

Review Article

Infertility Disclosures Among Women, Men and Couples: A Systematic Literature Review

Wai Ping Penny Lim^{1,2}, Jen-Sern Tham^{1*}, Mohd. Nizam Osman¹ and Siti Zobidah Omar³

¹*Department of Communication, Faculty of Modern Languages and Communication, Universiti Putra Malaysia, 43400 Serdang, Malaysia*

²*Department of Media, Faculty of Creative Industries, Universiti Tunku Abdul Rahman, 43000 Kajang, Malaysia*

³*Department of Mass Communication, Faculty of Social Sciences and Liberal Arts, UCSI University, 56000 Cheras, Malaysia*

ABSTRACT

This review paper examines the disclosure of decision-making and coping mechanisms among women, men, and couples dealing with infertility. The PRISMA review method analyzes 13 articles published between 2000 and 2021. Five themes are identified: openness, topic, social support level, confrontation, and avoidance. Additionally, the paper integrates social exchange theory to understand better the dynamics of disclosure and support exchange among those navigating infertility. The study recommends the need for more research on men, acknowledging their often marginalized role and the difficulties they face in discussing infertility. The review concludes that coping strategies are crucial in combating the social stigma associated with infertility.

Keywords: Childless, couples, disclosures, infertility, information sharing, men, women

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E-mail addresses:

limwp@utar.edu.my (Lim Wai Ping Penny)

jstham@upm.edu.my (Jen-Sern Tham)

mo_nizam@upm.edu.my (Mohd Nizam Osman)

SitiZobidah@ucsiuniversity.edu.my (Siti Zobidah Omar)

*Corresponding author

INTRODUCTION

Infertility, a non-visible illness affecting the male or female reproductive system, is defined as the inability to achieve pregnancy after 12 months of unprotected intercourse, often requiring medical intervention (American Society for Reproductive Medicine, 2023). Globally, about 17% of individuals face infertility, affecting all socioeconomic groups (Harris, 2023; Teh

et al., 2023). It impacts both genders, with male infertility being the sole cause in 20% of cases and contributing to 30%–40% of cases (Agarwal et al., 2010; Leslie et al., 2023; Raheem et al., 2019). Primary infertility involves those who have never conceived, while secondary infertility refers to difficulty conceiving after a prior pregnancy (Sormunen et al., 2018; Sun et al., 2019).

Although there is extensive research on the medical aspects of infertility (e.g., Azizbek, 2024; Kaltsas et al., 2023; Le et al., 2024; Singh et al., 2024), it remains a sensitive and stigmatized topic, with many individuals hesitant to disclose their struggles. Women are more likely than men to discuss infertility, though it affects both (Steuber & Solomon, 2011). Disclosure can be therapeutic but also challenging due to stigma (Warrender, 2020). Limited research exists on gender differences in infertility self-disclosure and coping strategies. This study seeks to fill these gaps by exploring these communication dynamics among women, men, and couples facing infertility.

Conceptualization of Self-disclosure

Self-disclosure is crucial for building, maintaining, and ending therapeutic relationships (Ashmore & Banks, 2002). However, it is important to consider various factors such as privacy, trust, and the potential negative consequences if the disclosed information falls into the wrong hands. Conversely, privacy involves controlling and managing disclosures (Derlega & Chaikin, 1977). Social media provides a platform for individuals to share

their experiences of distress and stigma anonymously (Andalibi, 2020). However, online disclosure can differ from in-person disclosure. Although some aspects of online communication, such as anonymity and reduced information richness, can promote self-disclosure, other features, such as asynchronicity, multiple audiences, and audience feedback, may support self-presentation (Schlosser, 2020).

Infertility can be an extremely stressful challenge for couples who are trying to conceive. In addition to the emotional impact, infertility also creates privacy dilemmas. Sharing disappointing news with others can be difficult (Andalibi, 2020; Sormunen et al., 2018). It is crucial to have good-quality communication between couples to cope well with chronic illnesses and infertility issues (Badr & Acitelli, 2017; Hawkey et al., 2021; Pasch & Sullivan, 2017). Couples and individuals do need coping strategies to support each other while trying to conceive and manage stress. However, many individuals are still suffering in silence for not being able to cope well emotionally as well as socially.

Kiełek-Rataj et al. (2020) conducted a study that investigated the impact of openness and communication on the satisfaction of women who have experienced infertility and miscarriage. By taking a dyadic approach, the study found that high-quality communication is essential in fostering a satisfactory relationship, a conclusion reinforced by Hawkey et al. (2021). Kiełek-Rataj et al. (2020) underscores the crucial role that positive and constructive communication plays in

fostering relationship satisfaction, with openness emerging as a key factor in determining the level of contentment shared between partners. As discussions related to infertility are shared between both partners, it is important for couples to cultivate mutual support and respect (Chelliah et al., 2023). This may involve establishing clear guidelines to prevent any potential boundary issues. Sadly, infertility is often shrouded in stigma and viewed as a taboo topic, causing many couples to avoid discussing it candidly.

In Uganda, infertility is often linked to marital difficulties for women, and it can lead to divorce. This makes infertility a complex global challenge with medical, sociocultural, and economic implications, often associated with gender-based hardship. It can also be considered a punishment for social transgressions, such as not having the bride price distributed among one's parents' relatives. Infertility is a valid reason for divorce in various cultures, and barrenness is seen as a personal tragedy and a source of humiliation (Obeagu et al., 2023).

Similarly, infertility is also a sensitive and taboo topic to discuss openly in Malaysia. Many married women who are unable to conceive are treated poorly, looked down upon, and even faced the possibility of divorce from their husbands (Ang & Lai, 2023). As a result, these women often suffer in silence. However, some women and couples have found solace in seeking help from online support groups and communities, where anonymity helps to protect their identity and allows them to share their experiences without

fear of exposure. This anonymity feature has proven helpful for affected individuals to disclose their issues and seek support (Chiew & Mohd Jan, 2018).

Without a doubt, digital communication is the preferred mode of communication for many individuals who are experiencing challenges with infertility. Building a robust social support system is crucial to navigating the difficulties associated with this condition. This necessitates establishing effective communication channels that facilitate the exchange of information and emotional support among individuals facing similar challenges (Montgomery et al., 2023). Their study found that IVF patients revealed that individuals are more likely to disclose personal information if the recipient reciprocates with a mutual understanding of engagement. Yet, interestingly, patients tend to avoid sharing information during the waiting period following embryo transfer.

The Rationale of the Study

Extensive research has been conducted in medical science on infertility (Azizbek, 2024; Le et al., 2024; Singh et al., 2024), but this review paper aims to focus on the communication aspect of infertility, specifically on how individuals and couples disclose and cope with their struggles. According to the empirical findings, more women tend to participate in online support groups than men (Chiew & Mohd Jan, 2018; Klaus et al., 2023; Mo et al., 2009). In general, men are often perceived as self-sufficient and rational, while women are seen as weaker and more dependent on emotional support. Due to societal expectations, men

may be considered weak if they ask for help. Non-disclosure is partially due to self-preservation, not wanting their ego to be challenged, and avoiding social pressure.

It is imperative to investigate and comprehend the disclosure of gender among individuals and couples experiencing infertility issues. Researchers hope to provide a platform that enables individuals with infertility to share their experiences, solicit advice, and support one another. Through leveraging digital communication tools, individuals can connect with peers by encountering similar experiences, fostering a sense of community and mitigating the isolation often associated with infertility. The role of digital communication in supporting individuals experiencing infertility cannot be overstated. Individuals can access the resources and support to navigate this challenging period by creating a supportive environment that advocates open communication.

This paper incorporates Social Exchange Theory to understand the disclosure and support exchange dynamics among women, men, and couples dealing with infertility. The relationship between infertility disclosures and social exchange theory (SET) highlights how individuals navigate social challenges. SET posits that social behavior involves weighing benefits and costs. Disclosing infertility is influenced by perceived support, stigma, and emotional well-being. Those who disclose often gain resilience and acceptance through emotional support, reducing isolation and increasing social support (Malina, 2023). Open communication about infertility

can improve relationship satisfaction and emotional support. Applying SET offers insights into how emotional support, stigma, and relational dynamics interact, helping individuals better cope with infertility. Previous research has underscored the imperative to explore the perspectives of men concerning infertility (e.g., Malik & Coulson, 2008b; Klaus et al. (2023); Pinzon and Rotoli (2023)). Most of these empirical studies have primarily centered on women's encounters with disclosure (Bute, 2009, 2013; Bute & Vik, 2010; Remennick, 2000; Sormunen et al., 2018). Although infertility is generally considered a shared challenge for couples, the majority of research has ignored men's infertility issues. It is crucial to conduct a comprehensive review that examines the challenges of disclosure for both genders to provide more effective counseling and support for couples who are struggling with infertility. Given the existing gap in the scholarly discourse regarding male perspectives on infertility, this study aims to offer a comprehensive examination drawn from diverse community contexts. The intended outcome is to furnish insights that facilitate enhanced understanding and support from family and social circles for individuals navigating the complexities of infertility. With that, we asked two questions:

1. How do women, men, and couples disclose their infertility challenges to others?
2. What coping strategies do women, men, and couples use when dealing with infertility challenges?

METHODS

To minimize potential biases and ensure transparency, the review process adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework (Moher et al., 2009). This framework has shown several benefits. Firstly, the framework allows for a clear definition of research questions. Secondly, it offers accurate screening metrics that specify the criteria for inclusion and exclusion.

Thirdly, it can examine large scientific literature databases within a specific time frame (Sierra-Correa & Kintz, 2015). It is observed that PRISMA permits a rigorous search for scientific research and has coded information relevant to infertility disclosures among women, men, and couples. Figure 1 illustrates the complete retrieval process used. Four basic steps were applied in this systematic reviewing process: identification, screening, eligibility, and inclusion.

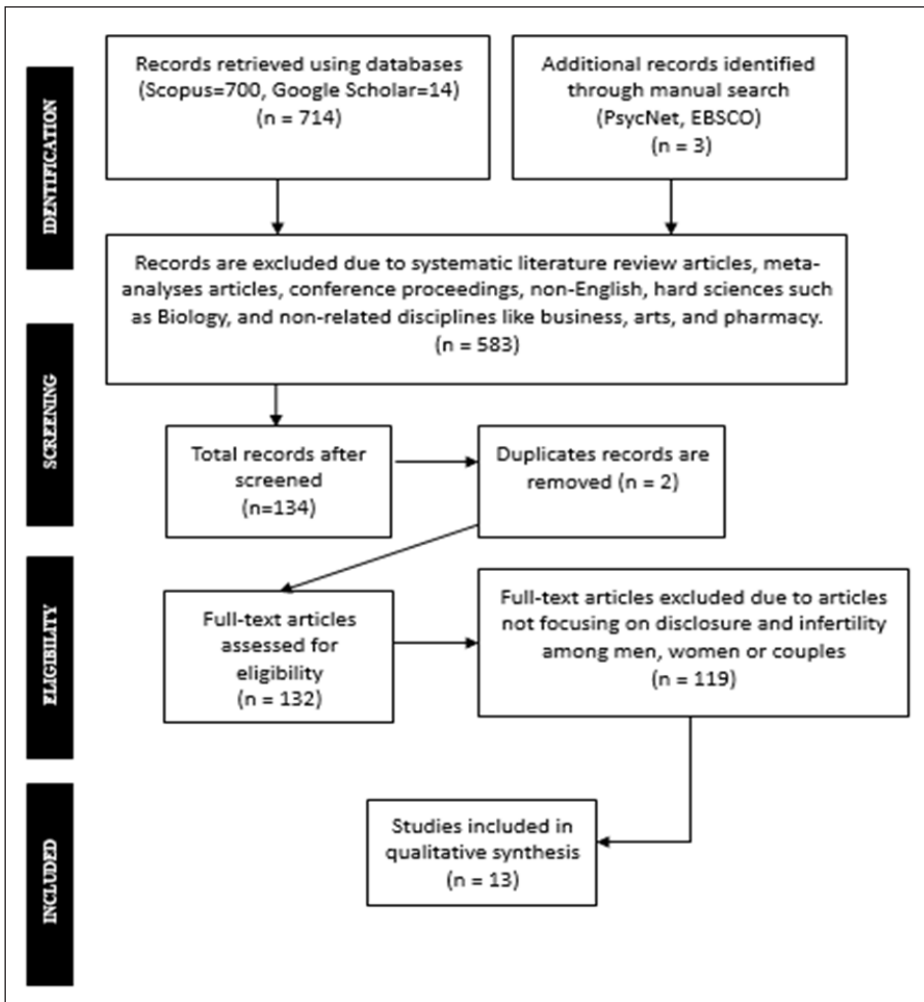


Figure 1. Flow diagram of this review study. Source: Adapted from Moher et al. (2009)

Search Strategy

Firstly, the researchers conducted a thorough literature search using two electronic databases: *Scopus* and *Google Scholar*. The search strategy used Boolean logic and combined relevant search terms such as “disclosure” and “infertility” and search strings to identify relevant articles for this study (Table 1). Although *Scopus* requires a subscription, it covers many literature types and subject areas. On the other hand, *Google Scholar* is free and an open search engine. It covers a vast collection of publishing formats and subject areas.

Table 1
Search strings to identify relevant articles in this study

Databases	Search strings
Scopus	TITLE-ABS-KEY (["disclosur*" OR "information sharing" OR "confess*" OR "unveil*"] AND ["barren" OR "infertility" OR "childless" OR "impotence" OR "sterile"])
Google Scholar	allintitle: "disclosure" OR "information sharing" OR "confess" OR "unveil" AND "infertility" OR "childless" OR "barren" OR "impotence" OR "sterile"

Manual searches are mainly used to identify additional primary studies for the literature review. This approach is important to ensure that journal articles are not missed during the primary search (Chapman et al., 2010). In this review, researchers identified three relevant journal articles from two other databases (*PsycInfo* and *EBSCO*). The searches spanned from 2000 to 2023, encompassing the entire database

inception period. We deliberately refrained from imposing a temporal limitation on including papers in our search process. This strategic choice was made to enhance the comprehensiveness of our study.

Screening and Eligibility

At this stage, all papers meeting the following criteria were eligible for inclusion: Firstly, the timeline was set from 2000 to 2023. Secondly, only full journal articles were selected. Thirdly, only English was chosen to overcome the language barrier and reduce the distortion of meanings caused by translation. Fourthly, the subject area mainly covers social sciences, psychology, arts and humanities, and communication since the researchers are keen to understand infertility disclosures from a communication perspective, not a medical one.

Excluding articles during the systematic review screening is a key step guided by PRISMA principles. This process involves identifying, assessing, and documenting reasons for exclusion while using a PRISMA flowchart. Following these guidelines ensures rigor, transparency, and the integrity of the review. In response, exclusion criteria were established to omit studies that did not meet the study's inclusion criteria (Table 2). Finally, 13 articles were included for coding and analyses after screening and eligibility.

Data Extraction and Quality Assurance

The researchers have carefully extracted the data that answers the research questions (Shaffril et al., 2019). To minimize errors in data compilation for data analysis later,

at least two researchers do data extraction independently to minimize errors during the data compilation process. This data extraction process comprises three steps Whittemore and Knafl (2005). First, the researchers need to read the articles' titles. Next, researchers have to go through the abstracts. Finally, researchers need to vet the articles thoroughly to determine the data based on the research questions outlined. Researchers have applied thematic analysis approach in this study.

Okoli (2015) highlighted that integrating qualitative and quantitative studies is a key aspect of qualitative synthesis. This study followed an integrative review approach, incorporating qualitative and quantitative research methods. As noted by Dixon-Woods et al. (2005), Hopia et al. (2016), and Whittemore and Knafl (2005), a mixed research design is crucial to gaining a comprehensive understanding of the study from a diverse range of perspectives.

As for quality appraisal, all eligible articles must be appraised to ensure quality. The researchers qualitatively assessed the articles by three categories: low, moderate, and high. Only those articles that have fulfilled the inclusion criteria are considered moderate and high in the category Petticrew and Roberts (2008). Articles excluded based on the criteria were categorized as low in category (Table 2). After reviewing the articles, all 13 articles qualified to rank between moderate and high in categories. Thus, these articles are ready to be reviewed (Table 3).

Table 2
Inclusion and exclusion criteria

Criterion	Included	Excluded
Timeline	2000–2023	<2000 and >2023
Literature type	Journals (research articles)	Books, theses, pre-prints, book chapters, book series
Language	English	Non-English
Subject area	Social sciences, Psychology, Arts & Humanities, and Communication.	Other than Social Sciences, Psychology, Arts & Humanities, and Communication

Table 3
Summary of the journal articles reviewed

No	Year	Title	Authors	Methods	Country
	2000	Childless in the land of imperative motherhood: Stigma and coping among infertile Israeli women	Remennick, L.	Qualitative (26 women)	Israel
	2007	The relationship between perceived stigma, disclosure patterns, support and distress in new attendees at an infertility clinic.	Slade, P. O'Neill, C. Simpson, A. J. Lashen, H.	Quantitative (64 men, 87 women)	United Kingdom
	2008	Computer-mediated infertility support groups: an exploratory study of online experiences	Malik, S. H. Coulson, N. S.	Qualitative (6 men, 89 women)	United Kingdom

Table 3 (continue)

No	Year	Title	Authors	Methods	Country
2008		The male experience of infertility: A thematic analysis of an online infertility support group bulletin board	Malik, S. H. Coulson, N. S.	Qualitative (Total: 166 men and women)	United Kingdom
2009		"Nobody thinks twice about asking": women with a fertility problem and requests for information.	Bute, J. J.	Qualitative (23 women)	United States of America
2010		Privacy management as unfinished business: Shifting boundaries in the context of infertility	Bute, J. J. Vik, T. A.	Qualitative (23 women)	United States of America
2011		Factors that predict married partners' disclosures about infertility to social network members	Steuber, K. R. Solomon, D. H.	Quantitative (50 men, 50 women)	United States of America
2013		Interactive effects of social support and disclosure on fertility-related stress	Martins, M. V. Peterson, B. D. Costa, P. Costa, M. E. Lund, R. Schmidt, L.	Quantitative (334 men, 364 women)	Portugal, the United States of America and Denmark
2012		Relational uncertainty, partner interference, and privacy boundary turbulence: Explaining spousal	Steuber, K. R. Solomon, D. H.	Quantitative (50 men, 50 women)	United States of America
2013		The Discursive Dynamics of Disclosure and Avoidance: Evidence from a Study of Infertility	Bute, J. J.	Qualitative (23 women)	United States of America
2015		Disclosure strategies, social support and quality of life in infertile women	Steuber, K. R. High, A.	Quantitative (301 women)	United States of America
2018		Infertility-related communication and coping strategies among women affected by Primary or secondary infertility	Sormunen, T. Aanesen, A. Fossum, B. Karlgrén, K. Westerbotn, M.	Quantitative (199 women)	Sweden
2021		Talking but not always understanding: Couple communication about infertility concerns after cancer	Hawkey, A. Ussher, J. M. Perz, J. Parton, C.	Qualitative (247 men, 775 women)	Australia

Data Analysis Approach

In this study, thematic analysis was utilized. The researchers analyzed the data using the qualitative synthesis approach, guided by the research questions. After data extraction, the researchers coded and converted the raw

data into meaningful data by identifying codes, categories, subthemes, and themes.

During this process, the researchers also used peer review of coding to ensure that themes were developed well with minimal bias. While going through the data's content,

the researchers summarized similar patterns or disparities and recurring themes in a table that were related to infertility disclosures and coping strategies among women, men, and couples.

RESULTS

Our search across the three specified electronic databases identified an initial set of 717 studies, all published between 2000 and 2021. After eliminating duplicate entries, a refined total of 715 studies remained for a more thorough analysis. Consequently, 132 articles underwent a comprehensive full-text review. Among these, 119 were ultimately excluded, leaving us with 13 studies that met our inclusion criteria and were consequently included in the final analysis (Figure 1).

Out of the initial 717 articles identified, 13 journal articles met the inclusion criteria based on the PRISMA framework. The studies included 751 men, 2010 women, and 166 couples. The review comprised six cross-sectional studies and seven in-depth interviews based on the database.

The review aims to answer two research questions:

1. How do women, men, and couples disclose their infertility challenges to others?
2. What coping strategies do women, men, and couples use when dealing with infertility challenges?

Three themes for research question 1 were identified: Openness, topics, and level of social support.

Disclosure of Infertility Challenges Among Women, Men, and Couples

Various factors, including demographic roles, influence the disclosure of personal information. For women who are experiencing infertility, societal impact plays a crucial role in their decision to disclose. It has been observed that disclosure patterns among those who support parenthood and resist social stigma differ from those who question the importance of motherhood and view it as a mandate. Typically, individuals who hold professional careers, are well-educated, and value familial aspirations are more likely to uphold the idea of motherhood as a necessity (Remennick, 2000). Table 4 summarizes how women, men, and couples disclose their infertility challenges to others.

Openness

Women tend to share certain information only with specific people in their lives. When it comes to infertility, they usually confide in close friends and family members. However, the treatment details are typically only shared with their spouse, partner, or immediate family members. Women who have primary infertility may be more likely to share their struggles with family members openly.

In contrast, those experiencing secondary infertility may be less likely to discuss these issues with others (Sormunen et al., 2018). Infertility is a topic that is usually more commonly discussed among women than men, particularly wives.

Table 4

Summary of themes for disclosures among women, men and couples

Disclosures	Women	Men	Couple
Openness	Selective disclosures. Higher stigma, lower disclosure. Higher disclosures might lead to higher distress related to infertility. Women tend to seek social support from friends and family. Anonymity helps with disclosures, especially on digital platforms.	Very little disclosure when perceived stigma is higher. Men perceive infertility as a threat to their masculinity and tend to avoid it due to societal expectations. Disclosures should be made within the marital dyad.	Very little disclosure when perceived stigma is higher. They are willing to disclose information within the support group within the boundaries they have agreed upon. Disclosures should be made within the marital dyad.
Topic	Types of treatment, Challenges in infertility, selective topics related to knowledge, feelings, and concerns. The focus is primarily on sharing experiences, emphasizing feelings and emotions.	Health concerns, Health issues about infertility. The topics are typically informative and factual in nature.	Treatment plans, treatment outcomes, emotional responses to infertility, long-term treatment perspectives, and marital issues related to infertility.
Level of Social Support	The direct approach garners higher quality support than the entrapment or indirect approach.	Men disclose less due to the perceived higher stigma, often exacerbated by a lack of support networks and resources.	The more stigma there is, the less likely people are to disclose; as a result, they will receive less social support and experience higher levels of stress.

Women tend to confide in their female friends about their infertility issues, whereas their husbands are less likely to discuss them with their social circle. It is advisable to keep these issues within the marriage and not share them with family or friends (Mahlstedt, 1985; Slade et al., 2007; Steuber & Solomon, 2012).

According to Slade et al. (2007), it has been observed that women tend to feel more distressed due to infertility and are more likely to talk about it openly than men. Men, on the other hand, are less likely to talk about it due to the stigma attached to

the issue. When there is a higher perception of stigma, couples are less likely to open up about their struggles. Furthermore, women face a higher risk of being stigmatized due to the societal belief that motherhood is a central aspect of female identity (Mahlstedt, 1985).

Cultural factors significantly influence stigma and taboo, shaping perceived risks and benefits (Cogan et al., 2024; Swami et al., 2022). Western societies encourage openness, with free speech instilled from an early age. In contrast, Eastern collectivist societies often display more hesitancy in

sharing thoughts or opinions, especially when compared to the individualistic norms of the West (Yates & de Oliveira, 2016). This pattern is also evident in communities with strong pro-natalist views (Remennick, 2000).

Topics

Often, women facing infertility struggle with managing their private information, choosing between concealment and disclosure. Bute (2013) and Bute and Vik (2010) have highlighted various approaches to initiating a conversation about infertility. These include the discloser starting the conversation, sharing common problems, and responding to requests for additional information. Depending on the method used, conversation can lead to different outcomes. However, women may have particular topics that they feel comfortable discussing. While some women find it helpful to share their experiences and provide support to others, others may feel burdened by the responsibility of educating others about fertility issues.

Men generally focus on disclosure to gather information rather than share experiences (Malik & Coulson, 2008b). Men are naturally reticent when disclosing health concerns with others. To most men, infertility is reckoning to “we-disease,” in which they should be managing the boundaries within the dyad marital context (Hawkey et al., 2021). Couples usually seek help in topics related to treatment plans, treatment outcomes, emotional responses to infertility, long-term treatment

perspectives, and marital issues related to infertility (Steuber & Solomon, 2012). Couples are encouraged to discuss and explicitly voice their concerns and privacy expectations to avoid potential feelings of betrayal related to information management. This can help overcome any boundary turbulence.

Level of Social Support

Women who openly communicate their infertility struggles on social networks usually receive better quality support and experience and an overall improved quality of life compared to those who use indirect or entrapment tactics (Steuber & High, 2015).

Generally, men feel that the higher the stigma is perceived, the lower the disclosures occur. Thus, the lower the social support will be, the higher the level of stress obtained for those who are suffering from infertility. Infertility issues can be perceived as a shared challenge by couples. Those who openly discuss their struggles with others tend to experience less social stress. Nevertheless, it is common for couples to only share their infertility challenges with close family and friends (Martins et al., 2013). Slade et al. (2007) posited that stigma and disclosures play a vicious cycle.

Coping Strategies

Coping strategies refer to individuals' conscious and unconscious efforts to manage stress, overcome adversity, or deal with challenging moments (Aren & Hamamci, 2024; Balconi et al., 2017; Kramer, 2010).

Coping strategies are especially important for those who are suffering in silence on the journey of infertility.

According to Grunberg et al. (2023), many patients are actively yearning to learn from other people's lived experiences to cope well in this journey of infertility. In this review paper, researchers have identified two themes in answering research question 2: (1) confrontation and (2) avoidance to understand the disclosure coping strategies used among women, men, and couples when dealing with infertility challenges.

Confrontation is a core element of interpersonal skills. People are afraid of confronting and being confronted. Confrontation includes both the attitudes and behavior of the communicator in the community, be it in the form of a dyad or the larger group. Confrontation has many benefits if it is executed with care and concern. Yet, it also induces dissonance. Dissonance may put one person in an uncomfortable state. As such, he or she may react defensively to confrontation (Egan, 1976).

Confrontation and dissonance are a natural part of any healthy relationship. By engaging in open and honest communication, we can better understand the other person and strengthen our connection, ultimately leading to a more profound relationship.

The present study has identified self-disclosure avoidance as a common coping strategy among individuals. The avoidance of self-disclosure occurs for various reasons, which remain undisclosed. Rosenfeld

(1979) posits that both genders experience apprehension in self-disclosure. However, their reasons for apprehension may differ. Men avoid disclosing information to maintain control over their relationships, while some women choose to remain silent to prevent personal hurt and problems with their interpersonal relationships. Men's reluctance to disclose information stems from a fear of being judged, as not everyone may comprehend their point of view. Most men refuse to disclose such information to exercise control over their relationships with others. They do not wish to be viewed as inconsistent, having to make changes later on for what they revealed earlier.

According to Sormunen et al. (2018), three coping strategies are available: active confronting, passive avoidance, and active avoidance. Active-confronting strategies are more frequently used than other coping strategies. It includes talking to others about the emotional effects of treatments they have undergone. However, the use of these strategies depends on the level of education, cultural expectations, and feelings of powerlessness, low self-esteem, and isolation, which may lead to the practice of passive avoidance.

Effective communication is crucial for building healthy relationships, and self-disclosure is key. However, disclosing personal information is ultimately up to individuals or couples. In this paper, we identified how individuals and couples cope with self-disclosure while navigating the challenges of infertility (Table 5).

Table 5
Summary of themes for coping strategies among women, men and couples

Coping Strategies	Women	Men	Couple
Confrontation	Direct humor approach Active confronting (Venting out) via social media. Anonymity helps.	Asking for informational support	Manage privacy boundaries via interdependence between spouses or partners, a mutual form of constructive communication. Seeking help from support groups and infertility educational group interventions.
Avoidance	Distraction technique Resistance approach (defensive thinking)	Reserved and Reticent in disclosures, except with their wives or partners (dyadic approach)	Avoid withholding treatment, such as self-silence.

Confrontation

Individuals who communicate effectively are often fearless in advocating for their beliefs. They are unafraid of influencing those around them and are typically proactive and confident in their expressions. They are usually transparent and truthful in sharing their personal experiences in the hopes of assisting and motivating others who find themselves in similar situations. Nevertheless, the core aspect here is the idea of reciprocity.

Men and women have different ways of dealing with emotional distress. Women tend to be more emotional and expressive, while men tend to be more rational and information-focused. Infertility, in particular, can be a source of psychological distress and strain for both men and women. Women feel more distress over infertility strain, anxiety, and depression as compared

to men. They tend to be more open about their struggles, particularly when feeling anxious, depressed, or overwhelmed (Slade et al., 2007). According to Malik and Coulson (2008b), men express their hopes and aspirations, but they are also afraid of disappointments.

Another technique is humor, which is used to connect with others to alleviate stress. Some women seek social support or vent their feelings (Bute, 2009). Anonymity is an interesting point to consider in online support groups. Women feel safer and more protected when they can remain anonymous. This allows for open and honest communication, which is more prevalent in the groups (Malik & Coulson, 2008a). For cancer survivors dealing with infertility issues, open and honest communication between partners is essential to understand each other better (Hawkey et al., 2021).

According to Martins et al. (2013), support groups and educational interventions focused on infertility can effectively reduce related stress. Maintaining privacy boundaries when discussing sensitive topics like treatment plans, emotional responses, long-term perspectives, and marital issues is crucial and requires interdependence (Steuber & Solomon, 2012).

Constructive communication is also essential for couples dealing with infertility, including openness, honesty, listening, and sharing. Withholding treatment, such as keeping silent or fearing separation, can only lead to misunderstandings (Hawkey et al., 2021). Receiving knowledge, understanding, and empathy are a source of comfort for some women, mainly through online support groups. Rather than burdening their husbands or partners with their decisions, they find solace in sharing their feelings and concerns with others going through similar experiences. These support groups provide a sense of community and help prevent social isolation (Malik & Coulson, 2008b).

Avoidance

Many women who experience both active and passive avoidance tend to keep their emotions hidden. They often try to substitute activities as a form of distraction and look for other life goals to fill the void of infertility. Compared to women who have secondary infertility, those who experience primary infertility are more likely to experience distress. The advent of social media has provided a new platform for infertile women to share their experiences and connect

with others who have gone through similar situations. Through this platform, they can learn about different treatments that can help overcome their infertility issues. According to Kahlor and Mackert (2009), infertile women tend to seek out fertility-related information online.

Women use various coping strategies to avoid dealing with infertility. One of them is distraction, where they keep themselves busy with work and avoid discussions related to children. However, many women tend to avoid disclosing their infertility status and hide it from others. In a pro-natalist society, coping strategies may seem more relevant than resistance approaches. Some women use defensive thinking, strategic avoidance, and courtesy stigma to protect their partners from being exposed to male infertility. They aim to save their partners from humiliation and discrediting (Remennick, 2000).

Steuber and Solomon (2011) state that husbands have higher privacy boundaries than their wives. Men tend to rely solely on their wives as their source of social support, while women often seek support from their family and friends. Although couples may have different approaches to coping with challenges, it is important for them to discuss and express their privacy expectations to avoid any potential feelings of betrayal or embarrassment in the future.

Men tend to be less open about their issues as compared to women. Many of them seek emotional and informational support from online message boards. However, some men question the accuracy of the information provided on these platforms

(Malik & Coulson, 2010). According to Hawkey et al. (2021), men are usually reserved and hesitant to discuss their health concerns, particularly infertility issues, with others. Men view infertility as a problem that affects both partners. Therefore, they rely on their wives or partners as a source of support.

DISCUSSION

After reviewing 13 journal articles, it was found that six articles followed a quantitative approach while the other seven adopted a qualitative approach. The research methods used were quite evenly distributed. Regarding the origin of the papers, six out of thirteen articles were produced in the United States of America, three in the United Kingdom, and one each from Israel, Denmark, Sweden, and Australia. The publications revealed that countries that adopt individualism tend to have more open disclosures than countries that practice collectivism based on Hofstede's Cultural Dimensions.

Cultural contexts shape how infertility is approached, with collectivist societies leaning towards secrecy due to stigma, while individualist cultures encourage open discussion and support. In collectivist settings, where group harmony and family reputation are key, disclosing infertility is often avoided to prevent shame. In Pakistan, for example, infertility may be seen as a failure to meet social expectations, leading couples to conceal their struggles to preserve family honor (Husain & Imran, 2020; Mumtaz et al., 2013). Similarly,

Israel promotes pronatalism (Remennick, 2000). In contrast, women in individualistic cultures like Sweden and the U.S. express a broader range of emotions and receive more social support (Magbri et al., 2018; Steuber & Solomon, 2011).

Out of the 13 reviewed papers, six focused explicitly on women's disclosure and infertility, while the remaining seven centered on couples or mixed genders. Only one paper was found that focused on men's disclosure and infertility, but the responses obtained were from mixed genders. Therefore, it was discovered that research on men's disclosure and infertility is scarce, and this is an evident research gap. Based on the papers reviewed from the year 2000 to the year 2021, it is clear that the majority of empirical studies focus mainly on women about disclosure and infertility. Most of the research carried out was primarily exploratory in the first decade, from 2000-2010. From the year 2011 onwards, more empirical studies began to focus on quantitative research.

Based on the trend analysis, it has been observed that there was more interest among researchers in studying the "disclosure of infertility" in the early 2000s compared to now. During that time, there were also more citations on the topic. The decline in the study of infertility could be attributed to different priorities among couples, the varied lifestyles of today's communities, and challenging circumstances that cause infertility, such as endometriosis and cancer, as compared to the heterogeneous couples who are trying to start their families

(Howard, 2023; Medenica et al., 2022; Tomassetti & D'Hooghe, 2018).

Over the last three decades, there has been a notable decrease in the fertility rate, dropping from 4.9 children per woman to 1.9. This decline can be attributed to various factors, one of which includes lifestyle changes, such as the growing number of individuals identifying as part of the LGBT community (Corrigan et al., 2013; Grafsky, 2018). To avoid social repercussions, these adults are uncomfortable disclosing and choose to prioritize their sexual identity over addressing reproductive health concerns. Nevertheless, certain researchers suggest that there are additional non-visible factors that may cause infertility, such as Endometriosis, Adenomyosis, cancer, and cystic fibrosis (Grafsky, 2018; Tomassetti & D'Hooghe, 2018; Werner et al., 2019). Patients suffering from these illnesses often experience significant emotional distress, prompting them to avoid discussing infertility issues. It is important to consider these factors to gain a more comprehensive understanding of the declining fertility rates.

Empirical studies have shown that infertility is more prevalent among women, but this could be due to men being reluctant to disclose their infertility issues. Therefore, it is essential to prioritize the review of this paper on disclosures and infertility, as male infertility has been increasing over the past two decades (Eisenberg et al., 2023; Leslie et al., 2023; Raheem et al., 2019).

It has been reported that in Malaysia, the fertility rate has decreased by 15% among men aged 30 and below. Surprisingly, a significant majority, 95% of sexually active

men, are not aware of their infertility issues. To address this problem, the director general of the National Population and Family Development Board (LPPKN), Abdul Shukur Abdullah, has made it mandatory for couples to attend clinics together. This measure aims to reduce resistance among husbands. Recent statistics show that from 2010 to 2019, male fertility issues accounted for 75% of the cases of Assisted Reproductive Technology (ART). Therefore, it is crucial to take appropriate measures to prevent a declining population in the future (Bernama, 2020).

Men are often portrayed as rational and decisive beings who know exactly what they are looking for, especially when they need to find information to address their problems. Therefore, it is crucial to have more online support groups that cater specifically to men's needs, providing them with the necessary information and support.

It has been observed that men, women, and couples have different perspectives and expectations when it comes to infertility challenges. Men consider infertility as a shared problem between partners and tend to seek solutions through informational support. However, men tend to disclose less about their infertility issues, which leads to lower social support and increased stress levels. Selective disclosures to trustworthy individuals can be an effective way to seek and gain social support, especially for women who may benefit from the shared experiences of others in similar situations.

Denying or withholding disclosures can increase the stress of the infertility

journey. Couples lacking social support and understanding might find online support groups helpful, where anonymity is allowed. This enables them to share and disclose freely without fear of exposing their identity and receive informational and emotional support. While some patients found anonymity helpful for preserving their self-identity and sharing with peace of mind, others preferred full self-disclosure without anonymity. Many of their infertile respondents shared this preference (Knoll & Bronstein, 2014). It was found that the more anonymous bloggers get, the more they worry about their blogs being read by people they know offline.

The impact of infertility can vary between men and women. Typically, men seek factual information, while women seek emotional support. It is essential to recognize these gender-specific needs and offer appropriate support. Incorporating references and citations that back up the information shared is encouraged to enhance the reliability of online support and the accuracy of the information presented.

Practical Implications

This research highlights the challenges women, men, and couples face when disclosing infertility, offering healthcare professionals key insights into its emotional toll. It underscores the importance of counseling as a crucial step in helping individuals share their experiences and lighten their emotional burdens. Social Exchange Theory (SET) provides a useful framework for understanding interactions

between healthcare practitioners and those dealing with infertility, as individuals seek relationships that maximize benefits and minimize drawbacks (Thompson & Brindley, 2020). Encouraging open discussions about infertility fosters a supportive environment that promotes resilience and emotional well-being (Klaus et al., 2023; Malina, 2023).

Sharing personal struggles can lead to emotional and social benefits, as well as greater access to resources and information. This exchange strengthens social bonds and enhances coping strategies, ultimately improving health outcomes for individuals and couples facing infertility. For healthcare practitioners to provide effective care, creating a safe, non-judgmental environment for open discussions is essential. Online platforms and social media can also help reduce stigma and facilitate discussions.

Addressing social stigma and expectations of masculinity is crucial in encouraging men to open up about infertility. Supportive environments like counseling, online groups, and healthcare practitioners facilitating open discussions can make a significant difference. Educational initiatives raising awareness about male infertility can help dismantle stigma and foster a culture where men can navigate their infertility journeys more openly and effectively.

Limitations and Recommendations

Research on men's disclosures regarding stigmatized issues like infertility is limited. Some studies analyzed mixed-gender or couple-based disclosures, making it challenging to determine disclosure patterns

by gender. Exploring this topic by region or continent in future research would shed light on the cultural and communication perspectives of women, men, and couples, providing a better understanding of their disclosure approaches and coping strategies.

This review also highlights how biases related to gender dynamics, cultural norms, and psychological factors significantly influence infertility disclosures among women, men, and couples. To address these biases, researchers and clinicians must adopt a more inclusive approach that incorporates the perspectives of both partners in infertility discussions.

CONCLUSION

Managing infertility requires a careful balance of open communication, coping strategies, and supportive societal attitudes. Understanding and empathy from healthcare professionals and communities are crucial. By promoting honest dialogue and offering targeted support, we can help ease the emotional burden of infertility. Empowering those affected can lead to more fulfilling lives and stronger relationships, underscoring the importance of compassion and informed care in addressing this challenge.

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