

SYSTEMATIC REVIEW

Psychosexual Aspects That Affect Long-Term Marriage of Subfertility Couples: A Systematic Review

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ABSTRACT

Introduction: The psychosexual dynamics within long-term marriages of subfertility couples remain a critical yet underexplored area. This systematic literature review aims to examine how psychosexual factors influence the long-term marriage of subfertility couples. **Materials and Methods:** We conducted an extensive search of scholarly articles from reputable databases Scopus and Web of Science. The flow of study based on the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) framework. The database discovered (n=32) that the final primary data was analyzed. **Results:** The findings were categorized into three themes regarding the psychosexual influence on long-term marriages of subfertility couples: (a) psychological well-being and emotional aspects, (b) relationship dynamics and coping strategies, and (c) medical interventions and sexual well-being. **Discussion:** The psychological-emotional, relationship dynamics, and sexual aspects of subfertility interact and reinforce each other, shaping the marital experience of subfertility couples. **Conclusion:** This review concludes that infertility-related distress, sexual dysfunction, emotional strain, and financial burdens contribute to marital instability, underscoring the necessity for integrated psychological and sexual health interventions. Therefore, early, targeted interventions are essential in mitigating the adverse psychosexual effects on couples, promoting healthier relationship dynamics and improved mental well-being in the long-term marriage.

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INTRODUCTION

Psychosexual dynamics form the cornerstone of emotional and physical bonds within marriage, shaping the quality and longevity of relationships. Among subfertility couples those who face difficulties conceiving these dynamics often become strained, leading to profound psychological, emotional, and sexual challenges [1]. Subfertility presents significant psychological and emotional challenges, often leading to psychosexual distress that affects both partners [2]. The inability to conceive can cause anxiety, depression,

and diminished self-esteem, which, in turn, impact sexual desire and intimacy [3]. Various psychosocial interventions, including cognitive-behavioral therapy (CBT), mindfulness-based therapies, and couple-focused interventions, have been explored as potential strategies to alleviate these psychological burdens [4]. Understanding the effectiveness of these interventions in reducing psychosexual distress is critical for improving the overall well-being of subfertile couples and promoting resilience in their marital relationships [5].

Beyond psychosocial interventions, coping strategies and relationship counseling play a crucial role in shaping the sexual satisfaction and relational stability of subfertile couples [6]. Emotion-focused coping and problem-solving approaches help couples navigate the psychological strain associated with subfertility,

fostering open communication and intimacy [7]. Relationship counseling has been shown to mitigate relational conflicts and enhance marital satisfaction by addressing underlying sexual concerns and emotional disconnection [8]. Examining these mechanisms offers valuable insights into how tailored counseling interventions can foster healthier dynamics and reinforce couples' emotional and sexual well-being.

Additionally, Assisted Reproductive Technology (ART) has revolutionized infertility treatment, yet its impact on sexual well-being remains complex and multifaceted [9]. Hormonal treatments, invasive procedures, and the emotional toll of ART cycles can lead to heightened stress and changes in sexual function [10]. While some studies suggest ART improves couples' intimacy due to restored hope, others highlight its adverse effects, including performance anxiety and reduced sexual satisfaction [11]. A critical evaluation of ART's influence on sexual well-being is essential to developing holistic fertility care strategies that support both physical and psychosexual health [12].

Despite growing recognition of these challenges, significant gaps remain in the literature, particularly regarding how cultural and social contexts influence psychosexual experiences in subfertility marriages, especially in non-Western settings. This article aims to provide a comprehensive exploration of these psychosexual dimensions, focusing on the interplay between sexual intimacy, emotional connection, and psychological well-being in the context of long-term marital stability among subfertility couples.

In general, a long-term marriage is often considered to be one that has lasted for a period of time, typically ten years or more [67,68]. It is often associated with a sense of enduring commitment and shared history. Research [69] has found that maintaining a marriage is a top priority for women facing subfertility issues.

The term subfertility is defined as difficulty to conceive after having regular sexual intercourse for more than 12 months without any contraceptive method [13,66]. On the other hand, infertility refers to the impossibility of carrying a child to birth. In other words, a woman or a couple is infertile when a full-term pregnancy is not possible. But in practice, both subfertility and infertility are used interchangeably by most reproductive endocrinologists and infertility specialists [66].

The psychosexual aspects affecting long-term marriages of subfertility couples are intricate and multifaceted, influenced by lifestyle, psychosocial factors and physiological factors. Subfertility imposes significant challenges to self-identity and sexual esteem, reshaping intimacy and relationship dynamics. Subfertility often results in reduced sexual satisfaction and coital pleasure, exacerbated during fertility treatments [11]. These treatments frequently lead to a decline in sexual

functioning, creating heightened emotional distress and necessitating a thorough sexual anamnesis before initiating medical interventions. Moreover, physical conditions like Primary Ciliary Dyskinesia (PCD) add complexity by introducing structural barriers to conception, further straining marital intimacy [14].

Subfertility is accompanied by profound emotional distress, often compounded by delayed or denied treatments. Socio-medical barriers, including obesity and single parenthood, which can exacerbate feelings of inadequacy and failure, harming marital cohesion and sexual intimacy, have been identified [13]. Women experience higher rates of sexual dysfunction compared to men in subfertility relationships, necessitating early psychological and sexual health interventions [11]. These findings underscore the need for addressing the psychological toll early to mitigate long-term impacts on psychosexual well-being.

Lifestyle factors such as smoking and obesity significantly influence fertility outcomes and marital intimacy. These factors negatively impact hormonal balance and semen quality, impairing fertility [14]. Compounded physical and emotional strains often disrupt sexual dynamics. Interventions targeting weight management and smoking cessation have shown promise in improving fertility outcomes and enhancing sexual intimacy [13].

Psychosocial factors such as anxiety, depression, and societal stigma significantly impact the psychosexual experience of infertile couples, often leading to reduced intimacy and marital distress [11,12]. Factors such as perceived social support, optimism, and coping strategies play significant roles in shaping these psychosexual experiences. Social stigma and relational dissatisfaction exacerbate sexual dysfunction [28,29,39]. However, resilience, communication, and psychological interventions, including cognitive-behavioral therapy, mitigate negative outcomes [11,33]. Recent studies emphasize the role of supportive counseling in enhancing coping mechanisms and marital satisfaction [25], underscoring the need for integrated psychosocial care in infertility clinics.

Cultural and social expectations surrounding parenthood play a critical role in shaping the psychosexual experiences of subfertility couples. Societal pressures often amplify feelings of inadequacy, particularly in contexts where fertility is closely tied to social identity [5]. Similarly, lower socioeconomic status exacerbates emotional stress and unmet parental expectations, further straining marital relationships [2].

Physiological factors such as hormonal imbalances, chronic stress responses, and infertility-related medical treatments significantly impact the psychosexual experience of couples [45,52]. Hormonal disruptions, including low testosterone and estrogen fluctuations,

contribute to reduced libido and sexual dysfunction [17,19]. Assisted reproductive technologies (ART) may exacerbate physical discomfort and psychological distress, further impairing intimacy [12,26]. Additionally, conditions like polycystic ovary syndrome (PCOS) and erectile dysfunction negatively affect sexual self-concept [13,20]. Addressing these physiological aspects through medical and psychological interventions enhances sexual well-being and relationship satisfaction [21,25]. Chronic health conditions associated with subfertility, such as hypothyroidism and endometriosis, significantly impact marital satisfaction. Hypothyroidism has been linked to disruptions in sexual activity and emotional intimacy [5], while the compounded effects of endometriosis and migraines on psychosexual health have been emphasized [19]. The chronic pain and emotional burden often result in reduced sexual desire and intimacy, highlighting the need for holistic approaches that address co-morbid conditions alongside fertility treatments.

Male subfertility introduces unique psychosexual challenges. Oxidative stress has been identified as a key contributor to male infertility, which often leads to feelings of inadequacy and diminished sexual intimacy [20]. Note that societal expectations around masculinity further exacerbate these challenges, underscoring the importance of addressing male psychosexual health to improve overall marital satisfaction.

The intersection of subfertility and domestic violence is an emerging area of concern. Subfertility-related frustrations often escalate into emotional and physical abuse, further straining marital dynamics [21]. Emotional violence was the most prevalent form, highlighting the critical need for psychosocial support to address underlying frustrations and protect the well-being of subfertility couples.

Age-related declines in ovarian reserves add significant pressure to subfertility marriages. Prolonged infertility correlates with reduced psychosexual satisfaction as couples grapple with diminishing biological prospects for conception [17]. This highlights the importance of psychological support mechanisms to mitigate stress in long-term relationships.

The psychosexual challenges associated with infertility have been widely studied, yet gaps remain in understanding the most effective interventions for mitigating distress and improving marital intimacy. Existing research has demonstrated that infertility often leads to psychological distress, decreased sexual satisfaction, and relationship strain [2,9]. However, many of these studies have focused on short-term interventions, neglecting long-term effects and cultural variations in response to therapy [7].

Coping strategies and relationship counseling have been

acknowledged as crucial in managing infertility-related distress, yet their direct impact on sexual satisfaction and relationship dynamics remains underexplored. Previous studies have identified that problem-solving coping, emotional regulation, and social support influence how couples navigate infertility-related stress [6].

Assisted Reproductive Technology (ART) has revolutionized infertility treatment, yet its psychosexual implications remain a subject of debate. Research has shown that ART procedures, such as in vitro fertilization (IVF) and hormone treatments, can have both positive and negative effects on sexual function and satisfaction [10].

Addressing these gaps, this systematic literature review provides a more integrated understanding of psychosocial, relational, and medical factors influencing the psychosexual experiences of infertile couples. The findings will contribute to evidence-based recommendations for mental health professionals, counselors, and fertility specialists seeking to enhance both psychological and sexual health outcomes in infertility care.

Research Question

The research questions for this review:

How do psychosexual factors influence stability and quality on long-term marriage among subfertility couples?

METHODS

The review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework, synthesis and quality appraisal [70]. The PRISMA framework for reporting as well as in the search strategy for relevant studies to be included in the review. The PRISMA guidelines, which outline a clear four-phase process: identification, screening, eligibility, and data extraction [70].

Selection Criteria

The selection of studies for this systematic literature review was guided by specific inclusion and exclusion criteria to ensure relevance and quality. Studies were considered for the review if they meet the followings: (i) assessed psychosexual factors influencing relationship stability of subfertility couples, (ii) couples must be married, (iii) English-language publications from 2018 until 2024. Moreover, this review consider only original study excluding review papers, meta-syntheses, meta-analyses, protocol paper, books, book series, chapters and conference proceedings.

Identification

It began with the identification stage, where several databases were searched to locate articles relevant to the study's focus. The following search strings, developed

by scanning dictionaries, thesauri, previous research and encyclopedias, were used in Scopus and Web of Science database search: (sexuality OR psychosexual) AND (marriage OR couple) AND (subfertility OR infertility). Scopus and Web of Science were considered in this review as they are two of the most powerful and widely recognized academic databases, each providing unique strengths that enhance the rigor and credibility of a systematic literature review. The combination of these two databases ensures that the review captures both breadth and depth, integrating comprehensive coverage with high-impact, influential studies, increasing the robustness and academic integrity of the systematic review. Six hundred fifty-one papers from the two databases relevant to the study issue were established in the first phase of the systematic literature review (refer to Table I).

Screening

Table I: The search string

Scopus	TITLE-ABS-KEY (sexuality OR psychosexual) AND (marriage OR couple) AND (subfertility OR infertility) Date of Access: December 2024
WOS	(sexuality OR psychosexual) AND (marriage OR couple) AND (subfertility OR infertility) Date of Access: December 2024

Search keyword strings for the systematic review for this study were developed by identifying relevant keywords and synonyms through dictionaries, thesauri, encyclopaedias, and prior research, applied to the Scopus database (sexuality OR psychosexual AND marriage OR couple AND (subfertility OR infertility) and the Web of Science database (sexuality OR psychosexual) AND (marriage OR couple) AND (subfertility OR infertility). Both of data base accessed in December 2024.

In the screening phase, these articles were carefully reviewed to filter out duplicates and those that didn't meet basic quality or relevance standards, using predefined criteria (refer to Table II). As part of the screening process, all studies that appeared potentially relevant were carefully reviewed to determine whether they matched the focus of this review namely "the psychosexual factors influencing the long-term marriages of couples facing subfertility". At this stage, duplicate entries were identified and removed to ensure a clean and accurate dataset as a way forward. The remaining studies were then assessed via a clear set of inclusion and exclusion criteria. Specifically, the assessment has excluded studies that related to systematic reviews, meta-analyses, meta-syntheses, protocol papers, books, book chapters, book series, and conference proceedings. To maintain consistency and accessibility, only studies published in English between 2018 and 2024 were considered.

Table II: The selection criterion is screening

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2018 – 2024	< 2018
Literature type	Journal (original research article)	Conference, Book, Review
Publication Stage	Final	In Press

The selection criteria for the systematic review included English-language materials published between 2018 and 2024, limited to journal articles at the final publication stage, while excluding non-English works, publications before 2018, and materials such as conference papers, books, reviews, or in-press articles.

Eligibility

In the next phase, known as the eligibility stage, the focus shifted to a more detailed evaluation of the remaining articles. Studies were considered for the review publications from 2018 until 2024. The publication interval period was set as such due to consistency with systematic literature review best practices. Many high-impact journals emphasize the inclusion of recent literature (usually within the last 5-7 years) to ensure the findings remain relevant and applicable to current clinical and counseling practices. By focusing on 2018-2024, this SLR ensures a comprehensive, up-to-date, and methodologically sound analysis of the integration of counseling psychology services in infertility clinics. Studies were ineligible for the review if the subjects were not married and same-sex couple. Only those that clearly addressed the research topic and met all inclusion criteria were considered for final analysis. The eligibility phase of the SLR ensures that only relevant studies are included for analysis.

Data Extraction

To organize the selected studies and prepare for a structured analysis, all relevant details from the final set of articles were carefully compiled into an Excel spreadsheet. This included key information such as the authors, year of publication, study title, country of origin, research design, tools used, sample characteristics, as well as reported challenges and perceptions. This approach allowed for a clear and consistent way to manage and compare data across studies. The next step involved identifying and grouping the main findings, with attention given to recurring themes and insights that aligned with the focus of this review. A summary characteristics of selected articles for the systematic review in Table III.

Quality Appraisal

Table III: Characteristics of selected articles for the systematic review

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Facchin et al. (2019) [45]	Infertility-related distress and female sexual function during assisted reproduction	Quantitative studies	-Sexual function	Milan	269 consecutive patients with infertility aged 24-45 (37.8 ± 4.0 years).	Is infertility-related distress a risk factor for impaired female sexual function in women undergoing assisted reproduction?	Women with higher infertility-related distress were more likely to report sexual dysfunction (odds ratio = 1.02 per point of score; 95% CI, 1.01-1.03; P = 0.001). Three FPI domains (i.e. social, relational, and sexual concerns) were correlated with almost all sexual function outcomes (Ps < 0.05).
Oehler, Freeman, and Hughes (2021) [29]	Sex therapy with couples experiencing infertility: an intersystem approach.	A case study		Provo, Utah.	one couple experiencing infertility.	Presented detailing the use of an intersystem approach in the treatment of one couple experiencing infertility.	Provide details for assessment of couples experiencing infertility and suggest the use of an intersystem approach during intervention, focusing on individual biological factors, individual psychological factors, dyadic relationship factors, intergenerational factors, and societal and cultural factors.
Anguzu, R. et al. (2020) [46]	Decisional conflict among couples seeking specialty treatment for infertility in the USA: a longitudinal exploratory study.	longitudinal, mixed-methods cohort study	-Family building -Decisional	USA	Participating couples (n = 68), opposite-sex couples who sought a new reproductive specialty consultation	couples' decisional conflicts around family-building approaches before and after seeking a specialty consultation for infertility.	The major qualitative themes were communication with partners, feeling supported and/or pressured in decision (s), changing decisions over time and ability to execute a desired decision. Average DCS scores were highest before the initial consultation. Within couples, men had significantly higher decisional conflict than women pre-consultation (48.9 versus 40.2, P = 0.037) and at 2 months (28.9 versus 22.1, P = 0.015), but differences at other time points were not significant. In adjusted models, predicted DCS scores declined over time, with women, on average, reaching the DCS threshold for implementing a decision at 2 months while for men it was not until 4 months.
Dierickx et al. (2019) [47]	Women with infertility complying with and resisting polygyny: An explorative qualitative study in urban Gambia.	Qualitative study using in-depth interviews	-decision-making -cope strategies	Gambia	(n=30) conducted among women with infertility in the urban communities of the West Coast region of The Gambia	To explore how women with infertility experience polygyny and To understand their decision-making regarding these marriages.	Most women emphasised conflicts that exist within polygynous households and reported financial and emotional difficulties. Thematic analysis identified several strategies of women with infertility to cope with and resist polygynous marriages, including overcoming childlessness, addressing conflict, spending time outside the compound, looking for social support, kanyaleng kafoolu, living separately and initiating divorce.
Patel, Sharma & Kumar (2021) [13]	"When love does not bear a fruit": Patterns and prevalence of sexual difficulties in infertile men and women as predictors of emotional distress.	Quantitative cross-sectional study	-sexual difficulties -infertility -stress -sexual dysfunctions	India	(n=300) married men and women diagnosed with infertility	Evaluate sexual difficulties as predictors of infertility-specific stress in patients undergoing fertility treatments and to assess the profile of sexual dysfunctions in participants.	Situation in urban Gambia. Women utilize a mix of compliance, coping and resistance strategies to navigate the challenges of polygynous marriages in a structurally constraining context. Prevalence of sexual dysfunctions since marriage was higher in women (7.5%) than men (60%). 92% of women and 86% of men experienced emergence of sexual difficulties after the couple started treatments.

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Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Boudreau et al. (2024) [48]	Attachment and Sexual Functioning in Couples Seeking Fertility Treatment: The Role of Infertility-Specific Coping Strategies.	Quantitative	-sexual difficulties. - coping strategies	Qubec	(n=97) couples seeking fertility treatment.	Examined whether infertility-related coping strategies explain the associations between attachment insecurities (anxiety, avoidance) and sexual function and satisfaction.	Anxiety was associated with one's lower sexual satisfaction and function via self-neglect coping strategies. Anxiety was also associated with the partner's lower sexual satisfaction via self-blame coping. Avoidance was associated with lower partner support-seeking and sexual satisfaction.
van Eickels et al. (2024) [49]	Predictors of partnership and sexual satisfaction and dyadic effects in couples affected by endometriosis and infertility.	Quantitative research design. A cross-sectional study	-sexual satisfaction	Germany	n = 62 women with endometriosis and n = 46 partners, including a total of n = 44 couples, some of whom were affected by infertility	Determine the association of different predictors of partnership and sexual satisfaction and dyadic effects in couples with endometriosis and infertility.	Significant dyadic effects only occurred in couples with both endometriosis and infertility. Depression showed a significant negative actor effect in men for partnership satisfaction and a negative actor and partner effect in women for sexuality satisfaction (p <.05). For women, social support showed a significant positive actor effect for partnership satisfaction (p <.05), age showed a significant actor and partner effect for sexuality satisfaction (p <.05).
Beaulieu, N., Brassard, A., & Bergeron, S. (2022) [40]	Why do you have sex, and does it make you feel better? Integrating attachment theory, sexual motives, and sexual well-being in long-term couples.	Quantitative research design	-positive and negative emotions -sexual activity	Canada	(n=149) long-term couples	Examined the intermediary role of attachment- and caregiving-related sexual motives in the associations linking attachment insecurities and positive and negative emotions during sexual activity.	Individuals higher in attachment avoidance endorsed less caregiving sexual motives, which was associated with their own more negative emotional experience during sexual activity. Individuals higher in attachment anxiety endorsed more attachment sexual motives, which was associated with their own and their partner's more negative emotional experience during sex. However, individuals higher in attachment anxiety also concurrently endorsed more caregiving sexual motives, which predicted their own and their partner's more positive emotional experience during sex.
Allsop et al. (2023) [50]	Perceived financial burden is indirectly linked to sexual well-being via quality of life among couples seeking medically assisted reproduction.	Quantitative research design. Cross-sectional assisted reproduction in the past six months.	-sexual satisfaction - sexual desire -sexual distress -sex frequency	Canada	(n=120 couples) who had undergone medically	-tested the hypothesis that perceived financial burden and couple income would predict quality of life during medically assisted reproduction - examined if the results differed by treatment status—that is, between partners who were receiving treatment and those who were not.	An individual's greater perceived financial burden predicted their own lower quality of life during medically assisted reproduction, which in turn predicted their lower sexual satisfaction, desire and distress, as well as their partner's lower sexual satisfaction. Household income did not indirectly predict any sexual well-being domains, and results regarding treatment status were inconclusive.

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Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Ashtari et al. (2022)	Does the prevalence of sexual dysfunction differ among the most common causes of infertility? A cross-sectional study.	Quantitative research design	-sexual dysfunction	Iran	(n=240) infertile females with infertility due to polycystic ovary syndrome (PCOS, n=80) and endometriosis (n=80) and male factor (n=80) at Royan Institute for Reproductive Medicine (Tehran, Iran) and 160 fertile women at health care centers,	Comparing the prevalence of sexual dysfunction among women with the most common causes of infertility.	The prevalence of female sexual dysfunction was 98.8% in women with PCOS, 100.0% in those with endometriosis, and 80.0% in those with male factor infertility. Overall, 36.2% of the enrolled fertile women were suffering from sexual dysfunction.
[31]							
Starč et al. (2022)	Sexual function and in vitro fertilization; [seksualnost i izvanmaterijsna oplodnja]	Quantitative research design	-sexual dysfunction	Croatia	(n=119) individuals who had undergone in vitro fertilization, 61 (51.3%) women and 58 (48.7%) men, average age 35 years	Investigate the sexuality of individuals undergoing in vitro fertilization as one of the methods of infertility treatment.	Statistically significantly higher satisfaction among male participants, participants in the 26-30 age group, those with a higher level of education, nonreligious, without children in marriage, with four sexual partners in life, over a period of 1 to 2 years in current partner (sexual) relationship, and without a diagnosed sexual disorder. There was a correlation between infertility, associated treatment, and sexuality. Infertility and involvement in treatment procedures increased the risk of sexual dysfunction.
[43]							
Amiri et al. (2021)	Sexual Function and Satisfaction in Couples with Infertility: A Closer Look at the Role of Personal and Relational Characteristics.	Quantitative research design	-sexual function -couple satisfaction	Canada.	(n=185) mixed-sex infertile couples seeking ART	Provide a better understanding of the infertility-specific personal (ie, emotional, mind-body) and relational stressors associated with the sexual desire, orgasm, arousal, and sexual satisfaction of infertile couples seeking ART.	For men and women, infertility-related emotional stressors were associated with their own and their partner's lower sexual desire. For women, experiencing greater infertility-related emotional stressors was also associated with their partner's lower sexual satisfaction. While experiencing greater infertility-related mind-body stressors was not associated with men and women's own sexual desire, arousal, orgasm, and satisfaction, for women, it was associated with their partner's lower sexual arousal. Lastly, for men and women, infertility-related relational stressors were associated with their own lower sexual arousal, as well as with their own and their partner's lower sexual satisfaction. For women, experiencing greater relational stressors was also associated with their own lower sexual desire and orgasm.
[37]							
Zhuoran et al. (2018)	Qualitative research on infertile Chinese couples' understanding of sexuality.	Qualitative approach	-Sexuality - Quality of life.	China	(n=56) infertile Chinese couples were recruited from the reproductive medicine centre of a general hospital	To gain insight into the dynamic features of the sexuality of infertile couples and to provide meaningful evidence for improving their quality of life.	Four themes emerged from the respondents' narratives; these themes relate to the infertile couples' understanding of sexuality: (i) gender identity, (ii) communication about sex, (iii) sexual life and (iv) sexual satisfaction. It was further found that Chinese culture's values of fertility, perceptions about sexuality and sex, social norms regarding gender, and expectations about marital sexual life can have significant effects on infertile Chinese couples' sexuality.
[51]							

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Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Elenis, E., Skoog Svansson, A., P., Lind, J., & Sydsju, G. (2020). [52]	Access to infertility evaluation and treatment in two public fertility clinics and the reasons for withholding it: A prospective survey cohort study of healthcare professionals.	Quantitative research design	-Infertility treatment	Sweden	(n=943) individual cases seeking fertility evaluation and treatment	Study the proportion of patients affected by involuntary childlessness who are denied fertility treatment and the reasons behind this in a publicly funded healthcare system.	The great majority of those undergoing evaluation were granted treatment either directly (85%) or after in-depth evaluation (7.5%), while 7.5% were denied treatment. Among those who were denied treatment, there were a greater proportion of single women and couples seeking treatment with donated gametes.
Silwal, A., Thapa, B. (2020) [20]	Prevalence of domestic violence among infertile women attending subfertility clinic of a tertiary hospital.	Quantitative research design	-domestic violence -infertility women	Nepal	(n=108) infertile women in a tertiary hospital	Find out the prevalence of domestic violence among infertile women attending subfertility clinic of tertiary hospital.	Domestic violence was found among 62 (55.35%) women at 95% Confidence Interval (46.15-64.55). The emotional violence accounted for 57 (50.89%), physical violence for 19 (16.96%) and sexual violence for 18 (16.07%). The prevalence of domestic violence was more 22 (61.11%) in women with secondary infertility than in women with primary infertility 40 (52.63%). The main perpetrators of domestic violence were family members 28 (45.16%).
Demirci & Sen. (2023) [39]	Sexual experiences of infertile women: A qualitative study.	Qualitative study- phenomenological design	-sexual intercourse	Turkey.	(n=11) infertile women.	To explore the experiences of the sexuality of infertile women patients.	The average age of the women was 33.05 ± 3.40 years, and their age of first sexual intercourse was 23.0 ± 2.8 years and all of them are legally married. The durations of experiencing the problem of infertility were as follows; 3-5 years in 33%, 6-10 years in 27%, and 11 years and above in 38%. According to interpretative phenomenological analysis, two main themes emerge. Two main themes were determined: Perception of Sexuality and Sexual Problems. The results show that infertile women have a higher risk for sexual dysfunction than fertile women.
Sohbati et al. (2021) [53]	Psychological well-being of infertile women and its relationship with demographic factors and fertility history: a cross-sectional study. Tehran, Iran	Qualitative cross-sectional study referred to three infertility centres, Tehran, Iran	-fertility characteristics	Iran	(n= 300) infertile women	Determine the psychological well-being of infertile women and its relationship with demographic factors and fertility history.	There was no significant relationship between demographic variables including age, occupation of each couple, spousal's education, economic status and place of residence with PWB, but the mean score of PWB was significantly different in women's educational levels (P=0.03). There was also a significant difference between the mean score of PWB among different groups in the duration of marriage (P=0.01). Fertility characteristics variables include the duration of infertility, duration of treatment of infertility, and current treatment were not the relation with PWB. However, the mean score of PWB in the number of IVF (P=0.003) and the failed IVF pregnancies (P=0.01) had a significant statistical difference.

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Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Liao et al. (2024) [35]	Preconception depression reduces fertility: a couple-based prospective preconception cohort.	Quantitative, observational, and longitudinal research design	-depression in women and men	China	(n=16 couples who tried to conceive for ≤6 months at enrollment)	Evidence from the general population—especially based on couples—preconception depression associated with time to pregnancy (TTP) and infertility.	Of the 16 521 couples analyzed, 10 834 (65.6%) and 746 (4.5%) couples achieved pregnancy within the first 6 months and between the 6th and 12th months, respectively. The median (P25, P75) TTP was 3.0 (2.0, 6.0) months. The infertility rate was 13.01%. After adjusting for potential confounders, in the individual-specific analyses, we found that preconception depression in women was significantly related to reduced odds of fertility (FOR = 0.947, 95% CI: 0.908–0.988), and preconception depression in either men or women was associated with an increased risk of infertility (women: RR = 1.212, 95% CI: 1.076–1.366; men: RR = 1.214, 95% CI: 1.068–1.381); in the couple-based analyses, we found that—compared to couples where neither partner had depression—the couples where both partners had depression exhibited reduced fertility (adjusted FOR = 0.904, 95% CI: 0.838–0.975). The risk of infertility in the group where only the woman had depression and both partners had depression increased by 17.8% (RR = 1.178, 95% CI: 1.026–1.353) and 46.9% (RR = 1.469, 95% CI: 1.203–1.793), respectively.
Abdelhalim et al. (2024) [54]	Silent struggles: Unveiling the unspoken epidemic of domestic violence against infertile women in Egypt.	Quantitative research design	-physical violence -sexual violence -financial violence	Egypt	(n=200) infertile women actively seeking infertility treatment.	Unravel the prevalence, associated determinants, and diverse manifestations of domestic violence against infertile women.	Among surveyed women, 69.0 % reported experiencing physical violence due to infertility, while 65.5 % reported verbal violence. Additionally, 36.5 % reported incidents of sexual violence, and 47.0 % reported being subjected to financial violence. Statistical analyses revealed noteworthy correlations between physical and verbal violence and various factors, including age (p = 0.013), types of infertility (p = 0.001), gender of children (p = 0.006, p < 0.0001), and frequency of coitus (p = 0.019, p = 0.012), respectively.
Cocchiaro et al. (2020) [41]	Assessment of sexual and emotional distress in infertile couple: validation of a new specific psychometric tool.	Quantitative research design	-sexual disorder -emotional distress	Italy	(n=324) 162 heterosexual couples seeking help for reproductive problems.	Develop a tool to probe and assess the emotional aspects, sexuality, and social relationships of the couple seeking medical care for infertility.	About 60% of men and women (both partners in 43% of couples) declare that infertility has changed their life (Q10). Moreover, the incidence of sexual disorder declared by the subjects is quite rare in men (10%) but more frequent in women (29%) (p < 0.01).
Ozturk, S., Sut, H. K., & Kucuk, L. (2019) [42]	Examination of sexual functions and depressive symptoms among infertile and fertile women.	Quantitative research design	-sexual dysfunction -sexual function	Turkey	(n=192) 96 infertile and 96 fertile women.	Examine the sexual functions and depressive symptoms of infertile and fertile women.	The rate of sexual dysfunction (87.5% vs. 69.8%) and the Index of Female Sexual Function total score (31.8 ± 7.8 vs 35.7 ± 6.3) were significantly higher in infertile women than fertile women (p=0.003, p<0.001, respectively). The sexual satisfaction and discomfort during sexual intercourse subscales of the Index of Female Sexual Function were significantly lower among infertile women than fertile women (p<0.001 for all); however, no significant difference was observed in the sexual intercourse/libido score of the Index of Female Sexual Function between infertile and fertile women (p=0.590). The correlation coefficients between the Beck Depression Inventory total score and the total and subscale scores of the IFSF did not significantly differ between infertile and fertile women (p>0.05 for all).

continue

Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Le Goff et al. (2023) [55]	Sexual function in heterosexual couples undergoing Assisted Reproductive Technology (ART) cycles with donor sperm.	Quantitative research design	Sexual function	France	(n=158) 79 couples	To describe the sexual function in couples undergoing ART with donor sperm.	Results In our sample, 39.3% (n = 24) of women had sexual dysfunction (SD). Among men, 26.5% (n = 13) had erectile dysfunction (ED). No statistically significant difference was found between both groups (with or without SD) in men and women in univariate analysis. Therefore, multivariate analysis was not performed, and no specific predictor of SD could be identified.
Teteher et al. (2024) [56]	Sexological and traumatic aspects in reproductive difficulties: a psychometric study on couples seeking help for infertility.	Quantitative research design	-traumatic symptom -sexology dimension	Rome	(n=302) 151 couples mean age of 36.7 ± 4.8 years for women and 39.8 ± 6.6f or men	Investigate the impact of infertility in gender differences on psycho-traumatological, sexological, relational and emotional aspects and gender differences in couples requiring assisted reproductive treatment.	There was a significant difference in traumatic symptoms between men and women (t = 5.859, p < 0.05). Gender differences were found in the sexological dimension of the SEIq (t = 7.858, p <.001) and in the total ASEX score (t = 3.979, p <.001). Specifically, significant correlations emerged between the ASEX domains and the emotional and sexological aspects related to infertility only in women. The reaction to the diagnosis was negatively correlated with the emotional area of the couple (r = -0.683, p <.001) and positively with the couple relationship (r = 0.815, p <.001). Multiple regression revealed that the overall functioning of the couple, rather than the single scales, is the main predictor of sexuality (R2 = 0.77).
Casu. (2019) [57]	Development and initial validation of the Positivity Scale for female adults.	Quantitative research design	-positive sexuality -infertility well-being	Itali	(n=912) Italian women aged 18–45 mothers, voluntarily and 23.46% primary infertile),	To develop and initially validate the Positivity Scale (PSS) to assess adult female-positive sexuality.	Factor analyses supported a one-factor model with measurement invariance across adulthood stage and fertility/childlessness status and good reliability. Younger and fertile women showed higher PSS scores, and moderate-to-high variability in infertile women's well-being was accounted for by PSS scores.
Purcell-Lavesque et al. (2019) [58]	Attachment and sexual functioning in women and men seeking fertility treatment.	quantitative research design -a cross-sectional study	-sexual function -sexual satisfaction	Canada	(n= 178) 88 Canadian women and 45 couples receiving fertility treatments self-reported measures of adult attachment and sexual functioning	Examine the frequency of sexual difficulties and the associations among attachment insecurities (anxiety, avoidance) and sexual functioning (problems with sexual function, sexual dissatisfaction) in women and couples seeking fertility treatment.	The frequency of problems in sexual function varied from 14.8% (pain) to 58.0% (desire) in women and from 6.7% (satisfaction with orgasm) to 28.9% (desire) in men. Among women, attachment-related avoidance predicted their low levels of sexual satisfaction (β=-0.30, p=.007) and sexual pain (β=0.22, p=.044). Dyadic analyses revealed associations between men's attachment-related anxiety and their difficulties in reaching erection (β=0.30, p=.042) and orgasm (β=0.33, p=.009). Anxiety in women was related to their lubrication difficulties (β 0.44, p .006). One partner effect was found: Men's avoidance was related to their partners' difficulty in achieving orgasms (β=0.39, p=.045).

continue

Table III: Characteristics of selected articles for the systematic review(cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Montecalvo et al. (2024) [59]	The elephant in the room: a study on the dialogue about sexuality during Assisted Reproductive Technology visits.	Mix Method Design	-sexuality -sexuality communication	Milan	(N=14,372) patient Video -recorder	To examine sexual conversations during ART visits, including who initiate the conversation and their content.	A strikingly low proportion of utterances related to sexuality, accounting for only 1.3% of the total 14,372 utterances analyzed. Sex utterances were mainly introduced by physicians (72%), while regarding those introduced by the couple, 64% were reported by men. From the qualitative analysis on the utterances emerged three distinct levels of communication about sex: explicit, almost explicit, and implicit. While physicians and males exhibit an almost balanced distribution across the 3 levels, female patients primarily respond to explicit and almost explicit communication initiated by physicians. The low percentage of sexual utterances underscores the rarity of these conversations during ART interactions, despite the clinical field where sexual health should deserve a crucial attention.
Reisi et al. (2024) [60]	Relationships between couple collaboration, well-being, and psychological health of infertile couples undergoing assisted reproductive treatment.	Quantitative-cross-sectional study	-depression -anxiety -stress	Iran	(n=400) 200 ART volunteer couples	Evaluate the relationship between couple collaboration, well-being during infertility, and the psychological indicators of infertile couples undergoing fertility treatment.	Couple collaboration was correlated with the level of depression, anxiety, and stress. Moreover, depression, anxiety, and stress levels were correlated with well-being during infertility. The direct and indirect effect of couple collaboration on the depression level was significant; however, the direct effect of couple collaboration on the level of anxiety and stress was not significant, and the effect of couple collaboration on these indicators was mediated by well-being during infertility. The fit index of the equation modelling showed a good fit of the relationship path between the variables of couple collaboration, well-being during infertility, and psychological indicators (CMIN = 4.196, p = 0.260).
Dong et al. (2021) [61]	Impact of infertility duration on female sexual health.	Quantitative study	-psychological depression -sexual functions	China	(n=715) patients (aged between 20 to 45), : ≤ 2 years (Group I, n = 262), > 2 years but ≤ 5 years (Group II, n = 282), > 5 years but ≤ 8 years (Group III, n = 97), and > 8 years (Group IV, n = 74).	Effect of infertility duration on sexual health.	As the number of years of infertility increased, the PHQ-9 score as well as the incidence of psychological depression increased significantly (p < 0.05), but the total score of FSFI and those of its six domains/sub-scales were not significantly different among the four groups. An analysis of the relevant factors affecting sexual functions, using the multivariable logistic regression model, revealed that when the infertility duration was greater than 8 years, there was a significant increase in the incidence of sexual dysfunction [adjusted odds ratios (AOR) = 5.158, 95% confidence interval (CI): 1.935–13.746, P = 0.001], arousal disorder (AOR = 2.955, 95% CI: 1.194–7.314, P = 0.019), coital pain (AOR = 3.811, 95% CI: 1.045–13.897, P = 0.043), and lubrication disorder (AOR = 5.077, 95% CI: 1.340–19.244, P = 0.017).

continue

Table III: Characteristics of selected articles for the systematic review (cont.)

Author, (Year) & References in text	Article Title	Study Design	Variable assessed	Country	Participants (N) (gender/ age)	Study Objective	Finding
Ribeiro, Pedro, & Martins. (2024) [62]	Psychosocial experiences of involuntary definitive childless women: a comparative study based on reproductive status.	Quantitative study	-sexual function -depression	Portugal	(n=203) (60 involuntary definitive childless women, 78 women with an infertility diagnosis actively trying to conceive, and 65 presumably fertile women)	Impact of involuntary definitive childlessness, namely on sexual function, social support, marital satisfaction, and psychological adjustment.	Women were 34.31 years old (SD 5.89) and cohabited with their partners for 6.55 years (SD 4.57). The odds ratio (OR) showed that involuntary definitive childless women had significantly lower sexual function than infertile women actively trying to conceive (OR 0.88, 95% CI 0.79–0.99) and presumably fertile women (OR 34.89, 95% CI 1.98–614.03), and higher depression levels than presumably fertile women (OR 99.89, 95% CI 3.29–3037.87). Women with an infertility diagnosis actively trying to conceive did not differ from presumably fertile women in sexual function, social support, marital satisfaction, anxiety, and depression.
Nakić-Rado et al. (2022) [63]	Infertility-related stress and sexual satisfaction: a dyadic approach.	Quantitative study	-stress -sexual satisfaction	Croatia	(n=94) couples experiencing infertility	Examine whether women's and men's infertility-related stress, and specifically its sexual concerns aspect, is related to their and their partner's sexual satisfaction.	The dyadic analysis revealed that women's and men's greater infertility-related stress contributed to their lower levels of sexual satisfaction (actor effect). Moreover, women's and men's greater sexual concerns (as the aspect of infertility-related stress) contributed to their own and their partner's lower levels of sexual satisfaction (actor and partner effect).
Kiesswetter et al. (2020) [34]	Impairments in life satisfaction in infertility: Associations with perceived stress, affectivity, partnership quality, social support and the desire to have a child.	Quantitative study	-psycho-social infertility	France	(n=456) 228 infertile couples	Quantify impairments in life satisfaction in infertile couples and To identify psychosocial variables moderating these impairments.	Sample scored below the norm of the general population on the LSQ sum score and various subscales, including those assessing social relationships, health, sexuality, leisure activities, and self-evaluation. Correlation and regression analysis revealed an inverse association of life satisfaction (LSQ) with stress (PSQ), negative affect (PANAS), and worry (PSWQ), and positive associations with positive affect (PANAS), partnership quality (PQ), social support (SSQ), and the strength of the desire to have a child (QDC).
(Dreischor et al. (2022) [38]	The needs of subfertility couples continuing to attempt natural conception: In-depth interviews.	Qualitative research design -depth interviews	-interest sexual advice	Belgium	(n=22) 10 heterosexual couples and 2 women	Experiences and the support and sexual advice needs of subfertile couples continuing to attempt natural conception after the diagnostic fertility work-up.	Couples would appreciate fertility clinic staff embedding expectant management in the fertility clinic trajectory, by starting off with reassuring couples that their very thorough diagnostic fertility work-up demonstrated their good chance of natural conception, and by involving couples in deciding on the duration of expectant management and by planning the follow-up appointment after expectant management up front. Couples had encountered sexual challenges during expectant management and had an interest in sexual advice, focused on increasing pleasure and partner bonding and preventing the rise of dysfunctions. The couples agreed that a (secured) website with evidence-based, non-patronizing text and mixed media would be an appropriate format for a novel support programme. Couples were keen for interactions with fertility clinic staff which addressed both partners of subfertile couples. Couples also valued advice on managing their lifestyle and distress and would have liked information on the experiences of their peers.

This table compiles characteristics of selected articles for the systematic review, detailing the authors, titles, publication years, source titles, study objective and finding, covering a diverse range of studies related to psychosexual and marital dynamics among subfertility or infertile couples from 2018 to 2024.

Quality Appraisal is the process of carefully and systematically examining research to judge its trustworthiness, and its value and relevance in a particular context. It is an essential skill for evidence-based medicine because it allows people to find and use research evidence reliably and efficiently. Critical Appraisal Skills Programme CASP (Systematic Review) Checklist are tool is the most commonly used criteria based tool for quality appraisal in health and social care-related evidence syntheses [76]. The tool is appropriate to assess not only qualitative studies, but also used for critical appraisal of quantitative and mixed-methods studies, depending on the appropriate checklist [80]. Three experts were appointed to assess and validate a total of 32 articles. The study utilized the CASP checklist, consisting of ten criteria (refer to Table IV). CASP Systematic Review Checklist are designed to be easy to understand, and to help researcher accurately perform critical appraisals of systematic reviews. The quality evaluation was conducted by specialists

Table IV: Quality appraisal analysis CASP systematic review checklist (2022)

Section	Question	Yes			No			Total agreed (%)	Comments
		Expert			Expert				
		1	2	3	1	2	3		
Section A: Is the basic study design valid for a systematic review?	Did the systematic review address a clearly focused research question?	/	/	/				100	Excellent
	Did the authors specify appropriate study design(s) for the systematic review to answer the research question?	/	/	/				100	Excellent
Section B: Is the systematic review methodologically sound?	Are all the important, relevant studies likely to have been included?	/	/	/				100	Excellent

Table IV: Quality appraisal analysis CASP systematic review checklist (2022) (cont.)

Section	Question	Yes			No			Total agreed (%)	Comments
		Expert			Expert				
		1	2	3	1	2	3		
	Did the authors assess the validity or methodological rigour of the studies in the systematic review?	/	/	/				100	Excellent
	If the results of the studies in the systematic review were combined to undertake a meta-analysis, was it reasonable to do so?	/	/	/				100	Excellent
Section C: What is the result?	Have the results of the systematic review been reported comprehensively, and interpreted appropriately?	/	/	/				100	Excellent
	Did the authors report on how precise the results of the systematic review were, and the implications?	/	/	/				100	Excellent
Section D: Will the results help locally?	Can the results of the systematic review be applied to your local population/in your local context?	/	/	/				100	Excellent

Table IV: Quality appraisal analysis CASP systematic review checklist (2022)

Section	Question	Yes			No			Total agreed (%)	Comments
		Expert			Expert				
		1	2	3	1	2	3		
	Are the benefits worth the harms and costs?	/	/	/				100	Excellent
	Would the experimental intervention provide greater value to the people in your care than any of the existing interventions?	/	/	/				100	Excellent

Quality appraisal analysis, CASP Systematic Review Checklist (2022), evaluates the validity, rigor, and value of research findings across sections, with expert reviewers achieving 100% agreement on criteria such as clarity of research aims, appropriateness of methodology, recruitment strategy, data collection, analysis rigor, and the overall value of the research.

who possess substantial experience in psychology, counselling, and subfertility. The checklists provided a structured framework for assessing the quality of the studies, allowing for a thorough evaluation of various forms of evidence [76]. Quality was assessed using three indicators: excellent, good, and average. Consequently, each article was critically evaluated based on its articulation of research aims, the appropriateness of research methods and design, the use of suitable strategies, data collection and analysis procedures, clarity of findings, and the value of the research. The final review of the 32 articles is following the quality recoimert for the assesment.

RESULT

Characteristics of the selected studies

An initial database search for titles and abstracts yielded 651 articles, but 31 articles were excluded as duplicates. Careful screening of the abstracts of the 110 remaining articles resulted in the exclusion of another 78 articles were excluded during the eligibility assessment for several reasons. Nine articles were removed because their content was outside the scope of the study. Eighteen were excluded due to titles that did not clearly reflect relevance to the research focus, while 17 had abstracts that did not align with the study’s objectives. Additionally, 34 articles were excluded because full-text

access was unavailable, preventing further evaluation. Hence, 32 articles were ultimately included in the review . The flow of the search findings is illustrated in Figure 1.

The studies selected for review in the final analysis were original research studies. Eight of the selected studies were qualitative in nature, twenty one employed quantitative methods, two utilized a mixed-methods approach, and one was a case study. Review papers and protocol papers were excluded from the analysis to maintain a focus on primary research. As shown in Table III, the total number of participants across all included studies was 38,107, with ages ranging between 20 and 45 years. The gender distribution consisted of approximately 60% women and 40% men. The studies were conducted in diverse geographical locations, including Milan, Utah, Turkey, United State of America, Gambia, India, Quebec, China, Croatia, Germany,Belgium, Portugal, France,, Italy, Quebec, Sweden, Nepal, Iran, Egypt, Canada, and Italy. This selected articles that were used to answer research questions. Table V present the results of this study, focusing on psychosexual aspects that affect long-term marriage of subfertility couples. The findings discovered three theme of aspects: a) psychological well-being and emotional elements, b) couples relationship dynamics and coping and c) medical interventions and sexual well-being.

DISCUSSION

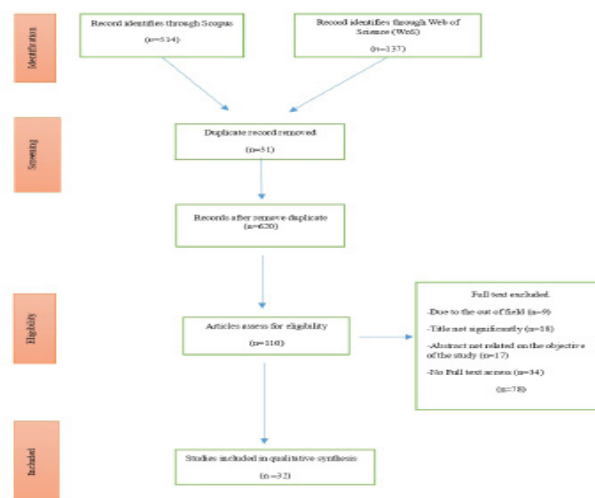


Figure 1: The PRISMA framework, adapted from Moher et. al. (2009), illustrates the systematic process of study selection, starting with 514 records identified through Scopus and 137 through Web of Science, After removing 31 duplicated, 620 records underwent screening based on inclusion criteria, excluding 510 non-English, pre-2018, conference, book, review, and in-press articles. Following eligibility assessment of 110 articles, 78 were excluded due to irrelevance, lack of full-text access, or titles and abstracts not aligning with the study objectives, Ultimately, 32 studies were included in the qualitative analysis.

Table V: Frequency table for the result analysis of 32 studies

Author	Study Objective	Findings	Psychological Well-being and Emotional Elements	Couples Relationship Dynamics and Coping	Medical Interventions and Sexual Well-Being
Facchin et al., 2019	Explore impact of distress on female sexual function	Distress linked to sexual dysfunction	✓		✓
Oehler, Freeman, and Hughes (2021)	Present intersystem approach in therapy	Comprehensive model for therapy recommended	✓	✓	
Anguzu, R. et al. 2020	Explore decisional conflict before and after consultations	Decisional conflict declined post-consultation; gender differences noted	✓	✓	
Dierickx et al., 2019	Understand experiences in polygynous marriages	Various coping strategies identified		✓	
Patel, Sharma & Kumar, 2021	Evaluate sexual difficulties and stress in infertile patients	High rates of sexual dysfunction post-treatment	✓		✓
Boudreau et al., 2024	Coping strategies linking attachment and sexual function	Insecurity linked to dysfunction via coping styles	✓	✓	✓
van Eickels et al., 2024	Partnership and sexual satisfaction in endometriosis/infertility	Depression and social support impact satisfaction	✓	✓	✓
Beaulieu et al., 2022	Sexual motives, attachment, and emotional impact	Insecurities influence emotion and satisfaction	✓	✓	
Allsop et al., 2023	Financial burden and sexual well-being	Financial burden reduced sexual satisfaction via QoL	✓	✓	✓
Ashrafi et al., 2022	Compare dysfunction across infertility causes	PCOS and endometriosis associated with higher dysfunction			✓
Starc et al., 2022	Sexuality during IVF treatment	Infertility/treatment linked to dysfunction			✓
Amiri et al., 2021	Role of stressors on desire and satisfaction	Emotional/relational stressors affect sexual outcomes	✓	✓	✓
Zhuoran et al., 2018	Chinese couples' view on sexuality	Social norms, gender roles affect sexuality	✓	✓	
Elenis et al., 2020	Reasons for denying fertility treatment	Denial linked to marital/individual context	✓		✓
Silwal & Thapa, 2020	Prevalence of domestic violence	Emotional and sexual violence common in infertile women	✓	✓	
Demirci & Sen., 2023	Explore infertile women's sexuality	Dysfunction more common, social/emotional effects	✓		
Sohbati et al., 2021	PWB and demographic/fertility history	PWB varied by education, IVF history	✓		
Liao et al., 2024	Preconception depression and fertility	Depression in couples linked to lower fertility	✓		✓
Abdelhalim et al., 2024	Domestic violence in infertile women	Violence linked to infertility, demographics	✓	✓	
Cocchiaro et al., 2020	Psychometric tool validation	Emotional distress higher in women; affects sexuality	✓	✓	✓
Ozturk et al., 2019	Compare infertile and fertile women	Dysfunction and depression more common in infertile group	✓		✓
Le Goff et al., 2023	Sexual function in ART couples	No specific predictors for dysfunction identified			✓
Tetecher et al., 2024	Sexual and emotional aspects of infertility	Gender differences in trauma and sexuality	✓	✓	✓
Casu, 2019	Develop Positive Sexuality Scale	Well-being predicted by positive sexuality score	✓		✓
Purcell-Livesque et al., 2019	Attachment and sexual functioning	Insecurity linked to sexual problems	✓	✓	✓

Table V: Frequency table for the result analysis of 32 studies (cont.)

Author	Study Objective	Findings	Psychological Well-being and Emotional Elements	Couples Relationship Dynamics and Coping	Medical Interventions and Sexual Well-Being
Montecalvo et al., 2024	Dialogue about sexuality during ART	Conversations rare; mostly physician-initiated		✓	✓
Reisi et al., 2024	Collaboration, well-being, psychological indicators	Well-being mediated link between collaboration and stress	✓	✓	
Dong et al., 2021	Infertility duration on female health	Longer infertility linked to more dysfunction	✓		✓
Ribeiro et al., 2024	Impact of definitive childlessness	Childless women had lower sexual function and higher depression	✓		✓
Naki RadoE et al., 2022	Stress and sexual satisfaction	Stress affects both actor and partner satisfaction	✓	✓	
Kiesswetter et al., 2020	Life satisfaction in infertility	Stress inversely linked to life satisfaction	✓		
Dreischor et al., 2022	Support needs in expectant management	Couples want advice on sexuality and connection	✓	✓	

Table V: This table present the selected 32 article title that review produce a theme. The findings discovered aspects Psychological Well-being and Emotional Elements in Infertility, Couples Relationship Dynamics and Coping, and Medical Interventions and Sexual Well-Being.

Psychological Well-being and Emotional Elements

The most dominant and recurrent theme is Psychological Well-being and Emotional Elements, identified in 27 of the 32 studies. This suggests a prevailing recognition across the literature of the pervasive emotional toll that infertility exerts on individuals and couples. Several studies [45,48,56] have consistently reported a strong link between emotional distress and reduced sexual satisfaction. These findings emphasize that factors such as anxiety, depression, and psychological trauma are not just secondary issues but play a central role in disrupting intimate relationships.. Furthermore, the gendered patterns of psychological vulnerability where women disproportionately experience heightened distress reveal an important biopsychosocial asymmetry. These findings imply that emotional well-being is both a primary lens through which infertility is experienced and a powerful mediator of sexual and relational health. Thus, the overwhelming presence of this theme across heterogeneous cultural and clinical contexts positions it as the most impactful in terms of shaping both the lived experience of subfertility and the long-term sustainability of marital intimacy.

Couples Relationship Dynamics and Coping

While the second theme was found in 20 studies, its relative underrepresentation compared to psychological well-being raises critical concerns. Despite growing evidence [37,50,60] showing that dyadic coping mechanisms play a significant role in moderating psychological distress and sexual satisfaction, many studies still overlook the couple as a dynamic unit of analysis. This oversight reflects a broader epistemological gap in infertility research, where relational mechanisms

are often secondary to individual-level pathology. Nevertheless, those studies that do engage with couple-level processes emphasize that marital cohesion, shared emotional labor, and adaptive communication are essential for mitigating the psychosocial fallout of infertility. Notably, recent findings [59] highlight a lack of open sexual communication during fertility consultations, pointing to an institutional oversight of couple-centered concerns. These relational dynamics may not present as immediately quantifiable as sexual dysfunction scores or depression indices, but their explanatory power is substantial. Future research must, therefore, re-center the couple not merely as a sum of distressed individuals, but as a collaborative, coping dyad especially in long-term marriages where relational interdependence magnifies over time.

Medical Interventions and Sexual Well-Being

The third theme appears in 22 studies, making it quantitatively more prominent than relational dynamics but slightly less so than psychological well-being. This theme is particularly salient in studies examining ART, IVF, PCOS, and endometriosis [35,49], where clinical procedures directly intersect with sexual health. The implications of medicalization are twofold: while fertility interventions offer hope and direction, they often generate new stressors—sexual, temporal, and economic that exacerbate existing vulnerabilities. The treatment process can lead to physical discomfort, interfere with the natural flow of intimacy, and diminish sexual spontaneity, as noted in previous studies [41,43]. However, the theme’s impact, though significant, is often secondary and mediated through emotional or relational channels. In other words, medical interventions frequently catalyze psychological

distress or relational conflict, rather than independently determining outcomes. Thus, while this theme garners substantial empirical attention, its explanatory weight is arguably less autonomous and more conditional than that of psychological or relational dimensions. This nuanced interpretation invites a more integrative framework where medical, emotional, and interpersonal domains are not compartmentalized but understood as co-constitutive forces shaping the psychosexual realities of subfertile couples.

CONCLUSION

Psychosexual factors profoundly influence the psychological well-being, relationship dynamics, and sexual health of infertile couples in long-term marriages. Infertility-related distress, sexual dysfunction, emotional strain, and financial burdens contribute to marital instability, underscoring the necessity for integrated psychological and sexual health interventions. While counseling and open communication can enhance emotional resilience and relationship satisfaction, these aspects remain underexplored in clinical infertility care. This review highlights the urgent need for holistic approaches that address the intersection of medical, emotional, and sexual well-being. However, limitations such as the heterogeneity of study methodologies, cultural differences, and a lack of longitudinal research hinder comprehensive understanding. Additionally, many studies focus on women's experiences, often overlooking the perspectives of male partners. The implications of this study emphasize the importance of integrating psychosexual counseling into fertility treatments, training healthcare providers to address sexual concerns, and developing tailored interventions for both partners. Future research should prioritize longitudinal studies, cross-cultural analyses, and gender-inclusive approaches to better understand and support the psychosexual well-being of infertile couples, ultimately fostering long-term marital stability.

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