternal mental health in the perinatal period is increasingly recognized, no study has yet explored how different forms of childhood maltreatment (e.g., emotional abuse vs. neglect) may distinctly affect paternal antenatal bonding or whether depression mediates these effects. Filling this gap is essential to understanding men's emotional vulnerability during pregnancy and identifying fathers at higher risk during the transition to parenthood.

Therefore, the present study aimed to investigate the differential impact of childhood emotional abuse and emotional neglect on the development of paternal antenatal bonding. In addition, it examined the role of antenatal depressive symptoms in shaping this relationship. By clarifying these associations, the study contributes to a better understanding of paternal vulnerability during the transition to fatherhood and supports the development of more tailored early interventions.

Methods

Procedure and ethical aspects

The data collection was preceded by the completion and signing of informed consent forms, which briefly explained the study's objectives and specified that individual information and responses provided were anonymous and confidential. This research does not involve any participants under the age of 18.

The assessment battery comprised various areas: socio-demographic information, pregnancy-related information, depressive symptoms, childhood trauma experiences, and parental-fetus bonding.

All the procedures in this study were conducted according to the 2024 Declaration of Helsinki. The protocol was approved by the Bioethics Committee at the University of Palermo (167/2023) and the Ethics Committee at the Civico - Di Cristina – Benfratelli, Hospital of Palermo (142/2022).

Sample

The sample of this study consists of 278 Italian fathers (Mean age = 36.5; SD = 5.6), recruited through various methods: during prenatal obstetrical check-ups, within birth centers and local health services, by disseminating the survey link through formal and informal parenting support networks, and by posting flyers in hospitals, private clinics, and health centers for pregnancy. All measures were administered individually, using electronic devices (telephone, tablet), both in person at the Hospital of Palermo “Civico - Di Cristina – Benfratelli” and online.

The participants in the study are Italian fathers and predominantly reside in Palermo (45%), Messina (11%), Lecce (32%), and Bari (12%). To be eligible, participants had to meet two criteria: they were at least 18 years old and spoke fluent Italian. The distribution of educational qualifications was as follows: junior high school or lower, 9%; high school diploma, 41%; bachelor’s or master’s degree, 27%; and postgraduate degree, 23%.

Measures

The Paternal Antenatal Attachment Scale (PAAS) [50, 51] : PAAS is a questionnaire designed to assess prenatal attachment. The scale consists of 19 items and uses a 5-point Likert scale to evaluate the father’s feelings towards the child along two dimensions: the quality of attachment (PAAS-QA) and the intensity of concern (PAAS-IC). The *Quality of Attachment* dimension reflects the emotional tone of the paternal experience, such as feelings of affection, joy, or ambivalence toward the fetus. The *Intensity of Concern* dimension captures the extent of the father’s cognitive and emotional involvement, including the frequency of thoughts and daydreams about the fetus [51]. Higher total scores indicate greater levels of paternal antenatal bonding. The scale has demonstrated good psychometric properties [52, 53].

Edinburgh Postnatal Depression Scale (EPDS) [54, 55]: The EPDS is a self-report questionnaire designed to assess depressive symptoms and emotional well-being over the past week. It comprises 10 items, each rated on a 4-point Likert scale ranging from 0 to 3. Item 10 is particularly important, as it evaluates the risk of suicidal ideation. Higher total scores indicate greater emotional distress, with a possible range from 0 to 30. Scores between 0 and 8 suggest no risk, 9–11 indicate moderate risk, and 12–30 indicate high risk. For this study, we used the validated Italian version developed by Benvenuti et al. [54], which demonstrated good psychometric properties (Cronbach’s alpha = 0.809).

Childhood Trauma Questionnaire—Short Form (CTQ-SF) [56]: The CTQ-SF is a 28-item self-report questionnaire designed to assess experiences of childhood trauma. Each item is rated on a 5-point Likert scale, ranging from 1 (never true) to 5 (very often true). The instrument includes five clinical subscales: Physical Abuse, Emotional Abuse, Sexual Abuse, Physical Neglect, and Emotional Neglect. For the present study, we used the validated Italian version translated by Sacchi and colleagues [57]. All subscales demonstrated excellent internal consistency, with Cronbach’s alpha coefficients greater than 0.87. For the purposes of this study we used the CTQ-Emotional Abuse score, and the CTQ-Emotional Neglect score.

Data analysis

A summary description of the variables included in the study is provided in Table 1. For each of the variables of interest, we checked for outliers using Grubb’s test. We adopted the criteria of asymmetry < 2 and kurtosis < 7 to identify deviations from normality [58] and found that all variables were normal except for childhood trauma dimensions (CTQ_EmotionaAbuse, CTQ_EmotionaNeglect), which showed marked levels of asymmetry and kurtosis. To assess the potential effect of confounding factors, we tested the association between the variables of interest and variables related to age, educational level (expressed in years of schooling), gestational time point (expressed in pregnancy trimester) and place of data collection (i.e., the specific site where recruitment occurred), using Kendall’s Tau correlation and Kruskal-Wallis test ($p < .05$). We then included age, gestational timepoint and place of data collection as covariates in subsequent analyses, as reported below, as these variables were found to be associated with some of the variables of interest (see below).

Kendall’s Tau correlations ($p < .05$) were used as a preliminary measure to identify simple associations between perinatal depressive symptoms measured with the EPDS and each of the childhood trauma dimensions measured with the CTQ_EmotionaAbuse and

Table 1 Descriptive statistics and correlations between variables

Variable	EPDS	CTQ_EA	CTQ_EN	PAAS_QA	PAAS_IP
Mean (sd)	4 (4)	6.3 (2.8)	8.5 (4.2)	22.4 (3.6)	33.1 (2.8)
2	0.220 ($p < .001$)	—			
3	0.192 ($p < .001$)	0.464 ($p < .001$)	—		
4	−0.203 ($p < .001$)	−0.205 ($p < .001$)	−0.307 ($p < .001$)	—	
5	−0.12 ($p = .046$)	−0.173 ($p < .001$)	−0.221 ($p < .001$)	0.415 ($p < .001$)	—

Table 1– Caption. Table 1 shows the descriptive analyses of the variables of interest and the results of correlation analyses. AbbreviationsEPDS Edinburgh Postnatal Depression Scale, CTQ-A Childhood traumatic questionnaire – Abuse, CTQ-N Childhood traumatic questionnaire – Neglect, PAAS-QA Paternal Antenatal Attachment – Quality of Attachment, PAAS-IC Paternal Antenatal Attachment – Intensity of Concern, sd standard deviation.

CTQ_EmoionalNeglect indices, providing information on the strength and direction of these connections. Similarly, using Kendall's Tau correlation ($p < .05$), we investigated the possible association between the perinatal depressive symptoms (EPDS) and paternal antenatal bonding in terms of quality (PAAS-QA) and intensity of concern (PAAS-IC). Finally, using Kendall's Tau correlation again ($p < .05$), we tested the association between the childhood trauma dimensions (CTQ_EmoionalAbuse and CTQ_EmoionalNeglect) and paternal antenatal bonding indices (PAAS-QA and PAAS-IC). All correlations were corrected for multiple comparisons using the false discovery rate procedure (Benjamini-Hochberg method) [59].

As a next step, a Structural Equation Modeling (SEM) approach was used to ascertain the potential relationships between the variables, specifically assessing the impact of childhood traumatic experiences and depressive symptoms on paternal antenatal bonding. The SEM analysis was conducted using the R software, through the lavaan package (<https://lavaan.ugent.be> – doi: <https://doi.org/10.18637/jss.v048.i02>). Using SEM, we compared two different models. In the first model, we examined the direct effects of childhood experiences of maltreatment (separately CTQ_EmoionalAbuse or CTQ_EmoionalNeglect) together with depressive symptoms (measured with EPDS) in directly influencing paternal antenatal bonding (measured with PAAS_QA and PAAS_IC). The second model included, in addition to the above, the direct effect of CTQ on EPDS. The addition of this relationship allowed us to test a more complex model, hypothesizing that EPDS functions as a mediating variable in the relationship between childhood traumatic experiences and paternal antenatal bonding. These models were tested separately for abuse conditions (Models 1 A and 2 A, respectively) and for neglect conditions (Models 1 N and 2 N, respectively). We tested the abuse and neglect dimensions in two parallel and identically specified SEMs, rather than in a single combined model, to ensure model parsimony and interpretability. This analytic strategy allowed us to examine each form of maltreatment as a primary predictor of paternal bonding through depressive symptoms, without introducing suppression effects due to their shared variance.

In detail, the relationships hypothesized in Model 1 A are as follows: Paternal Antenatal Attachment (in terms of Quality of Attachment and Intensity of Concern) is directly influenced by Childhood Emotional Abuse as well as by Perinatal Depressive Symptoms; In Model 2 A, we added to these hypothesized relationships the relationship the assumption that Childhood Emotional Abuse influences Perinatal Depressive Symptoms. Similarly, in Model 1 N, we hypothesized that Paternal Antenatal Attachment is directly influenced by Childhood

Emotional Neglect as well as by Perinatal Depressive Symptoms, while in Model 2 N, we added the relationship indicating that Childhood Emotional Neglect influences Perinatal Depressive Symptoms. For a graphical representation of the models, see Fig. 1.

In all models, the variables CTQ_EmoionalAbuse and CTQ_EmoionalNeglect were regressed for the covariates of the data collection site, while the variable EPDS was regressed for the variable age, given the evidence of association between these variables; all the variables were finally regressed for gestational time given the strong impact of that variable on bonding. The models were fitted to the data using the Maximum Likelihood Robust estimation method. The goodness-of-fit indicators used include: Root mean square error of approximation (RMSEA), Comparative Fit Index (CFI), Akaike Information Criterion (AIC), Tucker-Lewis Index (TLI). Values of CFI and TLI above 0.90 (and preferably > 0.95) indicate good model fit, RMSEA values below 0.08 (and ideally < 0.05) reflect acceptable approximation error, while lower AIC values denote better model parsimony and comparative fit.

Results

The analyses exploring the potential impact of confounding factors revealed an effect of age on EPDS ($\tau = -0.13$, $p = .004$), an effect of the data collection site on the CTQ_EmoionalAbuse and CTQ_EmoionalNeglect variables ($H(3) = 7.5$, $p = .047$ and $H(3) = 33.6$, $p < .001$, respectively), and an effect of pregnancy trimester on the PAAS_IC ($H(2) = 15.17$, $p < .001$). Correlation analyses between childhood trauma conditions and depressive symptoms showed a positive association between depressive symptoms and measures of abuse and neglect (see Table 1). Depressive symptom scores were negatively associated with paternal prenatal attachment scores (Table 1). Finally, childhood trauma conditions were associated with measures of paternal prenatal attachment, considering both attachment quality attachment and the intensity of concern (Table 1).

SEM analyses showed a better fit to the data for both models that included the relationship between EPDS and CTQ (Models 2 A and 2 N) compared to models that did not include this relationship. In particular, for the emotional abuse dimension, Model 1 A (RMSEA = 0.17, CFI = 0.74, TLI = 0.33, AIC = 4642.23) showed poor fit and limited parsimony, indicating that the direct-only model did not adequately represent the data. In contrast, Model 2 A (RMSEA = 0.04, CFI = 0.99, TLI = 0.97, AIC = 4598.92) exhibited an excellent fit, with all indicators meeting or exceeding conventional cutoffs (CFI/TLI > 0.95 , RMSEA < 0.05 , SRMR = 0.03), suggesting that the inclusion of depressive symptoms as a mediator substantially improved model performance and stability.

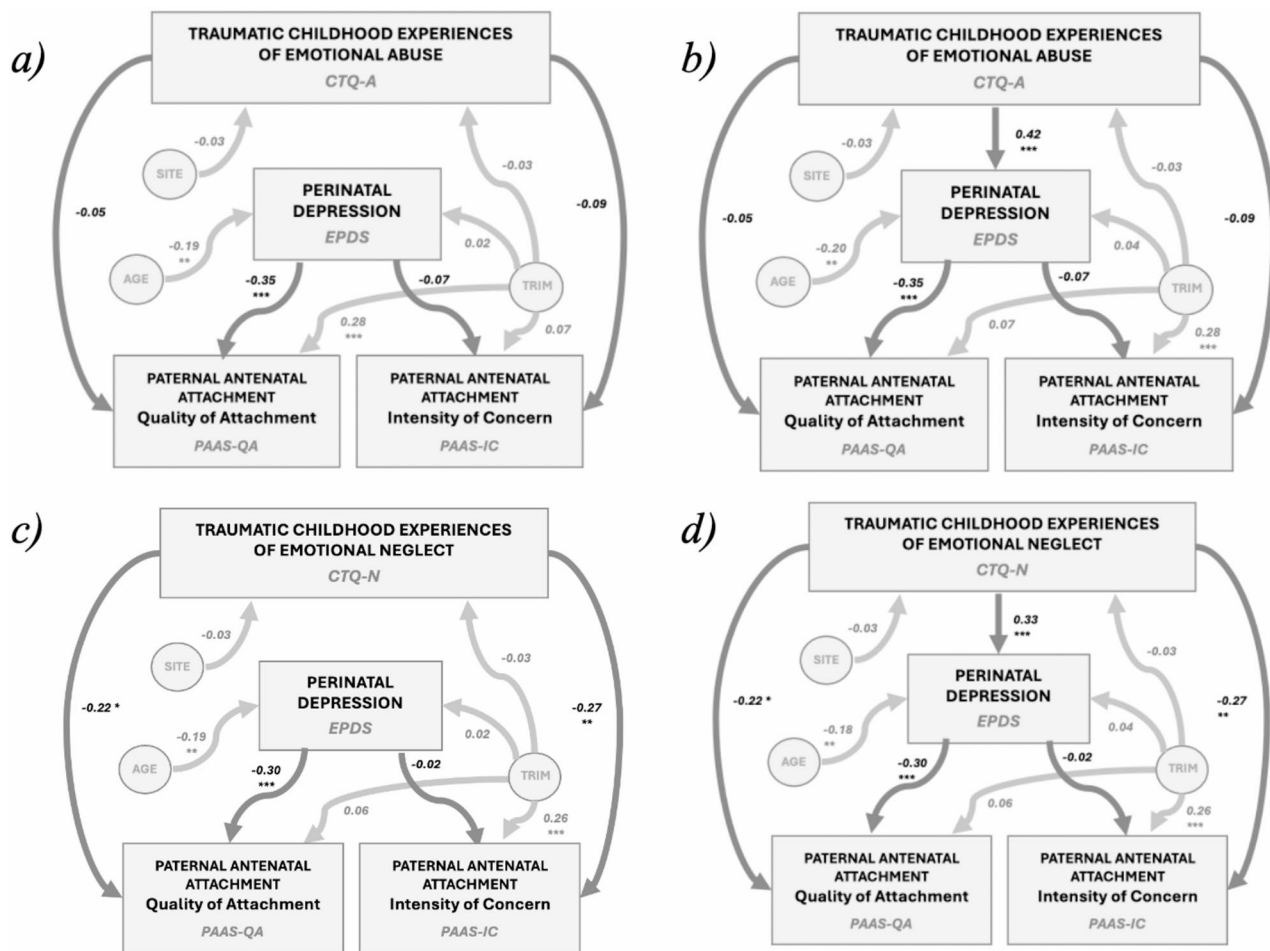


Fig. 1 Structural equation model with standardized path coefficients shown on each arrow **1a)** The relationships hypothesized in model 1 A in which Paternal Antenatal Attachment (in terms of Quality of Attachment and Intensity of Concern) is directly influenced by Childhood Abuse as well as by Perinatal Depressive Symptoms. **1b)** The relationships hypothesized in model 2 A in which also Childhood Abuse influences Perinatal Depressive Symptoms. **1c)** The relationships hypothesized in model 1 N in which Paternal Antenatal Attachment (in terms of Quality of Attachment and Intensity of Concern) is directly influenced by Childhood Neglect as well as by Perinatal Depressive Symptoms. **1d)** The relationships hypothesized in model 2 N in which also Childhood Neglect influences Perinatal Depressive Symptoms. Covariates are represented by circles. * $p < .05$; ** $p < .01$; *** $p < .001$

Similarly, for the neglect dimension, Model 1 N (RMSEA = 0.14, CFI = 0.83, TLI = 0.56, AIC = 4784.86) demonstrated an unsatisfactory fit, whereas Model 2 N (RMSEA = 0.07, CFI = 0.96, TLI = 0.89, AIC = 4760.34) showed a good overall fit, with indices within acceptable thresholds and a notable reduction in AIC. Although the improvement from Model 1 N to Model 2 N was less pronounced than in the abuse models, it still indicated that including the mediating path between childhood neglect and depressive symptoms resulted in a more coherent representation of the data.

Discussion

The present study aimed to investigate the impact of adverse childhood experiences (ACEs), specifically emotional abuse and emotional neglect, on the development of paternal antenatal bonding. Specifically, the study pursued a twofold objective: first, to investigate how distinct

forms of ACEs may differentially influence paternal antenatal bonding; and second, to examine the role of antenatal depressive symptoms in shaping this relationship;

Our analysis focused on two key dimensions of paternal antenatal bonding, proposed by the Paternal Antenatal Attachment Scale (PAAS): attachment quality and intensity of concern [51]. We hypothesized that these dimensions might be differentially affected by both early experiences of maltreatment and current depressive symptoms.

Our findings confirmed the relationship between childhood maltreatment and reduced levels of paternal antenatal bonding. Specifically, both abuse and neglect were linked to lower scores in both attachment quality and intensity of concern scales. These results corroborate the findings of recent studies that have indicated a correlation between lower levels of prenatal bonding in fathers exposed to early emotional neglect [25]. The results also

align with broader research findings that suggest maltreatment can impact maternal bonding to their unborn children [23, 60, 61]. Moreover, adults with a history of childhood trauma often face complex challenges in the transition to parenthood. Specifically, women who experienced emotional neglect in childhood may have greater difficulty establishing secure and healthy relationships [62]. This relationship is already evident in antenatal parental-fetus bonding, considering both the quality of attachment and the intensity of concern.

In our sample, childhood maltreatment was also associated with increased perinatal depressive symptoms in fathers. Again, both abuse and neglect contributed similarly to the risk of depressive symptomatology. The present findings corroborate earlier research linking early adverse experiences to increased vulnerability to maternal depression during the perinatal period [37], suggesting that this relationship may also be present in the paternal population. The findings of the present study also suggest that fathers who were experiencing symptoms of perinatal depression demonstrated lower levels of antenatal parental-fetus bonding, both in terms of attachment quality and intensity of concern. The present result further confirms recent evidence on the relationship between perinatal depressive symptoms and antenatal bonding in fathers [39], suggesting, even in the paternal population, a potential underlying mechanism linking perinatal depressive symptoms and antenatal bonding, as previously documented in mothers [23, 63, 64].

Our correlation analyses suggest a high degree of interconnectedness among the dimensions under consideration. On the one hand, there is a clear association between exposure to conditions of abuse and neglect in childhood and both perinatal depressive symptomatology and parental-fetus bonding. On the other hand, parental-fetus bonding has been demonstrated to be associated with the presence of depressive symptomatology. The evidence of this close interconnection supports the methodological framework of our study, which aimed to investigate the directionality of these relationships through structural equation modeling (SEM). The models that were implemented compared two potential relationships among the variables. Firstly, they examined the potential direct impact of maltreatment and depressive symptoms on fathers' antenatal bonding. Secondly, they investigated the possibility that depressive symptoms might serve as a mediator between maltreatment and paternal antenatal bonding.

Comparing SEM models suggests that models including the relationship between maltreatment and depressive symptoms better fit the data than models not including it. This better fit was observed in models that included both abuse and neglect dimensions, indicating

that the connection between these factors and negative symptoms is significant and essential for accurate modeling.

These results validate the idea that childhood maltreatment and perinatal depressive symptoms affect paternal antenatal bonding. Models that tested the direct effect of these dimensions showed a fair fit to the data. Regression coefficients in these models showed that maltreatment and depressive symptoms significantly impact prenatal attachment quality (PAAS_QA) and the intensity of concern (PAAS_IC). However, comparing these models with models that also tested the role of childhood maltreatment in modulating current depressive symptoms revealed that the latter models better fit the data. In other words, while maltreatment and depressive symptoms have direct and independent effects on paternal antenatal bonding, the indirect effect of maltreatment through influencing depressive symptoms must also be considered.

Overall, these results demonstrate that experiences of abuse and neglect directly and indirectly predict paternal antenatal bonding. However, our investigations suggest a relatively higher incidence of neglect than abuse. This difference was more evident in SEM models, in which the regression coefficients revealed that neglect dimensions have a relatively stronger effect on paternal antenatal bonding than abuse dimensions.

The negative associations between childhood maltreatment and paternal antenatal bonding suggest that early neglect experiences may impair fathers' ability to form strong emotional bonds with their unborn child. The weaker associations with abuse may indicate that neglect has a more pronounced impact on attachment processes, potentially due to its chronic nature disrupting relational skills, emotional growth, and trust in others. These results are consistent with attachment theory, which posits that early caregiving experiences shape later relational capacities [65].

When considering specific forms of maltreatment, both abuse and neglect were associated with increased depressive symptoms and reduced bonding. However, emotional neglect emerged as the strongest predictor of both diminished attachment quality and lower levels of concern for the fetus. This finding aligns with dimensional models of adversity [66], which emphasize the particularly detrimental impact of deprivation-based experiences, such as neglect, on socio-emotional development. Recent studies further support this view, indicating that affective forms of maltreatment, like emotional neglect, exert a pervasive impact on internal working models and the capacity to form secure relationships [38, 67].

Importantly, the best-fitting models (i.e., those including the indirect effect of maltreatment through depressive symptoms) identified depressive symptoms as a

potential mediator between childhood maltreatment and paternal antenatal bonding, thereby supporting our second hypothesis. These results suggest that early adverse experiences may increase the risk of prenatal bonding difficulties indirectly, through elevated emotional distress during the perinatal period. This finding is in line with previous research showing that perinatal depression impairs the development of early parent–child emotional connections, including among fathers [25, 39], and that childhood trauma heightens vulnerability to perinatal depression [22], which in turn undermines paternal bonding [43].

This study makes a new contribution to the literature by highlighting how specific types of early adversity, especially neglect, can shape paternal emotional availability and bonding during pregnancy.

Due to the cross-sectional design of the study, the current findings should be considered exploratory and primarily hypothesis-generating. The identified associations cannot establish causality, but rather highlight potential pathways that warrant further investigation in longitudinal studies. Future studies employing prospective designs are essential for clarifying the directionality and underlying mechanisms of these relationships.

In conclusion, our findings underscore the importance of considering both developmental history and current emotional well-being in understanding early fatherhood. These insights hold important implications for research and clinical interventions aimed at promoting healthy paternal involvement from the earliest stages of parenthood.

Strengths and limitations

A key strength of this study lies in its contribution to an underexplored area of research: the clinical consequences of childhood abuse and neglect, specifically in expectant fathers. While prior studies have predominantly focused on the general outcomes of maltreatment, few have differentiated between the effects of specific types of abuse and neglect. Our study addresses this gap by examining how distinct forms of early adversity relate to depressive symptoms and the quality of paternal–fetal attachment. Notably, the focus on fathers represents an additional strength, as this population has been largely overlooked in research on childhood trauma and perinatal adaptation.

Despite these strengths, several limitations should be acknowledged. First, reliance on self-report measures may introduce biases related to social desirability and retrospective recall. Second, the cross-sectional nature of the study precludes any inference about the temporal or causal direction of the observed associations. Consequently, it is impossible to determine whether depressive symptoms preceded or followed difficulties in prenatal

bonding. Furthermore, it should be acknowledged that current depressive symptoms may have biased participants' retrospective reports of their childhood experiences. Third, the sample may not be fully representative of the broader population, potentially limiting the generalizability of the findings to fathers from diverse socioeconomic or cultural backgrounds. Finally, as reported in the introduction, depressive symptoms in men may manifest differently compared to women, often including irritability, aggression, substance use, and risk-taking behaviors. Consequently, a limitation of this study is the use of the Edinburgh Postnatal Depression Scale (EPDS) to assess depressive symptoms in fathers, as this tool was originally developed and validated for maternal populations and may not fully capture the male-specific expression of depressive symptomatology.

Future research would benefit from longitudinal designs to track how paternal antenatal bonding develops into caregiving behaviors and influences long-term parent–child relationships. Additionally, incorporating mixed-methods approaches could offer deeper insight into the subjective experiences of expectant fathers with histories of childhood trauma, enriching our understanding of their emotional and relational development during the transition to parenthood. Finally, while the current study focused specifically on emotional abuse and emotional neglect—given their central role in shaping relational functioning—future research should adopt a more comprehensive approach, examining the distinct and combined effects of all CTQ subscales. Such analyses could provide a more nuanced understanding of how different forms of childhood adversity interact to influence paternal mental health and bonding processes.

Conclusions

This study contributes to the growing body of research on paternal perinatal mental health by demonstrating that early adverse relational experiences - specifically emotional abuse and emotional neglect - may negatively impact the development of paternal antenatal bonding. Our findings suggest that such experiences can influence expectant fathers' emotional connection with the fetus both directly and indirectly, via increased vulnerability to perinatal depressive symptoms.

Among the two forms of childhood maltreatment examined, emotional neglect emerged as a particularly significant predictor of diminished bonding quality, highlighting the pervasive and enduring impact of deprivation-based adversities on relational functioning. Moreover, depressive symptoms were found to mediate the relationship between early maltreatment and antenatal bonding, emphasizing the role of current emotional distress as a critical mechanism in the intergenerational transmission of emotional vulnerability.

These results underscore the importance of routinely assessing childhood maltreatment histories and perinatal depressive symptoms in fathers, not only as a means of identifying individuals at risk, but also to inform early, targeted interventions aimed at fostering emotional engagement and supporting the developing father–child relationship from pregnancy onward. Addressing paternal mental health and relational history within perinatal care settings may ultimately promote better outcomes for both parents and children, and contribute to a more inclusive, preventative model of family mental health.

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Authors' contributions

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Data availability

The data that support the findings of this study are available from the corresponding author, M.R.I., upon reasonable request.

Declarations

Ethics approval and consent to participate

The protocol was approved by the Bioethics Committee at the University of Palermo (167/2023) and the Ethics Committee at the Civico - Di Cristina - Benfratelli Hospital of Palermo (142/2022). The study was conducted in accordance with the principles of the 2024 Declaration of Helsinki. Informed consent to participate was obtained from all participants.

Consent for publication

Not Applicable.

Competing interests

The authors declare no competing interests.

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Article

Psychosocial Risk Factors and Psychopathological Outcomes: Preliminary Findings in Italian Pregnant Women

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Abstract: The perinatal period may represent a particularly challenging time for expecting parents. Previous studies have highlighted an association between several perinatal risk conditions (e.g., childhood maltreatment, poor social support, and stress levels) and the development of psychopathological symptoms in pregnant women, especially depression symptoms. The current study examined the effects of psychosocial risk factors (childhood maltreatment, poor social support, and stressful events) on anxiety, depression, perceived stress, irritability/anger, relationship problems, psychosomatic symptoms, specific physiological problems, and addiction/at-risk behaviors. Sixty-one pregnant women (age range = 24–45) participating in a larger study completed questionnaires about childhood maltreatment (CECA Q.), Maternity Social Support Scale (MSSS), questionnaire on stressful events, and the Perinatal Assessment of Maternal Affectivity (PAMA) during their pregnancy. Results from regression analysis indicated that the presence of childhood maltreatment predicted elevated depressive symptoms, elevated irritability and anger, and elevated relationship problems. Further, stressful events in the year prior to pregnancy predicted elevated psychosomatic symptoms during pregnancy. No other significant associations were found. In this study, traumatic childhood events were strongly associated with mental health symptoms during pregnancy. This is an important finding that suggests the importance of screening and targeting psychotherapeutic interventions for vulnerable women during pregnancy.



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Keywords: childhood maltreatment; social support; stressful events; psychopathological outcomes; pregnancy

1. Introduction

The perinatal period, which is typically defined as from the beginning of pregnancy to one year after childbirth, is associated with major physiological and emotional changes related to pregnancy, childbirth, and the care of a newborn. Such intense changes can make the transition into parenthood a time of vulnerability for mothers and fathers. During gestation, caregivers are required to reorganize their internal experience and begin to change their identity to accommodate their new role as parents [1,2]. Pregnancy is usually defined as a generally positive and joyful time for most; nevertheless, there may also be severe stressors associated with the physical, emotional, and cognitive changes that affect women in the prenatal period [3]. These stressors may be exacerbated by recall of one's own childhood caregiving experiences [4,5].

As research has shown, experiences of childhood maltreatment can have long-term negative consequences on adult health [6–10]. Childhood adversities typically refer to a wide range of negative early experiences, including physical, sexual, and emotional abuse; physical and emotional neglect; exposure to domestic violence; the presence of a family member with mental illness and/or substance abuse problems; bullying; parental death or loss; serious accidents or injuries; and extreme poverty [10]. Among all experiences of childhood adversity, research has demonstrated a strong link between experiences of childhood maltreatment and several psychopathological conditions in the lifespan, such as post-traumatic stress disorder, suicidal

and self-injurious behavior, depressive symptomatology, personality disorders, substance abuse, somatization, anxiety, and dissociation [6]. Considering the possible explanations of the association between childhood maltreatment experiences and psychopathological conditions, psychodynamic models highlight how experiences of childhood maltreatment can threaten fundamental human needs to belong and to create positive relationships, which are scaffolding for the development of self-worth and security feelings [11,12]. Given the importance of early nurturing bonds, traumatic experiences within the relationship between parents and their child can lead to the damaged development of all future relationships, including that of maltreated individuals with their offspring [13].

A growing body of research has shown interest in studying the relationship between childhood maltreatment and adverse psychological outcomes specifically during pregnancy [14,15]. The long-term consequences of early traumatic experiences are a serious public health concern. Therefore, identifying sensitive life periods when childhood maltreatment consequences are most salient may lead to successful intervention efforts. Research has shown that the perinatal period is one such sensitive time point [16].

In line with the attachment theory and psychodynamic models, the perinatal period is a time during which the negative effects of childhood maltreatment can manifest [13,14]. Indeed, early adverse experiences, particularly those of abuse and neglect, may be reactivated by the transition process to motherhood, potentially eliciting emotional and psychological responses associated with those experiences [17,18]. To confirm this theory, an interesting longitudinal study compared psychological distress in a group of pregnant and non-pregnant adolescents. Findings highlighted that early traumatic experiences can be considered predictors of psychopathological conditions among pregnant and parenting adolescents but not among nulliparous adolescents [19]. During pregnancy, emotional distress such as depression may be caused by recall of childhood maltreatment, which can elicit trauma-related thoughts and feelings [20,21].

Women who have experienced abuse in childhood may therefore be at particularly high risk for the development of psychopathological conditions such as post-traumatic stress disorder and post-partum depression during pregnancy and the postpartum period [22–25]. A recent systematic review of the empirical literature on the relationship between maternal histories of childhood maltreatment and perinatal mood and anxiety disorders revealed strong trends of association between adverse early experiences and perinatal depression, as well as post-traumatic stress disorder [20].

Research highlights that early traumatic experiences not only may affect mothers' psychological well-being during the perinatal period but also may have potential negative implications for their offspring's health and development. Indeed, strong associations were found between maternal psychological distress and increased risk for preterm birth, low birth weight, poor health, and other pregnancy and birth complications [26–28]. Moreover, evidence suggests that exposure to maternal psychopathology during the perinatal period also may have detrimental effects on the cognitive, behavioral, and emotional development of offspring, increasing the risk of psychiatric disorders in the adolescence and early adulthood of offspring [29,30].

The aforementioned studies show that pregnancy is a sensitive window during which to act promptly to avoid possible negative consequences for women and families. Among possible negative effects, previous studies have focused mainly on postpartum depression and have shown that it is associated with serious emotional distress, important social and occupational impairments, and increased healthcare utilization [31]. Postpartum depression may also affect women's parenting functioning and couples' relationships [32]. The potential link between a history of abuse and maternal depression during pregnancy has been less investigated [33] despite evidence suggesting that prenatal depression and postpartum depression may have similar negative effects and that pregnant women with a history of early traumatic experiences can manifest severe depression symptoms [34,35]. Further, as evidenced in some studies, almost 50% of women experience continued prenatal depression in the postnatal period [36,37].

For this reason, assessment during pregnancy is necessary to immediately detect, treat, and reduce depressive symptoms, as well as other forms of psychopathological distress [38,39].

Besides the serious negative consequences of childhood maltreatment, several risk factors associated with prenatal and postpartum psychopathological distress (anxiety, relationship, or psychosomatic problems), such as low social support and stressful life events, have been detected [40].

Knowing and understanding predictors of psychological negative conditions in pregnancy is crucial to avoid negative consequences for parents and children. One of the major obstacles to implementing effective prevention programs is inadequate programs for the early identification of women who are at risk of suffering from psychological problems during pregnancy and postpartum [41]. This situation has often left such disorders undetected and untreated or only detected at an advanced stage [42]. In this study, a wider range of potential risk factors (such as childhood abuse, lack of social support, and stressful events) for psychopathological outcomes was examined.

The current study aimed to present preliminary findings of larger ongoing research to garner a better understanding of the associations between potential risk factors and mental health outcomes in a sample of pregnant women. Targeting the risk factors of future mothers may help to reduce mental health problems for women, improve pregnancy outcomes, and offer a better family environment for children.

2. Materials and Methods

2.1. Procedure and Participants

Participants in this study (N = 61) comprised a convenience sample of Italian pregnant women. Eligibility requirements included the following: (a) being pregnant, (b) being at least 18 years of age, and (c) having the ability to understand and speak fluent Italian. Eligible participants provided informed consent after being provided with a thorough description of the purpose of the project. Following informed consent, participants completed a battery of self-report measures on their smartphone or computer/tablet. The project was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Department of Psychology, Educational Science and Human Movement at the University of Palermo (V.8_22/05/2022).

Participants were recruited through the active involvement of birth centers and local health services and health workers (e.g., gynecologists, obstetricians, etc.); formal and informal birth support networks; and the posting of fliers in public healthcare service locations, hospitals, community prenatal clinics, and social service agencies serving pregnant women.

2.2. Measures

- Questionnaire on sociodemographic characteristics and pregnancy-related variables: an ad hoc questionnaire used to collect primary information such as date of birth, marital status, education level, gestational age (in weeks), primiparity (first pregnancy or not), other children, information on the current pregnancy (single/twin, high/low risk), and whether they were currently romantically involved with a partner. Further questions assess the presence of psychological distress (depression, anxiety, etc.) before the current pregnancy.
- *Stressful Events in the Previous Year*: a 15-item questionnaire assessing any stressful events that occurred in the previous year (economic problems, illness of a loved one, change or loss of work, etc.) through dichotomous questions. A final single item assesses the impact of reported stressful events (none, mild, medium, and strong levels).
- *Maternal Social Support Scale (MSSS)* [43]: The MSSS is a 6-item, 5-point Likert-type rating scale that measures perceived social support (i.e., friendship network, family support, help from spouse/partner, and conflict with spouse/partner). The total possible score is 30, with cutoff points suggested by Webster [43] as follows: 0–18 (low social support), 19–24 (medium support), and >24 (adequate support). The MSSS showed good psychometric properties.

- *Childhood Experience of Care and Abuse Questionnaire (CECA.Q)* [44]: a self-report measure designed to collect information concerning adverse events occurring before the age of 17 years. These experiences include physical abuse by the main mother and father figures, sexual abuse by any adult, parental antipathy (hostility, rejection, or coldness), and emotional or physical neglect (defined in terms of a parent's disinterest in material care, health, schoolwork, and friendships). It thus combines classic traumatic experiences with negative bonding experiences with each caregiver. This measure is considered the gold-standard measure for childhood experience assessment, and it has satisfactory levels of test–retest reliability and concurrent validity.
- *Perinatal Assessment of Maternal Affectivity (PAMA)* [45]: The PAMA is an 11-item screening instrument used to assess perinatal maternal affective disorders. The first eight items deal with the following dimensions: anxiety, depression, perceived stress, irritability/anger (irritability, hostility, arguments with others, and anger attacks), relationship problems (including couple, family, friends, and at work), abnormal illness behavior (somatization, functional medical syndromes, chronic pain syndromes, and hypochondriac complaints), physiological problems (with sleeping, eating, or sexual desire), addictions (smoking, drinking alcohol, taking drugs, gambling, and compulsive use of the Internet), and other risky behaviors (such as driving at high speed, dangerous sports, or taking unnecessary risks at work). The last three items are questions relating to motherhood and cultural factors. The questions are: “Do you think your answers to these questions are related to being, or becoming, a mother? If “YES” or “Possibly”, in what way?”; “Do you feel happy or content with being, or becoming, a mother?”, and “Are there other questions, or words, that would be better to describe how you have been feeling over the past two weeks? If “YES”, please describe”. A self-rating of 0–3 is elicited for nine scaled items, with a total maximum score of 27. A higher score indicates a greater risk for an affective disorder.

2.3. Data Analysis

All measures were scored according to published guidelines, and basic descriptive statistics were calculated. The associations between potential risk factors and specific types of psychopathological distress were examined using binary linear regressions. In each case, the independent variables were, the CECA Q. dichotomic score, MSSS total score, and the presence of stressful events in the last 12 months; dependent variables included the different PAMA subscales (e.g., anxiety, depression, relational problems, etc.). All analyses were carried out using SPSS version 28.0 (SPSS Inc., Chicago, IL, USA). The significance level was determined as 0.05.

3. Results

3.1. Sample Characteristics

The study population consisted of 61 Italian pregnant women, mainly from central (47.5%) and southern Italy (44.3%), aged between 24 and 45 years old. Most of the pregnant women were married or lived with their unmarried partner (91.8%), had a university degree (72.2%), and had paid work (85.2%). Only 18% of the sample reported a low economic state, whereas the rest of the sample reported an average (57.4%) or medium-high economic status (24.6%).

As regards current pregnancy, most participants had a planned pregnancy (86.9%), 72.1% of women were primipara, and 57.4% were in the third trimester.

From a clinical perspective, 82% of women reported a low-risk pregnancy, 81.3% reported no pharmacological treatment for psychological disorders, 83.6% had chosen a private gynecologist, and 54.1% attended childbirth preparation training.

A proportion of 65.3% of participants did not have a history of abortion, voluntary interruptions of pregnancy, perinatal death, or high-risk pregnancies. Table 1 indicates the main participant information.

Table 1. Characteristics of the study population (N = 61).

Variable	n	%
Age		
45–37 years old	18	29.5
36–30 years old	31	50.8
<29 years old	12	19.7
Country: Italy		
Northern	5	8.2
Central	29	47.5
Southern	27	44.3
Education		
Primary school	1	1.6
High school diploma	16	26.2
University degree	22	36.1
Postgraduate degree	22	36.1
Employment status		
Unemployed	4	6.6
Housewife	3	4.9
Student	2	3.3
Precarious employment	13	21.3
Stable employment	39	63.9
Marital status		
Unmarried	5	8.2
Married/cohabitant	56	91.8
Economic status		
Low	11	18
Middle class	35	57.4
Medium–high	15	24.6
Gestational age		
First trimester	7	11.5
Second trimester	19	31.1
Third trimester	35	57.4
Pregnancy		
Planned pregnancy	53	86.9
Unplanned pregnancy	8	13.1
First pregnancy		
Yes	44	72.1
No	17	27.9
Other children		
Yes	11	18
No	50	82
High-risk pregnancy		
Yes	11	18
No	50	82
Psychopharmacological treatment		
Yes	0	0
No	61	100

3.2. Risk Factors and Psychopathological Outcomes in Pregnancy

As regards child maltreatment, 59% of the total research sample (36 out of 61 women) reported at least one experience. Specifically, more than half (54.1%) reported emotional abuse (from mother and/or father), described as hostility or coldness toward the child; 8.2% experienced physical abuse, described as serious forms of physical violence toward the child (e.g., punching, hitting with an object, or threatening with a knife); and 6.6%

experienced sexual abuse, defined as any non-consensual sexual contact by any perpetrator (e.g., fondling, oral sex, or penetration) before the age of 16.

Over half of the sample (55.7%) reported the presence of stressful events in the last 12 months. The type of stressful events reported concerned serious illness or accidents involving oneself or loved ones, grief, being a victim of violence, change or loss of important lifestyle components (study, work, or home), marital separation, problems with justice, and problems with work or finances. Among those who reported the presence of stressful events in the last 12 months, more than half (18 out of 34) were in the third trimester of gestation; moreover, 38.2% and 35.3% reported medium and strong levels of discomfort, suffering, and stress caused by these events, respectively.

Results from the MSSS showed that the majority (88.5%) of pregnant women indicated a medium level of perceived social support (from partner, parents, and friends), while 6.6% indicated a low level, and only 4.9% indicated a high level. With the progress of the gestation trimester, this perception did not significantly change.

Detailed information on childhood maltreatment experiences, stressful events in the previous year, and perceived maternal social support are provided as Supplementary Materials.

3.3. Associations of Risk Factors and Psychopathology in Pregnancy

Subscales of the PAMA were related to different risk factors, such as childhood maltreatment, stressful events in the last year, and lack of social support.

Regression analysis (Table 2) showed that the presence of childhood maltreatment was significantly related to higher levels of depression symptoms ($R^2 = 0.07$, Adj $R^2 = 0.05$, $F(1,59) = 4.11$, $p = 0.047$), higher levels of irritability and anger ($R^2 = 0.07$, Adj $R^2 = 0.05$, $F(1,59) = 4.12$, $p = 0.047$), and higher levels of relational problems ($R^2 = 0.12$, Adj $R^2 = 0.10$, $F(1,59) = 7.68$, $p = 0.007$).

Table 2. Association between childhood maltreatment and PAMA subscales.

Dependent Variable	B	SE	Beta	p
Anxiety	0.12	0.21	0.08	0.555
Depression	0.35	0.17	0.26	0.047 *
Perceived stress	0.33	0.22	0.19	0.144
Irritability/anger	0.45	0.22	0.26	0.047 *
Relationship problems	0.54	0.19	0.34	0.007 **
Psychosomatic problems	0.10	0.21	0.06	0.643
Physiological problems	−0.14	0.22	−0.08	0.520
Addiction/at-risk behaviors	0.11	0.10	0.14	0.277

PAMA: Perinatal Assessment of Maternal Affectivity; B: unstandardized coefficient; SE: standard error; Beta: standardized coefficient. * $p < 0.05$. ** $p < 0.01$.

Regression analysis with stressful events in the last year as independent predictors indicated that the presence of stressful events predicted significantly more psychosomatic symptoms during pregnancy (Table 3; $R^2 = 0.10$, Adj $R^2 = 0.08$, $F(1,59) = 6.47$, $p = 0.014$), whereas no significant relations were found for other psychopathological subscales.

Table 3. Association between stressful events and PAMA subscales.

Dependent Variable	B	SE	Beta	p
Anxiety	−0.31	0.21	−0.19	0.138
Depression	−0.08	0.18	−0.06	0.660
Perceived stress	−0.19	0.22	−0.11	0.389
Irritability/anger	0.05	0.23	0.03	0.827
Relationship problems	−0.07	0.20	−0.04	0.734

Table 3. *Cont.*

Dependent Variable	B	SE	Beta	<i>p</i>
Psychosomatic problems	−0.51	0.20	−0.31	0.014 *
Physiological problems	−0.29	0.21	−0.17	0.184
Addiction/at-risk behaviors	<0.01	0.10	<.01	0.992

PAMA: Perinatal Assessment of Maternal Affectivity; B: unstandardized coefficient; SE: standard error; Beta: standardized coefficient. * $p < 0.05$.

Regression analysis with maternal social support as independent predictors indicated that higher levels of a lack of social support from partner, parents, or friends did not predict any psychopathological symptoms (Table 4).

Table 4. Association between perceived social support (MSSS) and PAMA subscales.

Dependent Variable	B	SE	Beta	<i>p</i>
Anxiety	−0.02	0.04	−0.05	0.697
Depression	−0.05	0.04	−0.17	0.199
Perceived stress	−0.02	0.05	−0.07	0.615
Irritability/anger	−0.01	0.05	−0.04	0.761
Relationship problems	−0.02	0.04	−0.07	0.592
Psychosomatic problems	−0.05	0.04	−0.15	0.247
Physiological problems	0.02	0.04	0.07	0.605
Addiction/at-risk behaviors	0.02	0.02	0.15	0.246

MSSS: Maternity Social Support Scale; PAMA: Perinatal Assessment of Maternal Affectivity; B: unstandardized coefficient; SE: standard error; Beta: standardized coefficient.

4. Discussion

This study reported preliminary findings from broader ongoing research that aims to establish links between several risk factors for psychopathological outcomes in pregnant women. Specifically, in the current study, the unique contribution of these risk factors to specific clinical manifestations (e.g., anxiety, depression) during pregnancy was examined. However, given the small sample size and the use of multiple tests, results from this study should be considered provisional.

The current study builds on the childhood maltreatment literature by linking childhood maltreatment to psychopathological problems specifically during the prenatal period, which is a phase of extensive psychological and physiological changes. The PAMA questionnaire is a tool for the screening of perinatal affective disorders that considers not only depressive symptoms but also anxiety; hostility; and somatic, relational, behavioral, and addiction problems.

It is well-recognized that childhood abuse is among the major risk factors for depression in adulthood [46]. Despite the detrimental effects of depression at any time during a woman's lifetime, the effects of depression during the prenatal and postpartum periods are of great importance due to their severe and protracted consequences for both women and their offspring [33,47]. Findings from this study indicate an association between childhood abuse and depressive symptoms during pregnancy. As suggested in previous research, pregnancy may be a particularly sensitive period due to the development of a new self-identity, as well as the substantial biological and emotional changes that occur during the transition to motherhood [25,33]. Therefore, identification of traumatic childhood experiences during pregnancy may allow pregnant women at risk for depression to be closely observed by healthcare professionals, enabling the implementation of important preventive strategies, as treatment of prenatal depression can ward off the onset of postpartum depression [37].

Furthermore, in our sample of pregnant women, childhood maltreatment was associated with higher levels of irritability and anger, as well as with relationship problems, including in couples, as well as with family and friends, and at work. These findings contribute important insights to current knowledge, highlighting the effect of childhood maltreatment not only on depressive symptoms but also on other areas of psychopathologi-

cal distress. Significantly, dimensions such as irritability and anger (against others), and relationship problems appeared to be affected by traumatic childhood experiences. Indeed, from a psychodynamic point of view, an infant is shaped by his environment, interaction with his parents, and his own personal growth [48,49]. Psychologically, becoming a mother requires the activation of mental patterns that pregnant women and their own parents had reciprocally shaped. Unfortunately, this process may be problematic or impaired in women with traumatic childhood experiences, in whom traumatic memories can cause psychological distress, suggesting the need for greater attention to women's childhood histories during prenatal screening in order to achieve early detection of expectant mothers at risk of developing psychopathological conditions.

In line with previous research [4,50], this study considered not only childhood maltreatment but also the presence of several stressful events in the last year (economic problems, illness of a loved one, change or loss of work, etc.) and a lack of social support (from partner, parents, and friends) as potential risk factors for psychopathological symptoms during pregnancy.

Overall, the findings of regression analysis indicated that the presence of stressful events in the last 12 months predicted higher levels of psychosomatic symptoms but not other psychopathological problems. This result is in line with the literature considering recent stressful life events (including illness, accidents, domestic violence, etc.) among the main risk factors for the development of psychopathological outcomes in pregnancy and the perinatal period [51,52]. These data seem to underline the importance of clinicians and medical staff evaluating whether the presence of psychosomatic symptoms (such as somatization, headaches and migraines, skin rash, stomach ulcers, and hypochondriac complaints) may have a psychological rather than a physiological etiology during pregnancy in order to better identify the most accurate interventions.

Moreover, contrary to expectation, no associations between lack of social support from partners, parents, and friends and PAMA subscales were found. This result does not allow for validation of the research hypothesis suggested by the literature, according to which poor social support represents a strong risk factor for psychopathological outcomes during pregnancy and the perinatal period [53,54]. These unexpected findings may be attributable to the small sample size or factors unique to this sample and should be assessed further in future studies.

Limitations

In this preliminary study, several limitations can be noted. First, our sample was self-selected and not representative of pregnant women. It is expected that the psychopathological consequences would be more marked among women who have more psychosocial stress factors. Future studies are needed to ascertain whether or not these results can be generalized to the broader population of pregnant women.

Second, the sample was small since this study is part of a larger ongoing research project, which did not allow for more sophisticated statistical analysis. The use of multiple tests and the small sample size mean that findings from this study should be interpreted with caution.

Lastly, it is important that future research broaden this study to a more representative sample of pregnant women, taking into account other risk factors that may contribute, and start to examine the mechanisms behind these associations. For example, a topic of particular interest but that is still neglected is fathers' experience of pregnancy and their influence on the well-being of women and children. For many years, the literature has mainly focused on expectant mothers, probably because women play a principal role during pregnancy and their experience is more physically and physiologically perceptible than that of fathers [55]. However, in the last few years, researchers have focused their attention on the paternal experience of pregnancy; however, to date, there is not enough evidence to propose appropriate gender-based screening for fathers [56–58]. This area of investigation, which remains understudied, may play a central role in the prevention and management of situations of vulnerability and psychopathological risk.

5. Conclusions

In conclusion, although results from this study should be considered provisional, they suggest that the experience of maternal maltreatment in childhood has an impact on a pregnant woman's mental health and well-being. The results of this study highlight the need to identify at-risk women during pregnancy so as to allow healthcare workers to offer them the necessary help. Women with early traumatic experiences and a state of psychological suffering can be considered at risk. Therefore, comprehensive prenatal screening should include the assessment of childhood maltreatment experiences and of the current psychopathological distress of all pregnant women. This assessment is essential for identifying pregnant women who would benefit from targeted intervention to help interrupt the intergenerational transmission of adversity before babies are born.

The risk of the intergenerational transmission of mental health problems to the next generation of children is well-recognized [59,60]; therefore, prevention and intervention efforts for this vulnerable population may be informed by a better understanding of processes by which traumatic experiences provoke the risk of psychopathological conditions among pregnant women.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/women3010010/s1>, Table S1: Percentage (%) of Stressful events in the previous year, CECA Q., and Maternal Social Support Scale (n = 61); Table S2: Percentage (%) of PAMA subscale (n = 61).

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Article

Exploring the Association Between Childhood Emotional Maltreatment and Eating Disorder Symptoms During Pregnancy: A Moderated Mediation Model with Prenatal Emotional Distress and Social Support

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Abstract: Background/Objectives: Pregnancy is a critical period marked by significant transformations that can trigger or exacerbate eating disorder symptoms. Childhood emotional maltreatment, including abuse and neglect, is a known risk factor for disordered eating, yet its specific impact during pregnancy remains unexplored. For this reason, this study aimed to examine the link between childhood emotional maltreatment and eating disorder symptoms in pregnant women, also focusing on the potential mediating and moderating variables involved in this association. Specifically, this study explored the mediating role of prenatal emotional distress, whereas prenatal social support was investigated as a protective factor able to moderate the effects of past trauma on disordered eating during this sensitive period. Methods: Participants were 272 Italian pregnant women (aged 18–48, $M_{age} = 31.21$, $SD = 4.95$) who were asked to respond to four self-report instruments: Childhood Trauma Questionnaire—Short Form; Eating Disorder Examination—Questionnaire Short; Perinatal Assessment of Maternal Affectivity; and Maternity Social Support Scale. Results and Conclusions: The results showed that prenatal emotional distress totally mediated the association between childhood emotional maltreatment and eating disorder symptoms in pregnant women ($\beta = 0.20$; $SE = 0.06$; 95% CI: 0.08, 0.33; $p < 0.001$). Moreover, moderation analysis showed that prenatal social support only moderated the direct link between childhood emotional maltreatment and disordered eating, so higher levels of childhood emotional maltreatment were predictive of higher levels of eating disorder symptoms only among pregnant women with low levels of prenatal social support ($b = 0.17$; $SE = 0.06$; $t = 2.73$; 95% CI: 0.05, 0.30; $p < 0.01$). The limitations and clinical implications are discussed.

Keywords: childhood emotional maltreatment; eating disorder symptoms; pregnancy; prenatal emotional distress; prenatal social support



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1. Introduction

Eating disorder symptoms refer to a wide range of dysfunctional eating-related behaviors and cognitions, including excessive shape and weight concerns, restricted eating, binge eating, and compensatory behaviors [1]. These disrupted behaviors and cognitions may

negatively affect the individual's physical health, psychosocial functioning, and emotional well-being [2], potentially heightening the risk for a full-blown eating disorder—such as anorexia nervosa, bulimia nervosa, and binge eating disorder [3]. Specifically, according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) [4], anorexia nervosa is a condition characterized by restricted eating and significant underweight; these symptoms are accompanied by intense fears of gaining weight and altered body image, which strongly affects the individual's self-evaluation. The influence of body perception on self-evaluation also characterizes bulimia nervosa, which is further described by recurrent episodes of binge eating with feelings of loss of control, typically followed by compensatory behaviors (e.g., vomiting, fasting, use of laxatives, etc.) aimed to prevent weight gain. Finally, binge eating disorder is characterized by recurrent episodes of binge eating occurring in the absence of any compensatory behavior.

It has been suggested that pregnancy is a sensitive period for the onset, reappearance, or worsening of eating disorder symptoms, with prevalence rates comprised between 5.5% and 23.4% for shape and weight concerns, 0.3% and 2.5% for restricted eating, and between 8.4% and 36.1% for binge eating behaviors [1,5]. Specifically, pregnancy poses significant challenges due to physical, psychosocial, and relational changes in a woman's life. The transition to motherhood requests adjustments to a new role, as well as a redefinition of the relationship with the partner, family, and the whole social environment [6]. Due to these requests, pregnancy may represent a potent stressor that confers vulnerability to emotional suffering and to maladaptive behaviors, such as symptoms of eating disorders, which may be further triggered by difficulties adapting to weight gain and physiological changes in body image [2,5].

Eating disorder symptoms during pregnancy represent an important threat to the health of both the mother and the fetus, as these conditions are associated with poor obstetric outcomes such as an increased risk of miscarriage and preterm delivery, low birth weight, and other postpartum complications [1,7]. Deepening our understanding of the potential risk factors for eating disorder symptoms during pregnancy is, thus, crucial to prevent maternal and fetal morbidity and mortality and to improve the physical and emotional well-being of pregnant women.

1.1. Childhood Maltreatment and Eating Disorder Symptoms During Pregnancy

The literature has proposed that a history of traumatic childhood experiences should be conceived as a risk factor for eating disorder symptoms during pregnancy. Specifically, Senior and colleagues [8] found that sexual abuse was a significant predictor of concerns about shape and weight in pregnant women, even after controlling for other risk factors. Moreover, Meltzer-Brody et al. [9] found a high prevalence of sexual and physical abuse experiences among pregnant women with anorexic and bulimic symptoms. However, to the best of our knowledge, no studies have explored the role of emotional forms of maltreatment, such as childhood emotional abuse and childhood emotional neglect, in the onset of eating disorder symptoms during pregnancy.

Childhood emotional abuse refers to a wide range of parental hostile behaviors, comprising verbal aggression, humiliation, and constant criticism toward the child, as well as threats, isolation, and rejection [10]. Childhood emotional neglect, instead, refers to caregivers' failure to provide emotional support or warmth to the child, along with the inability to respond to their basic psychological needs [11]. Previous studies on the general population have found that childhood emotional abuse and childhood emotional neglect are stronger predictors of eating disorder symptoms as compared to other forms of maltreatment, as suggested by their association with higher scores on different measures of disordered eating (e.g., chronic dieting, overeating, weight and shape concerns, etc.) [12–14]. Indeed, emotional abuse and emotional

neglect are pervasive forms of maltreatment that stem from a chronically dysfunctional and invalidating family atmosphere, which may impair the child's ability to tolerate and manage their emotions, above and beyond the effects of other forms of abuse or neglect [15]. This may culminate in symptoms of eating disorders, which may serve as dysfunctional coping strategies to deal with these emotions [14].

Given the unique contribution of emotional abuse and neglect to eating disorder symptoms, addressing this research gap by exploring this association during pregnancy may represent a worthwhile endeavor. At the same time, the mechanisms that could explain this association need further investigation.

1.2. Childhood Emotional Maltreatment and Eating Disorder Symptoms During Pregnancy: The Role of Prenatal Emotional Distress

It can be proposed that childhood emotional abuse and neglect predispose to the onset of eating disorder symptoms during pregnancy through their effects on the expectant mother's emotional well-being.

In line with the attachment theory and the psychodynamic perspective, pregnancy is a period during which women tend to recall memories of their own childhood [16]. When experiences of emotional maltreatment (abuse and neglect) occur in the context of early interactions with caregivers, this reactivation may be emotionally distressing, potentially eliciting emotional suffering in pregnant women [17]. Previous studies have supported this hypothesis, finding that childhood emotional maltreatment was related to conditions of prenatal emotional distress, which embraces a wide range of affective dimensions (e.g., depression, anxiety, irritability/anger, somatization, etc.) [15,18].

In turn, prenatal emotional distress could constitute a risk factor for eating disorder symptoms during pregnancy, as proposed by past research. Specifically, a systematic review by Baskin and Galligan [19] found evidence of a strong relationship between negative affect, particularly symptoms of depression and anxiety, and disordered eating in pregnant women. Disordered eating, indeed, may function as an emotion regulation tool to suppress distressing feelings and momentarily relieve heightened emotional states [5].

However, the mediating role of prenatal emotional distress in the association between childhood emotional maltreatment and eating disorder symptoms during pregnancy has not been explored yet.

1.3. Prenatal Social Support as a Protective Factor

It should be noted that not all women with histories of childhood emotional maltreatment develop symptoms of eating disorders later in life. Indeed, some factors may intervene to buffer the detrimental effects of early traumatic experiences on mental health, protecting the individual from the onset of psychopathological conditions.

Particularly during pregnancy, the existence of a nurturing and sensitive interpersonal environment may help an expectant mother deal with pregnancy-activated stressors. Indeed, positive relationships may favor a reframing of negative and distressing beliefs structured during early interactions with caregivers, offering new resources to cope with the challenges of the transition to motherhood [20].

Prenatal social support, conceived as the instrumental and affective involvement of a woman's interpersonal network (partner, family, and friends) during pregnancy, has been studied as a protective factor for maternal mental well-being, particularly among pregnant women who have experienced childhood maltreatment [21]. Specifically, previous research has found that perceived prenatal support, particularly from a partner, was related to lower negative affect (e.g., depressive symptoms) before childbirth [22,23]. In fact, high levels of social support have the potential to increase perceived coping abilities, lessening the impact of adverse experiences on mental health [24].

To date, there are no studies exploring the buffering effect of prenatal social support in the direct and indirect association between childhood maltreatment and disordered eating. However, it has been observed that pregnant women without eating disorder symptoms reported higher social support from their families as compared to pregnant women with anorexic or bulimic symptoms [25].

Given evidence corroborating the promotive role of social support for pregnant women's mental health, further exploring its contribution to the interplay between childhood emotional maltreatment, emotional distress, and disordered eating during pregnancy would offer useful information for the prevention of perinatal psychopathological risk and the promotion of the emotional well-being of the expectant mother.

1.4. The Present Study

Based on the above considerations, the first aim of the present study was to investigate the association between childhood emotional maltreatment and eating disorder symptoms in a sample of pregnant women, as well as the potential mediating role of prenatal emotional distress in this association. Moreover, the second aim of this study was to test the potential buffering effects of prenatal social support in the direct and indirect association between childhood emotional maltreatment and eating disorder symptoms during pregnancy.

We hypothesized the following:

- Childhood emotional maltreatment would be associated with eating disorder symptoms in pregnancy, and this association would be mediated by prenatal emotional distress (Hypothesis 1);
- Social support would moderate the direct and indirect associations between childhood emotional maltreatment and eating disorder symptoms via prenatal emotional distress (Hypothesis 2).

2. Materials and Methods

2.1. Participants and Procedure

The Bioethics Committee of the University of Palermo (+/0, ethic approval date: 26 October 2023) approved this study. All the procedures were performed in accordance with the ethical principles for psychological research following the Declaration of Helsinki and its revisions [26] as well as the ethics guidelines of the American Psychological Association [27].

A total of 272 Italian pregnant women (aged 18–48, $M_{age} = 31.21$, $SD = 4.95$) participated in the study. The inclusion criteria were (a) being pregnant, (b) being at least 18 years old, (c) being able to understand and speak Italian, and (d) never being diagnosed with an eating disorder. Consequently, the exclusion criteria were (a) not being pregnant, (b) being younger than 18 years old, (c) not being able to understand and speak Italian, and (d) having a current or past diagnosis of eating disorder(s). The participants were recruited from hospitals and birth centers in Southern Italy, from 30 January 2024 to 29 May 2024. All the participants were informed about the research aims, the voluntary nature of participation, and the anonymity of responses. Consent was requested before proceeding with data collection.

Most of the participants were married or cohabitating (87.9%) and primiparous (58.8%). The majority of women (86.4%) reported being in the third trimester of pregnancy. Detailed sociodemographic characteristics and pregnancy-related information are reported in Table 1.

Table 1. Sociodemographic and pregnancy-related information.

Variable	n	%
Relationship status		
Married/Cohabitant	239	87.9
Engaged	30	11.0
Divorced	3	1.1
Educational level		
Elementary school diploma	3	1.1
Middle school diploma	53	19.5
High school diploma	89	32.7
Bachelor/Master degree	76	27.9
Post-Lauream degree	51	18.8
Work status		
Housewife	76	27.9
Unemployed	41	15.1
Student	2	0.7
Occasional worker	30	11.0
Employed	123	45.2
Income		
Extremely low	1	0.4
Low	24	8.8
Medium	172	63.2
High	75	27.6
Trimester of pregnancy		
First	5	1.8
Second	32	11.8
Third	235	86.4
Planned pregnancy		
Yes	185	68.0
No	87	32.0
Primiparous		
Yes	160	58.8
No	112	41.2

2.2. Measures

2.2.1. Childhood Trauma Questionnaire—Short Form

The Italian version of the 28-item Childhood Trauma Questionnaire—Short Form (CTQ-SF) [28,29] was used for the retrospective assessment of childhood experiences of emotional maltreatment. Specifically, this is a self-report questionnaire that evaluates five different types of childhood trauma: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. For the purposes of this study, only the “emotional abuse” and the “emotional neglect” subscales were used. To obtain an indicator of emotional maltreatment, the average score of the items comprising these subscales was calculated. All the items were rated on a 5-point Likert scale, ranging from 1 (never true) to 5 (very often true). Higher scores suggest more severe maltreatment experiences.

2.2.2. Perinatal Assessment of Maternal Affectivity

The Perinatal Assessment of Maternal Affectivity (PAMA) [30] is an 11-item self-report instrument used to assess maternal emotional distress during the perinatal period. It comprises 8 items that assess eight different dimensions: anxiety, depression, perceived stress, irritability/anger, relationship problems, psychosomatic reaction, physiological problems (with sleeping or eating), addictions (smoking, taking drugs, and drinking alcohol), and other risky behaviors (such as driving fast after drinking alcohol). The women

were asked to rate the severity of each symptom over the last two weeks using a 4-point Likert scale, ranging from 0 (not at all) to 3 (a lot). A total score of maternal emotional distress during the perinatal period was obtained by calculating the average score of these eight dimensions so that higher scores indicate greater perinatal emotional distress. The PAMA also includes 3 additional items related to motherhood; these items were not used to calculate the PAMA total score.

2.2.3. Eating Disorder Examination—Questionnaire Short

The Eating Disorder Examination—Questionnaire Short (EDE-QS) [31] was used to assess the presence of eating disorder symptoms over the last 7 days. This is a 12-item self-report instrument derived from the original 28-item Eating Disorder Examination—Questionnaire [32,33]. Items were rated on a 4-point Likert scale, ranging from 0 to 3. An EDE-QS total score was obtained by calculating the average score of all the items comprising this measure; a higher total score indicates a greater severity of eating disorder symptoms.

2.2.4. Maternity Social Support Scale

The Maternity Social Support Scale (MSSS) [34,35] was used to assess global levels of social support perceived during pregnancy. This self-report questionnaire consists of 6 items that refer to social factors typically associated with perinatal emotional distress (i.e., support from family and friends, help from spouse/partner, conflict with spouse/partner). Items were rated on a 5-point Likert scale, ranging from 1 (never) to 5 (always). Higher scores indicate higher levels of perceived social support.

2.3. Data Analysis

Analyses were conducted using IBM SPSS Statistics version 20.0. First, we computed descriptive statistics for the key study variables and reported means (M) and standard deviations (SD). Pearson correlation was used to investigate the possible associations between EDE-QS total score, CTQ emotional maltreatment scores, and the total scores of PAMA and MSSS.

We employed PROCESS macro-Model 4 [36] to test the mediating effect of prenatal emotional distress (PAMA total score) in the relationship between childhood emotional maltreatment experiences (measured via CTQ-SF) and eating disorder symptoms (EDE-QS total score) in pregnancy (Hypothesis 1). Bootstrapping with 5000 resamples was performed to verify the significance of the mediating effect of prenatal emotional distress. If the 95% confidence interval (CI) for the bootstrapped estimate did not include zero, then the indirect effect was considered significant at $p < 0.05$. According to Kenny and Judd [37], indirect effect size estimates around 0.01 are considered small, 0.09 are considered medium, and 0.25 and higher are considered large.

Finally, through PROCESS macro-Model 59 [36], we run a moderating mediation model to test the moderating role of prenatal social support (MSSS total score; Hypothesis 2) in the indirect and direct effects of childhood emotional maltreatment on eating disorder symptoms in pregnancy (Figure 1). We run bootstrapping with 5000 resamples to test the significance of the hypothesized moderating effects.

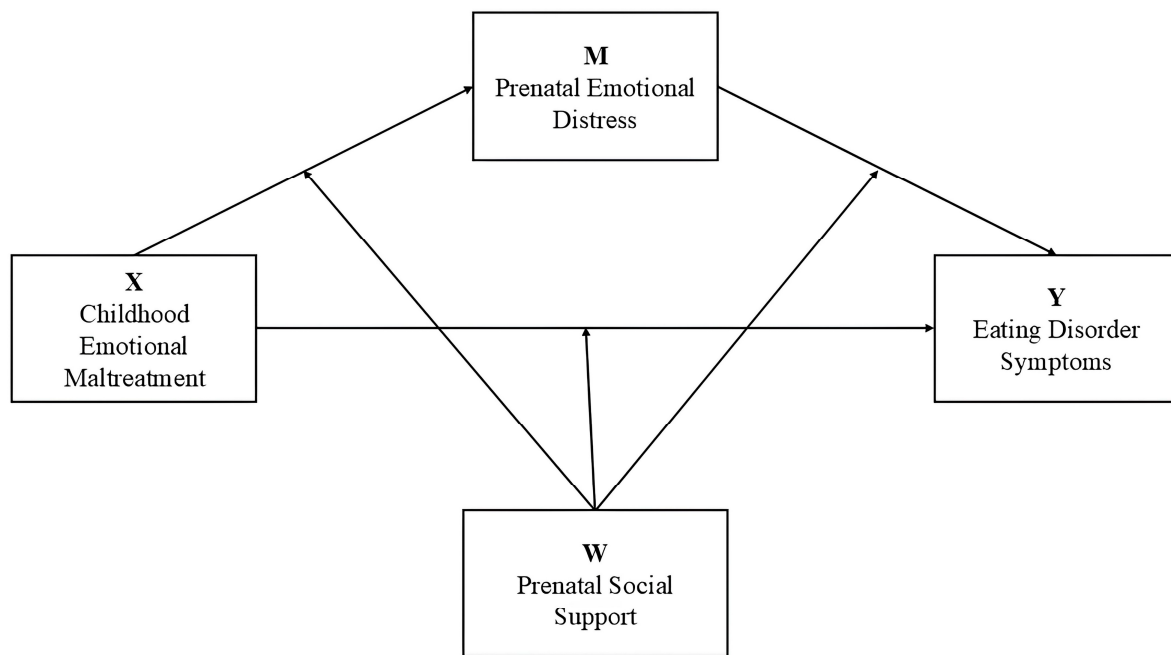


Figure 1. Proposed moderated mediation model.

3. Results

3.1. Preliminary Analysis

Means (*M*), standard deviations (*SD*), and correlations among the study variables are presented in Table 2. Eating disorder symptoms were significantly and positively related to childhood emotional maltreatment ($r = 0.20, p < 0.01$) and to prenatal emotional distress ($r = 0.39, p < 0.01$), whereas significant and negative associations were found with prenatal social support ($r = -0.14, p < 0.05$). Prenatal emotional distress was significantly and positively related to childhood emotional maltreatment ($r = 0.24, p < 0.01$).

Table 2. Correlation matrix, means, and standard deviations of study variables.

	1	2	3	4
1. Eating Disorder Symptoms	--			
2. Childhood Emotional Maltreatment	0.20 **	--		
3. Prenatal Emotional Distress	0.39 **	0.24 **	--	
4. Prenatal Social Support	−0.14 *	−0.25 **	−0.34 **	--
<i>M</i>	0.52	1.29	0.45	4.35
<i>SD</i>	0.49	0.47	0.57	0.48

Note: $N = 272$. * $p < 0.05$; ** $p < 0.01$.

3.2. Mediation Analysis

A simple mediation model was tested to explore the relationship between childhood emotional maltreatment (*X*), prenatal emotional distress (*M*), and eating disorder symptoms (*Y*) in pregnancy.

The results revealed a significant effect of childhood emotional maltreatment on prenatal emotional distress ($\beta = 0.24$; $SE = 0.07$; 95% CI: 0.15, 0.43; $p < 0.001$), as well as a significant effect of prenatal emotional distress on eating disorder symptoms ($\beta = 0.37$; $SE = 0.05$; 95% CI: 0.22, 0.41; $p < 0.001$). The results showed a significant total effect of childhood emotional maltreatment on eating disorder symptoms ($\beta = 0.20$; $SE = 0.06$; 95% CI: 0.08, 0.33; $p < 0.001$), as well as a significant indirect effect of childhood emotional maltreatment on eating disorder symptoms through prenatal emotional distress ($\beta = 0.09$;

BootSE = 0.03; 95% CI: 0.04, 0.14). Conversely, the direct effect of childhood emotional maltreatment on eating disorder symptoms in the presence of the mediator was found to be non-significant ($\beta = 0.11$; SE = 0.06; 95% CI: $-0.01, 0.23$; $p = 0.06$). This result suggests a total mediation effect of prenatal emotional distress in the relationship between childhood emotional maltreatment and eating disorder symptoms in pregnancy. The model was significant with $R^2 = 0.17$, $F(2,269) = 26.84$, $p < 0.001$. So, Hypothesis 1 was supported.

3.3. Prenatal Social Support as a Moderator

Figure 2 shows the moderated mediation model with prenatal social support proposed as a moderator variable in the direct and indirect relationship between childhood emotional maltreatment and eating disorder symptoms in pregnancy. The results showed that prenatal social support did not significantly moderate the relationship between childhood emotional maltreatment and prenatal emotional distress and between prenatal emotional distress and eating disorder symptoms.

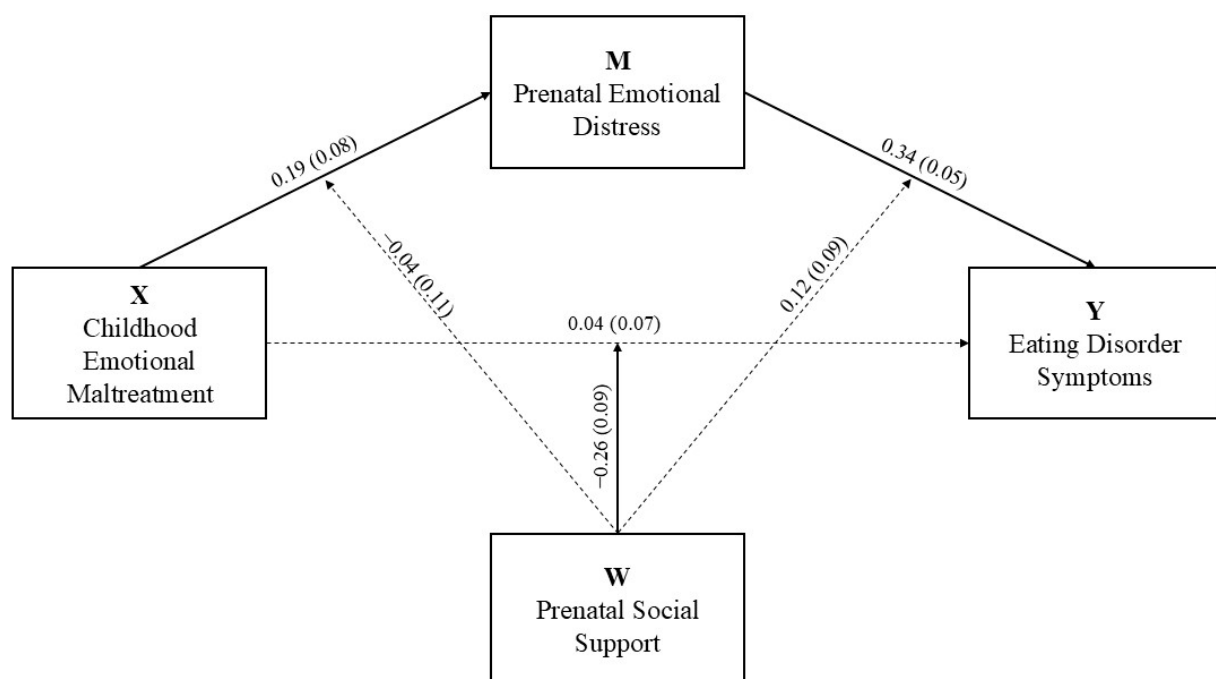


Figure 2. Moderated mediation model with social support proposed as the moderator variable. Note: The values represent the unstandardized coefficients with standard error in parentheses. The solid lines represent the significant paths for $p < 0.05$. The dashed lines represent the non-significant paths.

Only the interaction effect of childhood emotional maltreatment and prenatal social support on eating disorder symptoms was significant, contributing to a significant increase in the explained variance [$\Delta R^2 = 0.02$, $F(1,266) = 7.87$, $p < 0.01$] as suggested by the test of the highest order unconditional interaction. Significant and non-significant interactions are reported in Table 3, along with the conditional direct effects of childhood emotional maltreatment on eating disorder symptoms at different values of the moderator. Specifically, as graphically shown in the slope analysis displayed in Figure 3, the results revealed that higher levels of childhood emotional maltreatment were predictive of higher levels of eating disorder symptoms in pregnancy only among women with low levels of prenatal social support ($b = 0.17$; SE = 0.06; $t = 2.73$; 95% CI: 0.05, 0.30; $p < 0.01$). That is, scarce social support experienced in the prenatal period may exacerbate the detrimental effects of childhood emotional trauma on eating disorder symptoms during pregnancy.

Table 3. Moderated mediation analysis with social support as the moderator variable.

<i>Mediator variable model</i>				
Outcome variable: Prenatal Emotional Distress				
	<i>b</i> (SE)	<i>t</i>	<i>p</i>	
Childhood Emotional Maltreatment	0.19 (0.08)	2.39	<0.05	
Prenatal Social Support	−0.35 (0.07)	−4.94	<0.001	
Childhood Emotional Maltreatment x Prenatal Social Support	−0.04 (0.11)	−0.40	NS	
<i>Dependent variable model</i>				
Outcome variable: Eating Disorder Symptoms				
	<i>b</i> (SE)	<i>t</i>	<i>p</i>	
Childhood Emotional Maltreatment	0.04 (0.07)	−0.68	NS	
Prenatal Emotional Distress	0.34 (0.05)	6.34	<0.001	
Prenatal Social Support	0.01 (0.06)	0.21	NS	
Childhood Emotional Maltreatment x Prenatal Social Support	−0.26 (0.09)	−2.81	<0.01	
Prenatal Emotional Distress x Prenatal Social Support	0.12 (0.09)	1.46	NS	
<i>Conditional direct effect at specific values of the moderator</i>				
Path	Moderator:			
	Prenatal Social Support	Effect (SE)	LL 95% CI	UL 95% CI
	M −1SD	0.17 (0.06)	0.05	0.30
	M	0.04 (0.07)	−0.08	0.17
	M +1SD	−0.08 (0.09)	−0.27	0.10
<i>Conditional indirect effect at specific values of the moderator</i>				
Mediator	Moderator:			
	Prenatal Social Support	Effect (BootSE)	BootLL 95% CI	BootUL 95% CI
	M −1SD	0.06 (0.03)	0.02	0.15
	M	0.06 (0.03)	0.02	0.14
	M +1SD	0.07 (0.05)	−0.03	0.17
<i>Pairwise contrasts between conditional indirect effects</i>				
	Contrast	BootSE	BootLL 95% CI	BootUL 95% CI
Medium vs. Low Prenatal Social Support	0.01	0.02	−0.06	0.04
High vs. Low Prenatal Social Support	0.01	0.05	−0.12	0.08
High vs. Medium Prenatal Social Support	0.00	0.03	−0.07	0.05

Conversely, the conditional indirect effect of childhood emotional maltreatment on eating disorder symptoms via prenatal emotional distress was not moderated by social support, as confirmed by the bootstrapping results. Specifically, the conditional indirect effect at low, moderate, and high values of social support did not show significant differences, as can be seen in Table 3. Therefore, Hypothesis 2 was only partially supported.

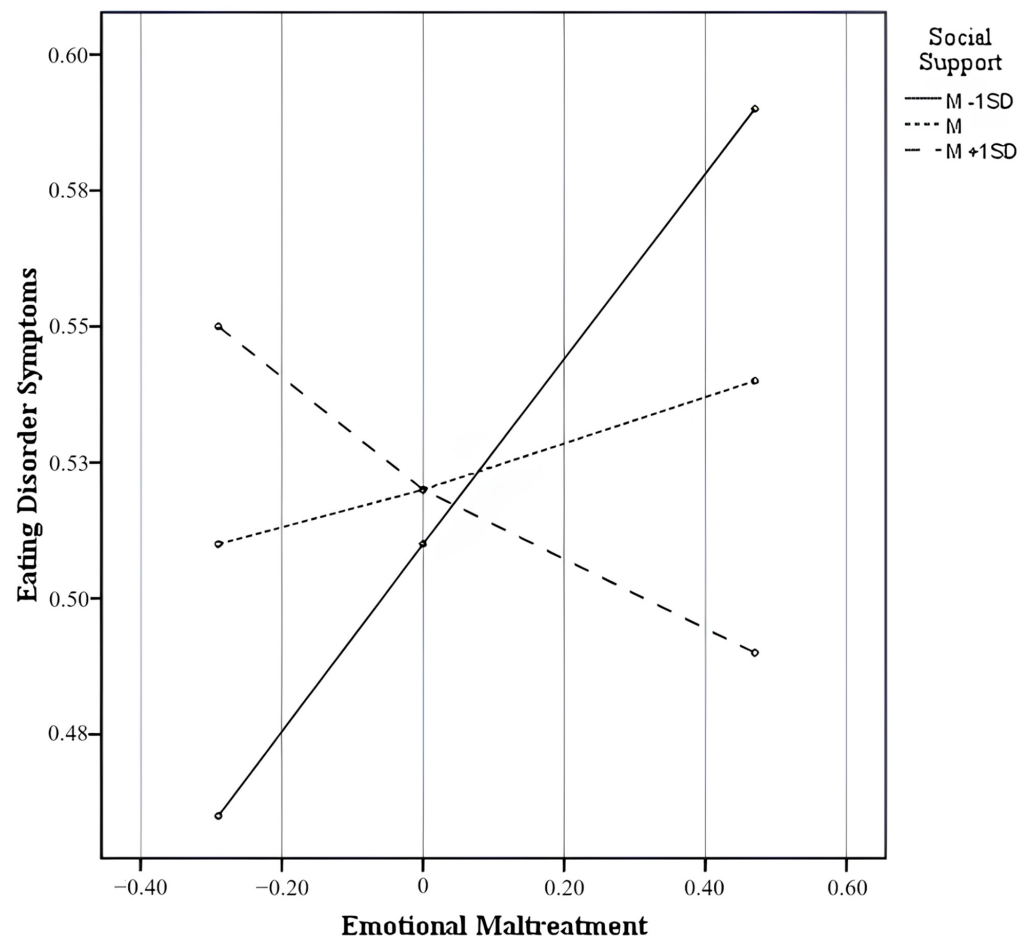


Figure 3. Interaction effects between childhood emotional maltreatment and prenatal social support on eating disorder symptoms.

4. Discussion

This study aimed to evaluate the relationship between childhood emotional maltreatment and eating disorder symptoms during pregnancy considering the potential mediating role of prenatal emotional distress and the potential moderation effect of prenatal social support in this association.

First, we hypothesized that childhood emotional maltreatment would be associated with eating disorder symptoms during pregnancy and that this association would be mediated by prenatal emotional distress. Our results supported this hypothesis, showing that childhood experiences of emotional maltreatment were related to higher levels of emotional suffering during pregnancy, which in turn were related to higher levels of eating disorder symptoms. These results corroborate the findings from previous studies that showed an association between childhood emotional maltreatment and prenatal emotional distress [15,18] and between prenatal emotional distress and eating disorder symptoms [19].

It should be noted that in this study, emotional distress fully mediated the relationship between childhood adversities and eating disorder symptoms. Although the cross-sectional nature of this study does not allow us to determine causal connections, this result might suggest that early traumatic experiences favor the onset of eating disorder symptoms during pregnancy only through their deleterious effects on the emotional well-being of expectant mothers. This would be in line with psychodynamic theorizations, which propose that the transition to motherhood is a sensitive period during which childhood memories tend to be reactivated and used as references in the creation of a new identity as a mother [20]. When early experiences of emotional maltreatment occurred, this transition could become

particularly challenging, as past memories could elicit negative representations of parenthood which can result in increased emotional suffering [17]. Moreover, it is well known that exposure to emotional maltreatment during childhood can lead to impairments in emotion regulation processes [38,39]. Difficulties in identifying, expressing, and managing one's own emotions could make it more difficult for the expectant woman to deal with trauma-related negative effects, which could, thus, be further exacerbated. This condition of heightened psychological distress, in turn, may favor the use of a wide range of maladaptive coping strategies, including symptoms of eating disorders, which may serve as a tool to regulate or suppress negative emotions and reduce distress [5]. This is in line with previous studies suggesting a relationship between emotion regulation difficulties and eating disorder symptoms [14,40] which could, thus, represent a dysfunctional way to deal with the negative emotional effects exerted by past trauma.

Second, we hypothesized that prenatal social support would moderate the impact of childhood emotional maltreatment on eating disorder symptoms during pregnancy, both directly and indirectly via prenatal emotional distress. The results partially supported our hypothesis, showing that higher levels of childhood emotional maltreatment were directly related to higher levels of eating disorder symptoms in pregnancy only in the presence of low levels of prenatal social support. Conversely, this association was not significant at moderate and high levels of social support. So, it could be suggested that the lack of a supportive interpersonal environment may have the potential to strengthen the deleterious effects of past traumatic experiences on the eating behaviors of the pregnant woman, favoring the onset of eating disorder symptoms.

Some explanations can be proposed. As previously stated, the transition to parenthood poses important challenges, as the woman is requested to adapt to her new role as a mother [6]. As suggested by previous research [21], supportive and caring relationships may represent crucial resources able to foster the woman's ability to deal with these transformations, which is particularly salient among women with histories of childhood maltreatment. However, when social support from partners, family, and friends is scarce or inadequate, negative representations of self and others formed during early interactions with caregivers can be strengthened [41]; women may experience feelings of loneliness and ineffectiveness in facing maternity-related challenges and tasks, which may increase the risk of maladaptive behaviors, such as eating disorder symptoms, as a way to cope with these overwhelming stressors. Moreover, among several transformations, vulnerable women may encounter more difficulties in adapting to changes in weight and body image, which may represent another trigger for eating disorder symptoms when a supportive and empowering relational environment is not available.

Finally, contrary to our hypothesis, the results showed that prenatal social support did not moderate the association between childhood emotional maltreatment and emotional distress and between emotional distress and eating disorder symptoms. So, it could be proposed that childhood emotional maltreatment exerts its effects on emotional suffering during pregnancy independently from the existence of a supportive network; similarly, the results suggest that support from partners, family, and friends does not protect pregnant women from the onset of eating disorder symptoms as a way to respond to emotional distress. However, other interpersonal factors, such as the quality of communication or the presence of emotional intimacy or involvement with the partner, may play a role in buffering the effects of past trauma on eating disorder symptoms during pregnancy via emotional distress, and thus should be further explored in future research.

Limitations

Our findings should be considered within the context of some limitations. First, the cross-sectional nature of this research does not allow us to examine causal relationships among the study variables. Future research would benefit from a longitudinal design to determine whether changes in emotional distress and eating disorder symptoms during pregnancy are affected by past experiences of emotional maltreatment, and whether social support from partners, family, and friends buffers this association. Second, we only administered self-report measures, which may be sensitive to social desirability bias, possibly inflating some of the associations among variables. Future research should use a multi-method approach, including qualitative interviews. Third, trying to address the gaps in previous research, the present study only focused on childhood emotional maltreatment, which represents the less explored type of maltreatment in relation to eating disorder symptoms during pregnancy. However, a comparison with childhood physical maltreatment (physical abuse and physical neglect) and childhood sexual abuse would be beneficial and should, thus, be addressed in future research using a larger number of subjects. Fourth, the measure of eating disorder symptoms used in this study, the EDE-QS, was not conceived to specifically evaluate eating disorder symptoms in pregnant women, although its extended version (the EDE-Q) has been widely used in this research field, showing good psychometric properties [42]. Finally, most of the participants in this study were in the third trimester of pregnancy (86.4%), which could bias the results and limit generalizability. Replication of this study with a more heterogeneous sample would foster the generalization of the findings also to women in different stages of pregnancy.

5. Conclusions

This study contributes to a better understanding of the relationship between emotional forms of maltreatment and eating disorder symptoms during pregnancy. The results suggest that this association is mediated by prenatal emotional distress, and that it may be reinforced by scarce or inadequate social support from partners, family, and friends.

The findings from this study could have important implications for health care professionals working with pregnant women (gynecologists, nurses, midwives, and psychologists), who should be adequately trained in the recognition of the signs associated with eating disorder symptoms. Indeed, eating disorder symptoms during pregnancy are of clinical concern, as they are associated with a heightened risk of postpartum complications that could represent a threat to the physical and psychological health of both the mother and the baby [1,7]. Comprehensive prenatal screening procedures should incorporate the assessment of potential psychosocial risk factors, such as past traumatic experiences and prenatal signs of psychological suffering, which could predispose the onset of eating disorder symptoms in this sensitive period, in order to identify at-risk women and provide specific and timely interventions aimed to prevent the onset or the exacerbation of these conditions. In particular, evidence from this study suggests that interventions with at-risk women should focus on the revision and resignification of past experiences of emotional maltreatment, with the main goal of favoring the acquisition of a more positive representation of parenthood that could help women dealing with this transition. Moreover, clinical intervention should be directed at strengthening the woman's ability to manage negative emotions and recur to more adaptive strategies to cope with psychological distress. Finally, professionals should also explore the woman's perception of support from significant others, as one of the aims of the intervention should be the building of a more positive and caring interpersonal network, which could act as a fundamental resource for the well-being of the expectant mother.

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Article

Romantic Relationship Quality and Eating Disorder Symptoms in Late Pregnancy: The Serial Mediating Role of Depression and Body Dissatisfaction

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Abstract

Late pregnancy represents a critical period for the onset of eating disorder symptoms, particularly in the presence of psychological and relational vulnerabilities. Among these, the quality of the romantic relationship has received limited empirical attention, despite its potential role in shaping women's psychological adjustment, influencing both mood and body image. The present study examined the association between romantic relationship quality and eating disorder symptoms during the third trimester of pregnancy, considering the mediating roles of depressive symptoms and body dissatisfaction. A sample of 231 Italian pregnant women (Mage = 32.3 years) completed four self-report measures: the Dyadic Adjustment Scale-7, the Edinburgh Postnatal Depression Scale, the Body Image in Pregnancy Scale, and the Eating Disorder Examination Questionnaire-Short. A serial mediation model was tested, including pre-pregnancy body mass index as a covariate. Results indicated that lower romantic relationship quality was associated with greater eating disorder symptoms through higher depressive symptoms and body dissatisfaction, which acted both independently and sequentially. These findings highlight the complex interplay between relational and psychological factors in the development of disordered eating during pregnancy, emphasizing the need for early screening and integrated interventions addressing both interpersonal and intrapersonal domains.

Keywords: romantic relationship quality; eating disorders; late pregnancy; third trimester; perinatal depressive symptoms; body dissatisfaction; maternal psychological well-being



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1. Introduction

Pregnancy constitutes a sensitive period characterized by profound physiological and psychosocial transformations that affect both expectant parents. In particular, during the third trimester (from 28 weeks of gestation to delivery), pregnant women and their partners are required to adjust to new responsibilities and demands, while beginning to negotiate childcare practices in preparation for childbirth (Baldoni et al., 2020). This developmental phase entails a significant reorganization within the couple, in which previous relational models and representations must be revised to accommodate the emerging family configuration (Zhi et al., 2025). Such reorganization may influence the quality of the romantic relationship, which, in turn, plays a pivotal role in shaping the emotional well-being of both partners (Yang et al., 2023).

Romantic relationship quality is a multidimensional construct that refers to individuals' subjective evaluations of various aspects of couple functioning, including intimacy and cohesion, consensus, communication patterns, conflict resolution strategies, and overall relationship satisfaction (Roberson et al., 2018). Research has predominantly examined the impact of romantic relationship quality on pregnant women's mental health, showing that high-quality relationships represent a crucial resource for promoting the expectant mother's emotional well-being and for facilitating effective coping with pregnancy-related stressors (Antoniou et al., 2021; Daugherty et al., 2022). Conversely, low relationship quality has been associated with heightened psychological distress and maladaptive behaviors (Costa et al., 2020; Jonsdottir et al., 2017). These findings are theoretically grounded in recent developments within attachment theory. In adulthood, the romantic partner constitutes the primary attachment figure (Mikulincer & Shaver, 2007). Stressful circumstances—such as those emerging during pregnancy—tend to activate the attachment system, prompting the expectant mother to seek proximity and support from her partner as a means of alleviating anxiety and distress (Simpson & Rholes, 2017). However, when the romantic relationship is unsatisfactory, the partner may be perceived as unable to meet the pregnant woman's attachment needs. Consequently, the attachment system remains chronically activated, emotional relief is not achieved, and psychological distress may ensue.

Importantly, romantic relationship quality should be understood within the broader context of gender dynamics. In heterosexual couples, relationship functioning is often shaped by prevailing gender norms and power imbalances, which can exert a significant influence on women's psychological well-being (Habarth et al., 2019). In certain contexts, low relationship quality may not merely reflect limited intimacy or poor communication, but may instead conceal more severe relational dynamics, including physical or psychological violence (Shortt et al., 2010). Empirical evidence has underscored the high prevalence of coercion and abuse during pregnancy, as well as their detrimental effects on maternal mental health and overall quality of life (Howard et al., 2013). Although the present study did not directly assess these experiences, situating romantic relationship quality within this broader sociocultural framework is essential for a comprehensive understanding of the associations between relational variables and women's emotional well-being.

Among studies examining the potential adverse effects of poor romantic relationship quality during pregnancy, several have explored its role in the emergence of eating disorder symptoms (EDS). Specifically, Baskin et al. (2020) found that lower relationship satisfaction was associated with higher levels of EDS during pregnancy, consistent with prior findings by Knoph Berg et al. (2011) and Gonçalves et al. (2015), which also identified links between poorer intimate relationship quality and dysfunctional eating behaviors before childbirth. As previously discussed, the romantic relationship serves as a primary attachment bond and a central mechanism for emotion regulation (Mikulincer & Shaver, 2007; Sousa-Gomes et al., 2022). When this relationship is unsatisfactory, its regulatory function may become impaired, leaving the pregnant woman more vulnerable to adopting alternative, maladaptive coping strategies to manage distress, including disordered eating behaviors (Haynos & Fruzzetti, 2011).

EDS encompass a broad spectrum of maladaptive cognitions and behaviors related to eating, weight, and body image—such as restrictive eating, binge-eating episodes, compensatory behaviors (e.g., self-induced vomiting, excessive exercise, fasting, or laxative use), and pervasive concerns with shape and weight (Bannatyne et al., 2018; Costanzo et al., 2025). During pregnancy, these symptoms have been associated with a range of adverse maternal and fetal outcomes, including an increased risk of gestational hypertension, miscarriage, preterm birth, low birth weight, and difficulties initiating breastfeeding (Sommerfeldt et al., 2022). Furthermore, research suggests that EDS may compromise the

quality of maternal–fetal bonding and contribute to the development of perinatal affective disturbances, potentially hindering the transition to motherhood and disrupting early mother–infant interactions (Martini et al., 2022).

Building on this framework, a deeper understanding of the association between romantic relationship quality and EDS during pregnancy—and of the mechanisms underlying this relationship—appears crucial for preventing adverse pregnancy-related outcomes and informing interventions aimed at promoting maternal and fetal physical and psychological health.

Previous research has suggested that perinatal depressive symptoms may mediate the link between romantic relationship quality and EDS during pregnancy. Specifically, Baskin et al. (2020) found that poorer relationship quality was associated with greater disordered eating during mid-to-late pregnancy, and that this association was fully mediated by depressive symptoms. Poor romantic relationship quality is, indeed, a well-established psychosocial risk factor for depression, particularly during the perinatal period (Costa et al., 2020; Røsand et al., 2011; Yang et al., 2023). From an attachment-theoretical perspective, the romantic partner represents a primary source of emotional regulation in adulthood (Mikulincer & Shaver, 2007); when this regulatory function is compromised, vulnerability to depressive symptoms may increase. The transition to motherhood constitutes a critical period in which women particularly benefit from a caring, emotionally available, and responsive partner who can support them in coping with pregnancy-related challenges (Baskin et al., 2020). Conversely, poor relationship quality may heighten feelings of distress and loneliness, negatively affecting the expectant mother's emotional well-being and increasing the likelihood of depressive symptoms (Yang et al., 2023). In turn, pregnant women may resort to dysfunctional emotion regulation strategies—such as disordered eating behaviors—to alleviate negative affect and mitigate depressive states (Costanzo et al., 2025). This notion is consistent with interpersonal theories of eating disorders, which propose that disordered eating behaviors may function as maladaptive coping strategies for managing negative emotions arising from relational difficulties and conflict (Ansell et al., 2012; Miniati et al., 2018).

Another mechanism potentially involved in the association between romantic relationship quality and antenatal EDS is body dissatisfaction. Pregnancy is a period marked by profound physical transformations, including weight gain, changes in body size and shape, and physical symptoms such as fatigue, back pain, swelling, and skin alterations (Linde et al., 2022). These changes become particularly pronounced during the third trimester, requiring women to reevaluate their body image and adjust to a new physical condition. However, a poor relationship with one's partner may hinder this adjustment process and foster body dissatisfaction, defined as a subjective negative evaluation of one's body or specific body parts (Chan et al., 2020). Although the association between romantic relationship quality and body dissatisfaction during pregnancy has not yet been directly examined, evidence from other populations (e.g., community samples and women recovering from breast cancer surgery) suggests that intimate relationship factors can substantially influence body image. Specifically, lower relationship quality has been associated with greater dissatisfaction with one's physical appearance (Cairo Notari et al., 2017; Stiles et al., 2022). It is therefore plausible that a similar pattern could emerge during pregnancy, particularly in the later stages of gestation: a supportive and affectionate partner relationship may serve as a crucial resource that helps the pregnant woman adjust to bodily changes and feel secure in her evolving appearance, whereas a poor relationship may contribute to feelings of unattractiveness and diminished self-worth, making body acceptance more difficult. Heightened body dissatisfaction may, in turn, increase vulnerability to maladaptive compensatory behaviors—such as restrictive dieting or fasting—which can represent early indicators of

prenatal disordered eating (Fuller-Tyszkiewicz et al., 2020; Vanderkruik et al., 2022). Individual factors may also shape how women experience bodily changes during pregnancy. In particular, previous research has consistently shown that a higher pre-pregnancy body mass index (BMI) is associated with greater body dissatisfaction and increased vulnerability to EDS during gestation (Baskin et al., 2021; Chan et al., 2020). Pre-pregnancy BMI may therefore represent a critical variable to consider when investigating pregnant women's adjustment to body changes and their risk for disordered eating behaviors.

Based on the above, depressive symptoms and body dissatisfaction may constitute two independent psychological mechanisms leading to prenatal EDS, starting from a condition of relational suffering. However, these two mechanisms may also be interconnected, operating in a sequential manner. Specifically, depressive states arising from a poor relationship with one's partner may hinder the woman's ability to adapt to pregnancy-related bodily changes, thereby fostering dissatisfaction with her physical appearance. Previous studies have examined the hypothesis of a direct association between depressive symptoms and prenatal body dissatisfaction (Silveira et al., 2015). For instance, Clark et al. (2009) found that depressive symptoms during late pregnancy significantly predicted several dimensions of body dissatisfaction, including perceptions of feeling fatter, less attractive, and less strong or fit. Depressive states may indeed heighten the tendency to evaluate oneself negatively across multiple domains, including body image, and to selectively focus attention on the most disliked body areas, thereby amplifying body dissatisfaction (Chan et al., 2020). As discussed above, this heightened dissatisfaction may, in turn, promote the adoption of maladaptive eating behaviors and increase vulnerability to EDS, as supported by previous research highlighting the role of body image disturbances in the development of perinatal disordered eating (Vanderkruik et al., 2022).

Nevertheless, further research is needed to clarify the relationship between depressive symptoms and body dissatisfaction during pregnancy, as well as their potential role as serial mediators in the association between romantic relationship quality and antenatal EDS.

The Present Study

Building on the aforementioned theoretical and empirical considerations, the present study aimed to examine the association between romantic relationship quality and EDS in a sample of women in the third trimester of pregnancy. Specifically, we investigated the potential mediating roles of prenatal depressive symptoms and body dissatisfaction in this relationship. Grounded in attachment theory and prior evidence linking poor relationship quality to both affective distress and body image disturbances during pregnancy, we formulated the following hypotheses:

Hypothesis 1. *Depressive symptoms would mediate the association between romantic relationship quality and EDS.*

Hypothesis 2. *Body dissatisfaction would mediate the association between romantic relationship quality and EDS.*

Hypothesis 3. *Depressive symptoms and body dissatisfaction would operate as serial mediators in the association between romantic relationship quality and EDS. Specifically, lower relationship quality would be associated with greater depressive symptoms, which in turn would predict increased body dissatisfaction, ultimately leading to higher levels of EDS.*

2. Method

2.1. Participants and Procedure

The Bioethics Committee of the University of Palermo (protocol number: 167/2023; ethics approval date: 11 February 2023) approved this study. All procedures were conducted in accordance with the ethical principles for psychological research, following the Declaration of Helsinki and its revisions ([World Medical Association, 2001](#)), as well as the ethics guidelines of the [American Psychological Association \(2010\)](#).

A total of 231 Italian heterosexual pregnant women (aged 20–45, $M_{age} = 32.3$, $SD = 4.7$) participated in the study. Participants were recruited from obstetrics and gynecology units of hospitals and birth centers in Southern Italy. This was a cross-sectional, multicenter, and descriptive study. Data collection was conducted between March and June 2024.

Inclusion criteria were (a) being in the third trimester of pregnancy, (b) being at least 18 years old, (c) currently being involved in a romantic relationship, and (d) being able to read, understand, and speak Italian. Exclusion criteria were (a) having a current or past clinical diagnosis of an eating disorder, (b) having a medical condition or pregnancy complication that could significantly affect psychological functioning (e.g., high-risk pregnancy, severe preeclampsia, hospitalization), and (c) inability or unwillingness to provide informed consent.

All participants received detailed information about the aims of the study, the voluntary nature of their participation, and the anonymity of their responses. Written informed consent was obtained prior to data collection.

Detailed sociodemographic characteristics and pregnancy-related information are reported in Table 1.

Table 1. Sociodemographic and Pregnancy-Related Information.

Variable	n	%
Educational Level		
Middle school diploma	42	18.1
High school diploma	72	31.2
Bachelor's/Master's degree	69	29.9
Post-Lauream degree	48	20.8
Work Status		
Housewife/Unemployed	92	39.8
Occasional worker	27	11.7
Employed	112	48.5
Income		
Low	21	9.1
Medium	144	62.3
High	66	28.6
Planned Pregnancy		
Yes	156	67.5
No	75	32.5
Primiparous		
Yes	139	60.2
No	92	39.8
Medically Assisted Procreation		
Yes	11	4.8
No	220	95.2
Pre-Pregnancy Body Mass Index		
Underweight (<18.5)	23	10.0
Normal weight (18.5–24.9)	131	56.7
Overweight (25.0–29.9)	52	22.5
Obesity (>30.0)	25	10.8

2.2. Measures

2.2.1. Dyadic Adjustment Scale 7

The Dyadic Adjustment Scale–Short Form (DAS-7; [Hunsley et al., 2001](#)) was used to assess participants' romantic relationship quality. Together with its extended version, the 32-item Dyadic Adjustment Scale ([Gentili et al., 2002](#); [Spanier, 1976](#)), the DAS-7 is widely employed in both research and clinical settings due to its ability to capture the core dimensions of intimate relationship functioning (e.g., agreement, cohesion, satisfaction) and their effects on psychological well-being ([Başgöl et al., 2024](#)). The scale consists of 7 items (e.g., “How often would you say you and your partner calmly discuss something together?”; “Please indicate the approximate extent of agreement or disagreement between you and your partner for each area: philosophy of life, aims and goals, amount of time spent together”). The first six items are rated on a 6-point Likert scale ranging from 0 (*always disagree or never*) to 5 (*always agree or all the time*), whereas the last item—assessing overall happiness with the romantic relationship—is rated on a 7-point Likert scale from 0 (*extremely unhappy*) to 6 (*perfectly happy*). A total DAS-7 score was obtained by calculating the mean of all items, with higher scores indicating greater relationship quality. In the present study, internal consistency was acceptable (Cronbach's $\alpha = 0.74$).

2.2.2. Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale (EPDS; [Benvenuti et al., 1999](#); [Cox et al., 1987](#)) was administered to assess depressive symptoms among pregnant women. Although originally developed to evaluate postnatal depression, the EPDS has also been validated for use during pregnancy ([Kozinszky & Dudas, 2015](#)). The EPDS includes 10 self-report items rated on a 4-point Likert scale (0–3). The total score was computed by averaging all items, with higher scores reflecting more severe depressive symptoms. In the present study, the EPDS showed good internal consistency (Cronbach's $\alpha = 0.84$).

2.2.3. Body Image in Pregnancy Scale

The Body Image in Pregnancy Scale (BIPS; [Watson et al., 2017](#)) was used to assess body image during pregnancy. This 36-item self-report questionnaire measures seven dimensions: (1) preoccupation with physical appearance, (2) dissatisfaction with strength-related aspects of one's body, (3) dissatisfaction with complexion, (4) sexual attractiveness, (5) prioritization of appearance over function, (6) appearance-related behavioral avoidance, and (7) dissatisfaction with specific body parts. Items are rated on a 5-point Likert scale ranging from 1 to 5. The total BIPS score was computed by averaging all items, with higher scores indicating greater body image disturbance. In this study, the BIPS demonstrated excellent internal consistency (Cronbach's $\alpha = 0.90$).

2.2.4. Eating Disorder Examination–Questionnaire Short

The Eating Disorder Examination–Questionnaire Short (EDE-QS; [Gideon et al., 2016](#)) was used to evaluate eating disorder symptoms (EDS) over the past seven days. The EDE-QS is a 12-item self-report measure derived from the 28-item Eating Disorder Examination–Questionnaire ([Calugi et al., 2017](#); [Fairburn & Beglin, 1994](#)). Each item is rated on a 4-point Likert scale (0–3). A total score was calculated by averaging all items, with higher scores indicating greater severity of EDS. The EDE-QS demonstrated good internal consistency in the present study (Cronbach's $\alpha = 0.85$).

2.3. Data Analysis

Statistical analyses were conducted using IBM SPSS Statistics version 20.0. Firstly, the Variance Inflation Factor (VIF) was used to assess multicollinearity. Descriptive statistics,

including means (M), standard deviations (SD), and range, were then computed for all key study variables. Pearson correlation analysis was used to explore bivariate associations among romantic relationship quality (DAS-7), depressive symptoms (EPDS), body dissatisfaction (BIPS), and EDS (EDE-QS).

We employed PROCESS macro-Model 6 (Hayes, 2013) to test the hypothesized mediation model. Specifically, we examined the indirect pathways from romantic relationship quality to EDS through the mediation of antenatal depressive symptoms and body dissatisfaction (Figure 1). The significance of indirect effects was assessed using a bias-corrected bootstrap method with 5000 resamples. If the 95% confidence interval (CI) for the bootstrapped estimate did not include zero, then the indirect effect was considered significant at $p < 0.05$. Pre-pregnancy BMI was included in the model as a covariate to account for potential confounding effects.

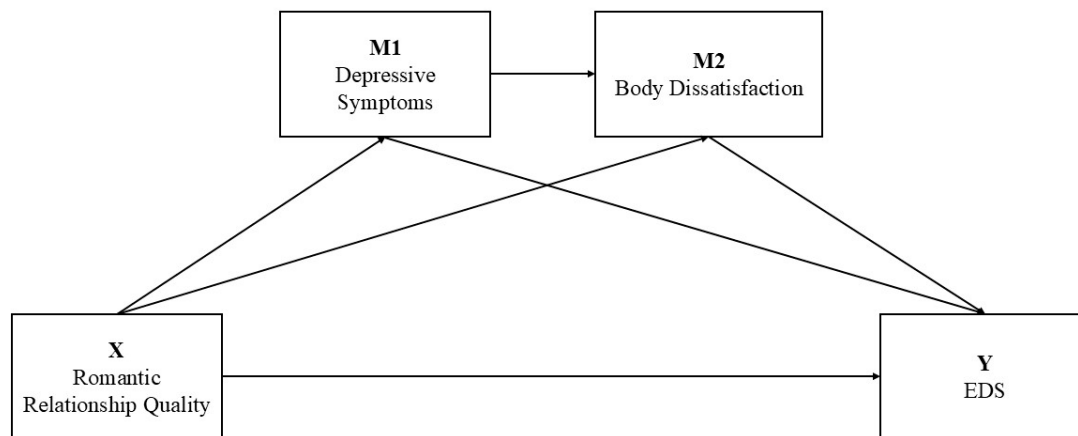


Figure 1. Proposed Mediation Model.

3. Results

3.1. Testing for Multicollinearity

Collinearity diagnostics showed that the VIF for romantic relationship quality, depressive symptoms, body dissatisfaction, and pre-pregnancy BMI were 1.23, 1.36, 1.37, and 1.07, respectively. These values are well below the commonly accepted threshold of 5 (Hair et al., 2017), indicating no evidence of multicollinearity among the study variables.

3.2. Preliminary Analysis

Means (M), standard deviations (SD), range, skewness, and kurtosis of the study variables are presented in Table 2. We adopted Kline's (2011) criteria of skewness $< \pm 3$ and kurtosis $< \pm 10$ to identify deviations from normality. No severe violation of univariate normality was detected, with the skewness values ranging from -1.10 to 1.41 and the kurtosis values ranging from 0.06 to 2.66 . Pearson correlations among the study variables are also reported in Table 2. EDS were significantly and positively related to depressive symptoms ($r = 0.36, p < 0.01$) and to body dissatisfaction ($r = 0.57, p < 0.01$), whereas significant and negative associations were found with romantic relationship quality ($r = -0.18, p < 0.01$). Romantic relationship quality was significantly and negatively related also to depressive symptoms ($r = -0.39, p < 0.01$) and to body dissatisfaction ($r = -0.33, p < 0.01$). Depressive symptoms and body dissatisfaction were significantly and positively associated ($r = 0.44, p < 0.01$).

Table 2. Correlation Matrix, Means, Standard Deviations, Range, Skewness, and Kurtosis of the Study Variables.

	1	2	3	4	5
1. Romantic Relationship Quality	--				
2. Depressive Symptoms	−0.39 **	--			
3. Body Dissatisfaction	−0.33 **	0.44 **	--		
4. EDS	−0.18 **	0.36 **	0.57 **	--	
5. Pre-Pregnancy BMI	0.04	−0.01	0.21 **	0.23 **	--
<i>M</i>	4.23	0.55	2.29	0.52	24.13
<i>SD</i>	0.69	0.51	0.57	0.48	5.47
Range	1.54–5.14	0–2.50	1.06–4.00	0–2.67	14.7–45.5
<i>Skewness</i>	−1.10	1.14	0.42	1.14	1.41
<i>Kurtosis</i>	1.71	1.13	0.06	1.22	2.66

Note: *N* = 231. ** *p* < 0.01.

3.3. Mediation Analysis

A mediation model was tested to explore whether prenatal depressive symptoms (M1) and body dissatisfaction (M2) mediated the association between romantic relationship quality (X) and EDS (Y) during pregnancy, with pre-pregnancy BMI included as a covariate.

As shown in Table 3, results revealed a significant negative effect of romantic relationship quality on prenatal depressive symptoms, so that higher depressive symptoms were predicted by lower relationship quality ($\beta = -0.39$, $SE = 0.05$, $p < 0.001$). Depressive symptoms, in turn, had a significant positive effect on body dissatisfaction ($\beta = 0.36$, $SE = 0.07$, $p < 0.001$). Results also showed a significant negative effect of romantic relationship quality on body dissatisfaction, so that higher dissatisfaction was predicted by lower relationship quality ($\beta = -0.20$, $SE = 0.05$, $p < 0.001$). Finally, both prenatal depressive symptoms ($\beta = 0.16$, $SE = 0.06$, $p < 0.01$) and body dissatisfaction ($\beta = 0.48$, $SE = 0.05$, $p < 0.001$) emerged as significant predictors of EDS. Conversely, the direct effect of romantic relationship quality on EDS was found non-significant in the presence of the mediators ($\beta = 0.04$, $SE = 0.04$, $p = 0.515$), indicating a full mediation of depressive symptoms and body dissatisfaction in the association between romantic relationship quality and EDS during pregnancy. The final model was significant with $R^2 = 0.357$, $F(4, 226) = 31.423$, $p < 0.001$.

Table 3. The serial mediation analyses.

Outcome	Predictors	<i>R</i> ²	<i>F</i>	β	<i>t</i>	<i>p</i>	95% CI
Depressive Symptoms	Romantic Relationship Quality	0.153	20.526	−0.39	−6.41	<0.001	−0.38, −0.20
	Pre-Pregnancy BMI			0.01	0.20	0.842	−0.01, 0.01
Body Dissatisfaction	Romantic Relationship Quality	0.271	28.083	−0.20	−3.19	<0.001	−0.26, −0.06
	Depressive Symptoms			0.36	5.88	<0.001	0.27, 0.54
	Pre-Pregnancy BMI			0.22	3.91	<0.001	0.01, 0.04
EDS	Romantic Relationship Quality	0.357	31.423	0.04	0.65	0.515	−0.05, 0.11
	Depressive Symptoms			0.16	2.61	<0.01	0.04, 0.27
	Body Dissatisfaction			0.48	7.75	<0.001	0.31, 0.52
	Pre-Pregnancy BMI			0.13	2.34	<0.05	0.01, 0.02

Note: Pre-Pregnancy BMI was included in the model as a covariate. Standardized regression coefficients (β) are reported. 95% CI = 95% confidence interval.

Bootstrapping analyses with 5000 resamples confirmed the significance of all indirect effects (Table 4). Specifically, the indirect effect of romantic relationship quality on EDS via depressive symptoms alone was significant ($\beta = -0.06$, $BootSE = 0.03$), as well as the indirect path via body dissatisfaction alone ($\beta = -0.10$, $BootSE = 0.03$). The sequential pathway through both depressive symptoms and body dissatisfaction was also significant ($\beta = -0.07$, $BootSE = 0.02$), supporting a serial mediation model in which lower romantic

relationship quality predicts higher EDS during pregnancy through higher depressive symptoms and increased body dissatisfaction. The detailed pathway model is shown in Figure 2.

Table 4. Total, direct, and indirect effects of romantic relationship quality (X) on EDS (Y) through depressive symptoms (M1) and body dissatisfaction (M2).

	Effect	BootSE	Bootstrapping 95% CI
Total effect	−0.13	0.04	−0.22, −0.05
Direct effect	0.03	0.05	−0.07, 0.11
Indirect effect (X→M1→Y)	−0.06	0.03	−0.12, −0.01
Indirect effect (X→M2→Y)	−0.10	0.03	−0.16, −0.03
Indirect effect (X→M1→M2→Y)	−0.07	0.02	−0.11, −0.03

Note: All effects are adjusted for Pre-Pregnancy BMI, included as a covariate in the model. Effect = standardized regression coefficient. BootSE = bootstrap standard error. Bootstrapping 95% CI = 95% bias-corrected bootstrap confidence interval, based on 5000 resamples.

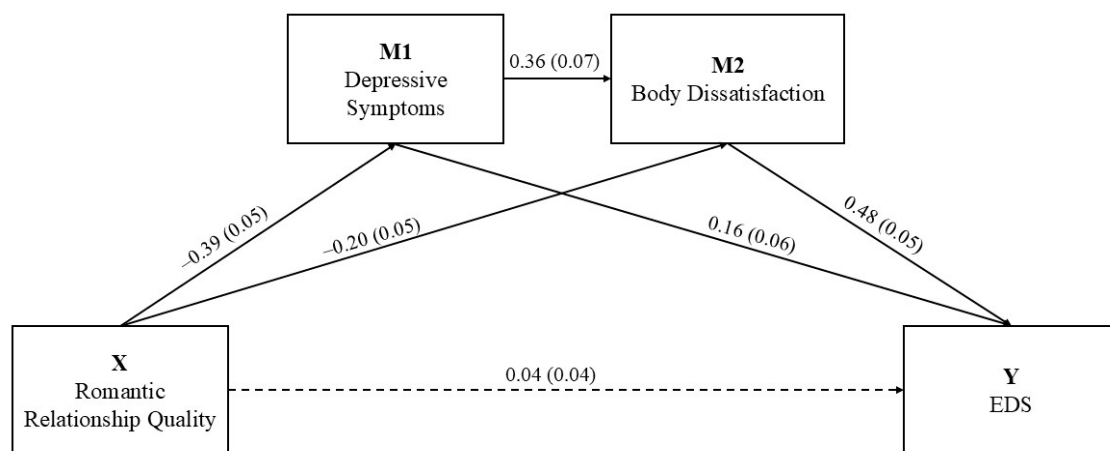


Figure 2. The serial mediation model of depressive symptoms and body dissatisfaction in the relationship between romantic relationship quality and ED symptoms. Note: The values represent the standardized coefficients with standard error in parentheses. The solid lines represent the significant paths for $p < 0.05$. The dashed lines represent the non-significant paths.

Pre-pregnancy BMI was included in the model as a covariate to control its potential influence on the study's variables. While it did not show a significant association with depressive symptoms ($\beta = 0.01$, $p = 0.842$), it emerged as a significant predictor of both body dissatisfaction ($\beta = 0.22$, $p < 0.001$) and EDS ($\beta = 0.13$, $p < 0.05$), so that higher BMI was associated with greater body dissatisfaction and increased EDS. However, the significance of the indirect effects remained unchanged when controlling for BMI, indicating that the mediation pathways from romantic relationship quality to EDS through depressive symptoms and body dissatisfaction were maintained besides the potential effects of pre-pregnancy BMI.

4. Discussion

This study aimed to examine the association between romantic relationship quality and EDS during the third trimester of pregnancy, considering the potential mediating roles of prenatal depressive symptoms and body dissatisfaction.

Consistent with our first hypothesis, results showed that prenatal depressive symptoms mediated the association between romantic relationship quality and EDS. Specifically, a poorer relationship with one's partner was associated with higher depressive symptoms, which in turn were linked to greater EDS. This finding aligns with attachment theory

(Mikulincer & Shaver, 2007) and interpersonal models of psychopathology (Ansell et al., 2012; Miniati et al., 2018), as well as with previous empirical evidence (Baskin et al., 2020), suggesting that a lack of a satisfying intimate relationship may have detrimental consequences on maternal mental health, particularly in late pregnancy. The third trimester represents a critical developmental phase characterized by heightened physical, hormonal, and psychosocial demands, in which women are required to renegotiate their identity and prepare for motherhood. Within this vulnerable context, the absence of a supportive romantic bond may diminish emotional resources, increase perceived stress, and intensify feelings of isolation and inadequacy (Costa et al., 2020; Yang et al., 2023). Consequently, depressive symptoms may emerge and increase the likelihood of engaging in maladaptive eating behaviors as an attempt to regulate or suppress negative affect and obtain temporary relief (Costanzo et al., 2025). From this perspective, EDS during pregnancy may serve an emotion-regulation function in response to relational and psychological distress.

Our second hypothesis was also supported: body dissatisfaction mediated the relationship between romantic relationship quality and EDS. Specifically, lower romantic relationship quality was associated with higher body dissatisfaction, which in turn predicted greater EDS. This finding extends prior research linking romantic relationship quality to body image (Cairo Notari et al., 2017; Stiles et al., 2022), demonstrating that this association is also relevant in the late stages of pregnancy. Romantic relationships may play a crucial role in shaping women's perceptions of their changing bodies during gestation (Chan et al., 2020). A positive, supportive relationship can facilitate the acceptance of pregnancy-related bodily changes, serving as a protective factor against body image concerns. Conversely, relational dissatisfaction may heighten sensitivity to perceived flaws and foster self-critical attitudes toward one's appearance. Within this context, EDS may function as maladaptive strategies aimed at alleviating body-related distress, regaining control, or conforming to perceived standards of attractiveness. This interpretation is consistent with previous studies identifying body dissatisfaction as one of the most robust and proximal risk factors for disordered eating (Fuller-Tyszkiewicz et al., 2020; Vanderkruik et al., 2022).

Third, we hypothesized that depressive symptoms and body dissatisfaction would operate sequentially as mediators in the link between romantic relationship quality and EDS. Findings supported this serial mediation model: poor romantic relationship quality was associated with higher depressive symptoms, which predicted greater body dissatisfaction, ultimately leading to more severe EDS. In line with prior research (Clark et al., 2009), these results suggest that psychological distress—in the form of depressive symptoms—may act as a key antecedent of body image disturbances by reinforcing attentional biases toward disliked body parts and negative self-evaluations (Chan et al., 2020). As pregnancy progresses, these distortions may intensify, particularly in the presence of relational suffering, resulting in elevated body dissatisfaction, a well-established proximal risk factor for EDS (Fuller-Tyszkiewicz et al., 2020).

This serial mediation pathway underscores the complex interplay between relational, emotional, and body-related factors in understanding EDS during pregnancy. Romantic relationship difficulties may operate as distal interpersonal stressors, eliciting depressive symptoms that erode body image, thereby increasing vulnerability to disordered eating. The absence of a significant direct effect of romantic relationship quality on EDS, once the mediators were included, indicates a full mediation pattern. Although the cross-sectional nature of the data precludes causal inference, this finding suggests that relational suffering may not directly influence disordered eating; rather, it promotes an affective and cognitive vulnerability—marked by depression and body dissatisfaction—that predisposes women to EDS. This perspective reinforces the conceptualization of EDS during pregnancy as a multifactorial condition shaped by interrelated interpersonal and psychological processes.

Importantly, these processes are embedded in a broader sociocultural context, which shapes the way intimate relationships, emotions, and body image are experienced. Specifically, Italy is a collectivistic country, with high familism values and elevated interdependence among family members (Rodríguez-González et al., 2020). In such context, family bonds—including the one with the romantic partner—are fundamental for the definition of one's personal identity and for fostering (or hindering) emotional well-being during key transitional periods such as pregnancy (Donati, 2003). At the same time, Italian and Western cultural ideas place a significant emphasis on beauty, thinness, and physical appearance, which may predispose women to negative feelings toward perinatal body transformations (Grano et al., 2025). Cultural norms may therefore amplify the relevance of romantic relationship quality in influencing mood and body image during pregnancy, as well as the salience of body concerns in predicting patterns of disordered eating.

Finally, pre-pregnancy BMI was included as a covariate due to its established association with both body dissatisfaction and EDS (Baskin et al., 2021; Chan et al., 2020). Consistent with expectations, BMI correlated significantly with both constructs. However, its inclusion did not attenuate the significance or magnitude of the hypothesized mediation pathways, suggesting that the observed associations are not merely a reflection of pre-existing weight status but represent psychologically meaningful processes specific to the perinatal period. Thus, while BMI remains a relevant background characteristic, it does not account for the complex interplay among relational functioning, emotional suffering, body image concerns, and eating behaviors observed during pregnancy.

4.1. Limitations

Our findings should be considered within the context of some limitations. First, the cross-sectional nature of this research does not allow for the examination of causal relationships among the study variables. Future research would benefit from adopting longitudinal designs to assess whether changes in EDS during pregnancy are influenced by variations in relational satisfaction, mood, and body image across time. Second, all constructs were assessed using self-report measures, which may be susceptible to social desirability biases and could have inflated some of the observed associations. Future research should adopt multi-method approaches, integrating self-report instruments with qualitative interviews or clinician-administered assessments, to provide a more comprehensive understanding of the studied phenomena. Third, the EDE-QS was not specifically designed to evaluate EDS in pregnant populations. Nevertheless, it has been previously employed in Italian pregnant samples (Costanzo et al., 2025), and its extended version, the EDE-Q, has demonstrated solid psychometric properties in this research field (Stephens et al., 2024). Future investigations could benefit from the development or validation of pregnancy-specific measures of disordered eating that better capture gestational changes in eating attitudes and behaviors. Fourth, this study did not account for past depression or experiences of gender-based violence, particularly psychological coercion or abuse. This represents a key limitation, as exposure to severe relational harm could partially explain some of the observed associations between romantic relationship quality and the psychological variables under investigation. Future studies should therefore include measures assessing both lifetime depressive episodes and intimate partner violence to clarify their role in shaping perinatal mental health outcomes. Fifth, the sample consisted exclusively of heterosexual pregnant women, which may limit the generalizability of the findings to other populations (e.g., sexual minority women or gender-diverse individuals). Future research should address this issue by recruiting larger and more diverse samples to capture the heterogeneity of experiences across different gender identities and sexual orientations. Sixth, as the sample was composed entirely of Italian women, cultural specificities may have influenced the

interplay among interpersonal and intrapersonal variables. Consequently, the generalizability beyond the Italian context is limited. Future studies should replicate and extend this model across diverse sociocultural backgrounds to determine whether the observed pathways are culturally specific or reflect more universal processes. Another limitation concerns the use of BMI as a covariate. Although BMI is a widely used indicator of body fat in adults, it has well-documented limitations, such as its inability to distinguish between fat and muscle mass (Bray, 2023) and its poor sensitivity to variations in body shape and fat distribution across genders and ethnic groups, which may introduce gendered and racial biases (Sweatt et al., 2024). Finally, this study did not include sociocultural variables (e.g., internalization of appearance ideals, perceived social pressures regarding body shape) that are known to affect body image and EDS in both general and perinatal populations (da Silva et al., 2020; Pedersen et al., 2018). Future research should incorporate validated measures of these constructs for a deeper understanding of the sociocultural pathways contributing to disordered eating during pregnancy.

4.2. Strengths and Practical Implications

Notwithstanding these limitations, this is the first study to explore the serial mediation of depressive symptoms and body dissatisfaction in the association between romantic relationship quality and EDS during late pregnancy. A key strength of this research lies in its contribution to a more nuanced understanding of perinatal disordered eating as a multifaceted phenomenon shaped by the interaction between relational and psychological dimensions. Another strength is the specific focus on the third trimester of pregnancy, a period of heightened vulnerability in the perinatal process. As childbirth approaches, profound couple and family reorganizations are required (Zhi et al., 2025), potentially affecting relationship quality and women's emotional well-being. At the same time, physical transformations become more pronounced during this stage (Linde et al., 2022), which may render the acceptance of bodily changes increasingly challenging. Late pregnancy therefore represents a critical window for the identification of risk factors associated with the emergence or exacerbation of EDS.

Findings from this study could also have important practical—preventive and clinical—implications. From a preventive standpoint, perinatal healthcare providers (e.g., gynecologists, obstetricians, midwives, general practitioners) could benefit from incorporating comprehensive screening protocols for relational stressors, depressive symptoms, and body image concerns into routine prenatal visits. Such practices would facilitate early detection of psychosocial vulnerability for EDS, which is essential when addressing maternal mental health. Indeed, early identification of at-risk women would allow to promote timely, targeted interventions aimed at preventing the onset or exacerbation of maladaptive eating behaviors, which may lead to serious complications for both the mother and the fetus (Sommerfeldt et al., 2022). In this regard, interdisciplinary collaboration between healthcare providers and mental health specialists may be essential to design integrated care programs addressing both medical and psychosocial aspects of maternal health.

From a clinical perspective, results from this study suggest that psychological interventions should aim to support the couple's accommodation to pregnancy-related demands by promoting more adaptive relational dynamics, including greater intimacy, emotional cohesion, and more constructive communication. These aspects are especially relevant during the third trimester, when the imminent transition to parenthood requires a profound reorganization of roles, expectations, and family functioning (Zhi et al., 2025). Moreover, partner-inclusive programs or couple-based interventions could be particularly beneficial, as they have the potential to foster relational stability and emotional security, which could

exert positive effects on the woman's psychological well-being and on her acceptance of body changes (Stapleton et al., 2012).

Finally, findings could have important implications at a policy level, supporting the integration of psychosocial assessment into perinatal care guidelines to ensure a more holistic approach to maternal and fetal health.

5. Conclusions

This study contributes to a better understanding of the association between romantic relationship quality and EDS during the late stages of pregnancy. Results suggest that this association is mediated by depressive symptoms and body dissatisfaction, which may operate both independently and in a sequential manner.

Future longitudinal studies are warranted to confirm the directionality of these associations and to evaluate whether interventions targeting both interpersonal and intrapersonal mechanisms can mitigate the risk of EDS across the perinatal period, ultimately improving both maternal and infant outcomes. Moreover, dyadic designs including both partners may yield valuable insights into how relationship processes influence maternal adjustment and vulnerability to disordered eating. Finally, future research should also consider cross-cultural replications and the inclusion of additional psychosocial risk factors, such as gender-based violence and sociocultural variables, to ensure a more comprehensive understanding of the determinants of disordered eating during pregnancy.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Bioethics Committee of the University of Palermo (protocol number: 167/2023; ethic approval date: 11 February 2023).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available upon reasonable request from the corresponding author.

Conflicts of Interest: The authors declare no conflicts of interest.

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