Article



Online social support for infertility in Azerbaijan

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Abstract

Online social support, with its novel opportunities for coping, is especially important for those experiencing isolation. Daughters-in-law in Azerbaijan are isolated and have inadequate support due to patriarchal and patrilocal norms, amplified when they experience infertility. This study considers an online community where supportive communication and resources are exchanged to mitigate infertility isolation. Using virtual ethnography and thematic analysis, three research questions related to different types of isolation are explored. We find support exchanges in this community can likely help women more efficiently and effectively cope with, and have more control over, the immediate stressor of infertility and associated uncertainty, which is profound given the lack of supportive resources they would otherwise have.

Keywords

Azerbaijan, infertility, isolation, online social support, online support, patriarchy, reproductive health, social media, social support, supportive communication, women

Social support is crucial when coping with infertility, a highly emotional and uncertain time. But paradoxically, infertility is isolating, which impacts access to support resources. This paradox has generated scholarly interest, but studies typically consider how those

Corresponding author: Katy E Pearce, Department of Communication, University of Washington, Box 353740, Seattle, WA 98195-3740, USA. Email: kepearce@uw.edu experiencing infertility find resources to complement and supplement existing support. This study examines infertility challenges in Azerbaijan, where women coping with infertility experience notable emotional, social, and informational isolation because of patriarchal and patrilocal systems that provide them with few support resources; thus, they have inadequate support, but an obligation to conceive. Traditionally, infertility would amplify this sense of isolation. More recently, however, women use social media to mitigate infertility isolation. Access to support via social media is an opening for these women, and this social media group can allow for a sense of female companionship and information that can be a lifeline when coping with infertility.

This study uses virtual ethnography and thematic analysis of a large, Closed Facebook group for daughters-in-law in Azerbaijan and evaluates three research questions considering how online support related to infertility addresses isolation. Support exchanges can likely help women more efficiently and effectively cope with—and have more control over—the stress of infertility and associated uncertainty, possibly resulting in greater support adequacy.

This study contributes to understanding of support by considering a case where online relationships may constitute the *only* available support resource due to offline emotional, social, and informational isolation. Having a case where online support is primary rather than complementary or supplementary underscores how online support can be indispensable. Social media are perpetually available, private, and can be anonymous, which are essential for supportive communication (Rains and Wright, 2016), but are even more important when other support is inadequate. This study also brings insight into supportive communication in an atypically studied cultural environment. Finally, by drawing on a culturally contextualized literature review in conjunction with communication theory on supportive communication of support and the experiences of women living in deeply patriarchal societies. We use the scaffolding of Western and Global North theoretical concepts and methodology, but with "a strategic and conscientious attitude" (Bachmann and Proust, 2020: 72).

Literature review

Social support and supportive communication

Social support is a term encapsulating processes related to the exchange of aid within a social network (Albrecht and Adelman, 1987), with supportive communication being the process of seeking, allocating, and receiving support resources and associated behaviors (MacGeorge et al., 2011). Social support processes include management of uncertainty (Goldsmith and Albrecht, 2011) through the use and provision of coping resources (Thoits, 1995), including emotional and tangible assistance (Rains and Wright, 2016), and sense of control (Albrecht and Adelman, 1987). Communication, including feedback and advice, influences support seekers' self-assessments, awareness of available resources, skill acquisition, and stressor re-evaluation/assessment (Albrecht and Adelman, 1987).

Emotional support is the provision of caring, empathy, love, and trust (House, 1981) through behaviors emphasizing affection, confidentiality, sympathy, listening, empathy, encouragement, and prayer (Cutrona and Suhr, 1992). Informational support is provided

during times of stress (House, 1981), related to problem-defining and problem-solving (Meng et al., 2016) and can reduce uncertainty or spark reappraisal of one's situation (Albrecht and Adelman, 1987).

Supportive communication researchers consider the discrepancy between desired and received support as linked to a variety of outcomes. The idea of support adequacy is a larger umbrella for this gap, tied to an evaluation of support quality, including in the context of infertility (High and Steuber, 2014).

Infertility and support. Infertility—medically defined as failure to achieve a successful pregnancy after 12 months or more of timed unprotected intercourse—is a multifaceted stressor affecting approximately 12% of couples worldwide. Socially defined, infertility refers to when a couple regards their inability to have children as a problem in need of corrective action (Greil et al., 2011).

Infertility is fraught with uncertainty (Unnithan, 2019) and high coping needs. This can include not only seeking treatment, but also coping with psychological and relational effects (High and Steuber, 2014). Social support is a critical coping resource for those experiencing infertility (Greil et al., 2010; High and Steuber, 2014).

Isolation and infertility. Social isolation is related to a lack of social integration and embeddedness (Weiss, 1973) and impacts access to resources from multiple social arenas, social belonging and bonding, and socializing with others (Stets, 1991). Emotional isolation is a lack of social integration, attachment, or relationship with one's partner (Stets, 1991; Weiss, 1973). Infertility is a high support time but, paradoxically, can increase isolation. People experiencing infertility often describe feeling isolated from and stigmatized by others (Greil et al., 2010; High and Steuber, 2014; Jansen and Saint Onge, 2015; Nahar, 2022; Sawyer, 2019; Unnithan, 2010a, 2010b, 2019), and women experiencing infertility report receiving insufficient support from their partners (Billett, 2019b; High and Steuber, 2014). Yet "[m]aintaining positive social relationships throughout struggles with infertility can be critical" (Jansen and Saint Onge, 2015: 185). And supportive communication needs during infertility may be most effectively met by friends (High and Steuber, 2014). For those experiencing social and emotional isolation or support inadequacy, any support can be powerful (Thoits, 1995).

The current study also considers the role of informational isolation in coping with infertility, whereby essential information related to coping with stressors or achieving a goal is absent or unattainable. Lack of access may be due to systemic or cultural suppression of information like language, stigma, taboo, institutional barriers, and lack of capital (Savolainen, 2016). The experience of infertility is a particularly challenging time for informational isolation because women have a high need for informational support (High and Steuber, 2014) and understanding reproductive health can be challenging (Greil et al., 2010).

Isolation and infertility: the case of Azerbaijan

This study considers women who have difficulties accessing support and experience support inadequacy due to culturally specific forms of isolation. Understanding support mechanisms for those experiencing social, emotional, and informational isolation due to both infertility and cultural norms that restrict women from accessing resources helps elucidate how individuals overcome isolation to access resources.

The context for this research is Azerbaijan, a former Soviet republic that is secular, but culturally Muslim, with Islam strongly influencing gender norms (Tohidi, 1997). Azerbaijan and its culturally similar neighbors are patriarchal (Tohidi, 1997), meaning relations of power and authority of men over women are learned through socialization and institutionalized through society (Inhorn, 1995 [Egypt]). These cultures are also patrilocal (Heyat, 2002 [Azerbaijan]; Hortaçsu and Baştuğ, 2000 [Azerbaijan, Turkey, Turkmenistan]), where new brides traditionally move into their in-laws' home upon marriage and their lives center the husband's family.

This study focuses on a particularly vulnerable life stage: women's entrance and early years in their in-laws' home. In Azerbaijan, and throughout Turkey and Central Asia, a daughter-in-law is known as a *gelin/kelin* (spelling depends on dialect): "a social category that has a special status . . . a [*gelin*] has a very low if not the lowest status, not only in family and kinship networks but also in her neighborhood" (Turaeva, 2017:172 [Uzbekistan]). Zhussipbek and Nagayeva (2021 [Central Asia]) describe *gelins*' status as low, subservient, marginalized, and oppressed.

Gelins are vulnerable and experience uncertainty and stress due to their status (Turaeva, 2017 [Uzbekistan]; Zhussipbek and Nagayeva, 2021 [Central Asia]). New *gelins*' security in the households is precarious, and many *gelins* fear being rejected from the in-law family, as well as the shame associated with divorce and being returned to one's natal family (Harris, 2004 [Tajikistan]).

Gelins must adhere to many norms, but the most important is motherhood. For *gelins*, reproduction—especially of sons (Baştuğ and Hortaçsu, 2000 [Turkmenistan]; Heyat, 2002 [Azerbaijan]; Hortaçsu and Baştuğ, 2000 [Azerbaijan, Turkey, Turkmenistan]; Sattarov, 2012 [Azerbaijan])—is a source of status, power, and security in an insecure position (Demircioğlu, 2015 [Turkey]; Inhorn, 1995 [Egypt]; Kandiyoti, 1988 [classic patriarchy]). New *gelins* face immense pressure to become pregnant quickly (Baştuğ and Hortaçsu, 2000 [Turkmenistan]; Demircioğlu, 2015 [Turkey]; Harris, 2004 [Tajikistan]; Penkala-Gawęcka, 2017 [Kyrgyzstan]). Indeed, almost no new brides (0.6%) in Azerbaijan use contraception (Yüksel-Kaptanoğlu et al., 2014). While many *gelins* may not meet the medical definition of infertility, they still experience social infertility because conception is a problem in need of corrective action.

Infertility is an onus for Azerbaijani women, where fear of consequences looms large. This is typical for pronatalist cultures where children are highly valued, marriages are expected to produce them, and consequences of infertility are severe—divorce, violence, and ostracism (Anvar, 2015 [Uzbekistan]; Baştuğ and Hortaçsu, 2000 [Turkmenistan]; Gürtin-Broadbent, 2016 [Turkey]; Harris, 2004 [Tajikistan]; Inhorn, 1995 [Egypt]; Nahar, 2022 [Bangladesh]; Unnithan, 2010b [India]). Having a child is not viewed as a choice but as an obligation, with investment and involvement from extended families (Anvar, 2015 [Uzbekistan]; Inhorn, 1995 [Egypt]; Sattarov, 2012 [Azerbaijan]; Unnithan, 2019 [India]).

Given this, women will do literally *anything* to have a baby (Gürtin-Broadbent, 2016 [Turkey]). Faced with pressure, *gelins* coping with infertility need support. Yet, many

have inadequate support resources available because of emotional, social, and informational isolation, enabling a deeper infertility-isolation paradox because of the lack of support resources available.¹

Emotional isolation. Emotional isolation from infertility is amplified for *gelins* because of poor spousal attachment. Much has been written about the lack of connection between new spouses (Harris, 2004, 2011 [Tajikistan]; Roche, 2017 [Central Asia]). Reasons for this are partially due to how *gelins* enter the family and the nature of the marital relationship. Couples may not know each other well prior to marriage, and arranged marriages are not uncommon (Harris, 2004 [Tajikistan]; Heyat, 2002 [Azerbaijan]; Ismailbekova, 2014 [Kyrgyzstan]). In addition, while *gelins* are generally homebound (Baştuğ and Hortaçsu, 2000 [Turkmenistan]; Heyat, 2002 [Azerbaijan]; Turaeva, 2017 [Uzbekistan]), husbands spend much time during the first year celebrating the marriage with friends (Baştuğ and Hortaçsu, 2000 [Turkmenistan]).

Spouses may lack opportunities to get to know each other after marriage because of the mother-in-law, who may prioritize her son's bond with her over his bond with his wife (Harris, 2004 [Tajikistan]; Kandiyoti, 1988 [classic patriarchy]). Mothers-in-law hold substantial power over *gelins* (Demircioğlu, 2015 [Turkey]; Harris, 2004 [Tajikistan]; Heyat, 2002 [Azerbaijan]; Ismailbekova, 2014 [Kyrgyzstan]; Roche, 2017 [Central Asia]; Turaeva, 2017 [Uzbekistan]; Zhussipbek and Nagayeva, 2021 [Central Asia]).

While typically women turn primarily to their partners for emotional support during infertility (High and Steuber, 2014; Malik and Coulson, 2008), at least in contexts that have been studied, we argue this may not be possible here because of emotional isolation and support inadequacy.

Social isolation. Many gelins are socially isolated and have barriers to accessing social connections for support and thus may experience support inadequacy. Some gelins are discouraged from communicating with natal family and friends (Baştuğ and Hortaçsu, 2000 [Turkmenistan]; Costa, 2016 [Turkey]; Harris, 2004 [Tajikistan]; Ismailbekova, 2014 [Kyrgyzstan]; Kikuta, 2019 [Uzbekistan]). A national survey found 10% of wives were not allowed to meet with their family and 13% were not allowed to meet with friends (State Statistical Committee of the Republic of Azerbaijan, 2006). And female friendships typically fade after marriage (Harris, 2004 [Tajikistan]). Only two-thirds of women reported having close friends, opposed to 88% of men (Caucasus Research Resource Center, 2012a). And 42% of women say they never or rarely spend time with friends, opposed to 20% of men (Caucasus Research Resource Center, 2012b). While technology provides an avenue for maintaining communication with others, these are sometimes controlled by the mother-in-law or husband (Pearce and Vitak, 2016). However, the women in the group of study seemingly have some access.

Informational isolation. Gelins additionally experience informational isolation, especially related to reproductive health. We understand informational isolation as a state where access to informational support resources is constrained or unavailable to individuals who would benefit from it.

Reproductive health information in Azerbaijan. In Azerbaijan, informal and formal discussion of sexual and reproductive health is taboo in homes, at school, and with medical professionals (Heyat, 2002; State Statistical Committee of the Republic of Azerbaijan, 2006). Chastity imperatives cause silence about reproductive health. Information about sex is purposefully kept from girls to keep them "innocent" and maintain virginity (Harris, 2011 [Tajikistan]). The effect of this is low levels of sexual knowledge (Azerbaijan Republic Ministry of Health, 2011).

Sources of informational support, with surveillance. Gelins have a difficult time seeking informational support. With health information needs, gelins have traditionally sought information from their mothers-in-law, who are health gatekeepers (Penkala-Gawecka, 2017 [Kyrgyzstan]). A mother-in-law's involvement in and control over health information and decision-making is highest when reproductive health is at stake (Demircioğlu, 2015 [Turkey]; Inhorn, 1995 [Egypt]; Molchanova et al., 2018 [Kyrgyzstan]; Penkala-Gawecka, 2017 [Kyrgyzstan]; Perelmutter, 2014 [Russia]; Peshkova, 2002 [Uzbekistan]). Mothers-in-law are highly engaged in fertility scrutiny: surveillance of pregnancy signs or the lack thereof (Anvar, 2015 [Uzbekistan]; Gürtin-Broadbent, 2016 [Turkey]).

Informational isolation also plays a role in infertility treatment. Traditionally, women in Azerbaijan sought folk remedies and wisdom from older women, which was and is the most powerful source of information and support, even with modern options available (Anvar, 2015 [Uzbekistan]; Inhorn, 1995 [Egypt]; Nahar, 2022 [Bangladesh]; Peshkova, 2002 [Uzbekistan]; Sattarov, 2006, 2012 [Azerbaijan]). Spiritual healers may be appealing versus modern options because they offer women both explanations and solace (Unnithan-Kumar, 2001 [India]). Indeed, folk beliefs, especially around health, are commonly accepted in Azerbaijan (Sattarov, 2006).

Online support for gelins

For *gelins* with access, social media can radically alter isolation and overcome barriers like restricted access to female relationships. Social media are described as revolutionary in combatting isolation for such women (Costa, 2016 [Turkey]; Kikuta, 2019 [Uzbekistan]; Younas et al., 2020 [Pakistan]). The ability for *gelins* to seek information and support has impact on her power, described below. These are examples of what Bachmann and Proust (2020) describe as social media deeply changing female life in the Global South.

Addressing social and emotional isolation, online relationships are particularly important because *gelins* are discouraged from having friends (Costa, 2016 [Turkey]; Harris, 2004 [Tajikistan]; Ismailbekova, 2014 [Kyrgyzstan]; Kikuta, 2019 [Uzbekistan]; Pearce and Vitak, 2016 [Azerbaijan]).

For access to people and relationships that impact isolation, we build upon Costa's (2021 [Turkey]) concept of immobile mobility, loosely based on Wallis' (2013 [China]) use of the term, when homebound women go to digital places to engage in alternative forms of sociality while isolated at home and the ways social media afford opportunities to transgress and reinforce social norms. This concept allows us to explore how female agency unfolds into the practices of social media use (Costa, 2021). "The concept of

'immobile mobility' captures women's movement beyond the social, cultural, and physical limitations created by the patriarchal family, without an open challenge to its founding social norms" (Costa, 2021: 142).

And social media can help with informational isolation as well. As Kikuta (2019) explains about a *gelin* in Uzbekistan, technology "replaced her in-laws as a source of information, and, thereby undermined the existing hierarchical family relationship" (p. 192). This is important given the lack of reproductive health information. Social media can provide sexual education (Kikuta, 2019; Younas et al., 2020).

Online support for all

Beyond social relationships online, research has shown online support complements and supplements other forms of support (Goldsmith and Albrecht, 2011; Rains and Wright, 2016). Infertility online communities are numerous and provide coping strategies and many forms of support (Billett, 2019a; High and Steuber, 2014; Jansen and Saint Onge, 2015; Malik and Coulson, 2008; Sawyer, 2019; Yeshua-Katz, 2019). Mohd Jan and Pung (2014) find that online groups allow Malaysian women an opportunity to talk about stigmatized infertility anonymously. Online support is important for those isolated (van Ingen and Wright, 2016; Wright, 2016; Zhao and Basnyat, 2018) because of availability (Rains and Wright, 2016) and ability to find similar others (Wright, 2016).

When people believe they have less or inadequate in-person offline support, they may turn to online support (Namkoong et al., 2017; Rains and Wright, 2016), including socially isolated people (van Ingen and Wright, 2016). Rains and Meng (2022) argue, "[O]nline relationships offer a means to overcome the limitations of one's offline network and have one's support needs satisfied" (p. 492). Sometimes these limitations are due to dissimilarity or lack of available others (Wright, 2016). Overall, individuals can use online resources to overcome support inadequacy. The current study differs from past studies because we speculate this support may be more of a primary form of support rather than complementary or supplementary due to severe support inadequacy.

Given the context of emotional, social, and informational isolation, coupled with the potential for online support to address Azerbaijani *gelins*' isolation from infertility, we pose the following questions:

RQ. How do online support exchanges related to infertility address offline (a) emotional, (b) social, and (c) informational isolation?

Method

This study uses virtual ethnography and thematic analysis of a Closed Facebook group for Azerbaijani women who are hopeful, expectant, or new mothers. Virtual ethnography involves developing understanding through immersive participation and data collection (Hine, 2011). Facebook is fairly popular in Azerbaijan; as of April 2018, 55% of adult men and 26% of adult women used it (Pearce, 2018). The second author requested to join the three largest and most active parenting groups, each with more than 15,000 members and at least 35 posts per day, and was added to two groups in December 2017. After a month of observation, one group was selected for focus due to activity levels and its inclusion of pregnancy-related topics. This group is different from other online infertility communities because infertility is one of numerous topics discussed. Thus women remained in the group after infertility needs resolved. The selected group had approximately 20,000 members, six administrators, and averaged 144 posts per day. The group is Closed, meaning its existence and name are visible to all Facebook users and anyone can request to join; however, an administrator must approve members. In order to join, individuals answer questions about gender, marital status, children, and how actively they will participate. When the second author joined, she disclosed she is a non-Azerbaijani graduate student and was forthcoming about her role as a researcher. She observed the group for 4 months.

Given the size, we are confident members understand the group's "publicness." Some members acknowledged this publicity through use of pseudonyms and posting anonymously. Nonetheless, we constantly engaged in feminist reflexivity, with the utmost concern for participants. All examples provided are obfuscated, and quotations are translated from Azerbaijani into English, so identification is unlikely. Two authors have intermediate-advanced Azerbaijani language skills. All translations were verified with a native speaker.

For data collection, the second author monitored the group daily for 4 months in 2017 and 2018. In 2018, keyword searches were conducted to collect posts related to infertility for the entirety of the group's existence. Keywords included infertility and its variants, equivalent to barren, sterile, and so on. We also searched for common misspellings, especially tied to transliteration of Azerbaijani. Results of searches were placed into a document with a screenshot of the original post and all comments, the link to the post, and the text of the post and comments. Over 14,000 posts resulted from this keyword search. We then limited the posts to only those in 2017 and 2018, producing around 5000 posts. Those outside of the scope of the study were removed. The second author coded 1100 posts deemed within the scope. When posts were made requesting or providing support, the second author noted it and annotated with a sentence-length summary.

Thematic analysis was chosen to give descriptions to observed phenomena (Boyatzis, 1998). We developed a framework based on a number of literatures because online support groups, messages, uncertainty management, and information seeking work together in naturally occurring conversations and exchanges of support. We began deductively with social support codes from the literature, especially Cutrona and Suhr (1992), which were then cross-analyzed with emotional, social, and informational isolation. We also allowed for identification of emergent codes and themes (Boyatzis, 1998), especially related to isolation, as they were not the focus of existing frameworks.

Line-by-line coding of each post was employed using complete thoughts as the unit of analysis. The second author coded 860 posts; the first and second authors discussed and refined the codebook. The second author then coded all remaining posts (250), and the first author reviewed to confirm coding. Finally, excerpts were exported into Excel, and several meta-matrices were created to find patterns, determine representativeness of findings, and detect negative cases.

Results

RQa. Online support and emotional isolation

Emotional support is a common element of online infertility communities (Malik and Coulson, 2010). And individuals with less in-person support resources are more likely to receive emotional support online (Meng et al., 2021). While support from members cannot replace spousal attachment, the emotional support provided can function both as a supplemental relational attachment for infertility and as a primary support resource for navigating relations with one's husband and mother-in-law. As such, group participation and emotional support exchanges may assuage emotional isolation experienced by *gelins*. Specifically, posting in the group allowed for emotional venting, and commenting provided both validation for and reappraisal of experiences with infertility, as seen elsewhere (Malik and Coulson, 2010). Such support may reduce feelings of uncertainty and, consequently, isolation.

Gelins engaged in many emotional support exchanges, much of it tied to struggles with conceiving and sustaining a viable pregnancy. Members commonly posted about infertility with implicit, and sometimes explicit, requests for support. Informational support was often given in response, although emotional support was usually present. Commenters provided themselves as examples of having overcome a problem. For example, in a post about not being pregnant after 6 months of marriage, dozens commented that not only did they become pregnant after 7 or more months, but also how they conceived. In another example, a member expressed concern with the possibility of an ectopic pregnancy, a commenter evaluated that her concerns were unfounded and wrote, "Why are you thinking in such a terrible way? Be positive, everything will be good. It's the hormones. That's why you're worried like this. I was the same. Even the smallest thing made me hysterical when I was pregnant." Such reassurance through personal examples may both validate the poster's experience and encourage reappraisal of their situation.

Emotional support was also provided in use of virtual sending of affection including phrases like "sending kisses" and heart and kissing emoji. Phrases like "may God help you" and the A emoji were offered on posts about pregnancy complications. Johnson et al. (2020) find that "[E]moji will never 'cure' or 'heal' infertility, but their use illustrates the potential of paralinguistic cues as buffers for stress and loneliness in health crisis moments" (p. 323). Emoji represent an emotive exchange, a visual depiction of emotional engagement, which in and of itself is emotional support (Johnson et al., 2020). Similarly, heartfelt comments of sympathy were common on posts about infertility and miscarriage. These reactions often appeared in response to expressions of emotions, and thus validated this venting or fears.

Members also provided emotional support through validation. Validation communicates agreement with the recipient's perspective on their situation (Cutrona and Suhr, 1992), and was offered when members expressed feeling scared. For instance, a member posted an ultrasound saying, "I get stressed whenever a doctor's visit is coming up. Am I abnormal? Every time I think the baby isn't going to be alive." A commenter replied, "You are not alone. © I also think about this day and night. I am going for an ultrasound in 3 or 4 days and I'm already nervous." The member replied to this commenter that she was glad she had asked and found others like her. Similarly, in response to a member confiding she could not stop worrying about pregnancy complications, a commenter empathized, "I was also scared like you. Hundreds of those worries ran through my mind. Thankfully nothing came of them and everything is fine. I had an ultrasound at 7 weeks and heard the heartbeat." The member seeking support responded, "May God bless you, dear. God willing, I will hear one too." These examples demonstrate the use of validation as an emotional support resource in the management of uncertainty.

Support requests also directly addressed emotional isolation. Some sought ways to connect with their husbands or manage their mother-in-law relationship. In responses to such requests, commenters shared their own experiences to help the original poster understand her own situation and coping possibilities. Another frequent topic was dealing with fertility scrutiny and surveillance, which can be emotionally isolating. A member wrote, "Hi girls. I've been married 4 months and I'm still not pregnant. Is there anyone who got pregnant after 4 or 5 months without getting treatment? What did you do? I'm tired of hearing 'any news?' [from mother-in-law]." Most commenters provided emotional and informational support for this, giving concrete examples from their own lives. And one joked, "Tell your mother-in-law if she wants a child, go ahead and give birth to one."

While most fertility scrutiny came from mothers-in-law, some members asked for support regarding husband pressure, like "I'm not in a hurry myself, dears, but my husband is terribly eager for a child and says if he's 30 when the baby is born he'll be too old as it grows up." The poster added in the comments that she was concerned about her husband's insistence that they have intercourse. While some commented that the poster should pretend to have a headache in order to avoid intercourse, some indicated the poster should "just get it over with" and "he has a right to want an heir."

Members discussed barriers to fertility treatments due to their mother-in-law's interference. Complaining about mothers-in-law's "old fashioned" views regarding infertility treatments also occurred, and members helped each other craft replies. Venting also happened, for example: "I went to so many doctors and all of them said there was no problem with me and to bring my husband in. But my mother-in-law said nooooo there's nothing wrong with my child." Another member agreed with her:

It turned out that my husband was the one with a problem. His mother didn't let him see a doctor because she was so sure that he was healthy. She said that her son was fed only the best meat his whole life and was well taken care of so there's no way for him to have health problems.

A third member replied to both: "There's so many *gelins* who receive infertility treatment for years only to eventually learn that the problem is their husband." Providing these examples when *gelins* pushed back against mother-in-law hegemony can be powerful.

RQb. Online support and social isolation

In the group, companionship and social connection were frequently evoked, conveying presence, but also emphasizing friendship and shared experience. This often happens in online support groups, including infertility (Billett, 2019a; Malik and Coulson, 2010; Yeshua-Katz, 2019) and isolated people (Zhao and Basnyat, 2018). We presumed that social isolation typically experienced by *gelins* would result in expressions of feeling alone and seeking support that would address isolation. While such interactions did occur, they were not as common as requests for emotional or informational support. One post exemplified how members felt about the group: "I know I must be tiring you with my long messages, but what else can I do? You understand and help me more than anyone." We speculate this is related to the group size and norms related to female relationships. As noted, gelins are discouraged from continuing friendships, much less starting new friendships. Thus, social isolation is normative and not discussion worthy. But, beyond tangible social relationships, there was a general sense of inclusion and companionship within the group. For example, welcoming messages were proffered to new members. Even when new members admitted to not being pregnant or having children, members insisted they were still part of the community because they would soon be trying, and expressed welcome, belonging, and hope that the new member would find utility in membership. Posts expressing thanks also reminded members of the closeness and comradery in the group: "Hi my dears! You are like sisters who always support me in my sorrow and in my joy. I am so grateful to you for entertaining me every day. God bless every one of your babies. ******* This sense of shared experience can provide a powerful basis for support for isolated *gelins*, as both isolation reduction and knowledge that others overcame the same challenge can aid in coping.

The group also fostered a sense of constant presence and availability, an attribute of other isolation (Zhao and Basnyat, 2018) and infertility (Billett, 2019a) online communities. Posts received comments within minutes, at all hours, demonstrating availability. This post received six replies within minutes: "Hi, please whoever is on here reply, it's an emergency . . . who's awake?" In response to a post asking what sets this group apart from others, one member commented, "In every situation some-one will share what they know or their advice. Even if it's 3 or 4 am, at least 5 or 6 members will comment." Posts sometimes expressed recognition that others were always there for them, especially in a way that others outside the group were not. The feeling of presence may also have aided in reducing uncertainty, as members could be confident that someone would be available. Given the isolation experienced by *gelins*, this presence is notable.

A sense of closeness and attachment between members can help with social and emotional support, as found elsewhere in infertility groups (Billett, 2019a; Malik and Coulson, 2010; Yeshua-Katz, 2019). And for *gelins*, this can have even more impact because of isolation. Closeness was often conveyed through asking for updates from members going through challenging times. For example, a member posted: "I'm finally going for an ultrasound. . . . I've been having a lot of confusing dreams and because of them I'm scared. ©© Pray for me girls." Commenters requested the original poster update them with the results. When she updated with bad news, members responded with sympathy. Such exchanges convey a sense of emotional investment in other members, which may ameliorate the emotional isolation resultant from a lack of spousal attachment. They also serve to reduce social isolation.

RQc. Online support and informational isolation

Those with fewer in-person support resources are more likely to receive informational support online (Meng et al., 2021). While informational support is common in infertility groups (Malik and Coulson, 2008, 2010; Yeshua-Katz, 2019), compared to other cultural contexts commonly researched, these women experience greater informational isolation due to lack of resources about sexuality and women's health and mother-in-law gatekeeping. Simple requests for information related to coping with infertility were common, like "Do you know of a medication for getting pregnant?" Commenter: "There is no medication to get you pregnant. Once the doctor finds the reason for your infertility, they will prescribe the right medication you need to take. Asking Allah to ensure that this treatment will work. 凸" Members also asked basic reproductive questions like "Oh girls, what do I do to get pregnant? I've been married for six months and so far absolutely nothing." Responses provided informational support. Some indicated it was too early to be worried: "six months is very soon, why are you in a hurry?" to which the original poster replied, "I know it's fast but my mother-in-law has recently started saying there's something wrong and it's making me nervous." Other members told her that at age 26, "you should get some tests because you're old" and "If you are over 25, you need to go get examined to see if your follicles are ruptured."

Others provided guidance about fertility timing. This was one of the most commonly discussed topics in the group, notable because in surveys, less than one-third of Azerbaijani women were able to correctly answer questions about it (Azerbaijan Republic Ministry of Health, 2011; State Statistical Committee of the Republic of Azerbaijan, 2006).

The pressure to quickly become pregnant demands *gelins* take decisive actions, as illustrated by this exchange:

I'm a bit embarrassed to ask, but I've got a question for you girls and I need your advice. Do you know any positions that are good for getting pregnant? And after sex what do I need to do to make sure I get pregnant?

Commenter: Don't stand up immediately after you have sex. Instead, lay on your right side for a while. And don't wash yourself right away. Hot water will kill sperm.

Other members sought advice about treatments like in vitro fertilization (IVF) and recommendations for clinics and tests.

Given the lack of knowledge and experience, sexual information shared in the group undoubtedly can impact members' lives. But lack of knowledge also facilitates the spread of misinformation: endorsements of folk or spiritual remedies from healers, *some* of which may be dangerous.

Whenever members requested support about improving their likelihood of conceiving, multiple commenters suggested homeopathic solutions, especially drinking onion juice and a local herb. Beyond homeopathic treatments, spiritual healers were often discussed. Many view engaging with spiritual healers ranging as worth doing "just in case" at minimum to being a primary form of medical treatment (Molchanova et al., (2018) [Kyrgyzstan], especially related to infertility (Nahar, 2022 [Bangladesh]; Nazik et al., 2015 [Turkey]; Sattarov, 2006, 2012 [Azerbaijan]; Unnithan, 2010a [India]). To illustrate, there were frequent queries about removal of a curse new brides are vulnerable to. Traditionally new brides are supposed to stay in the home for 40 days after the wedding with only household members seeing them, a period of seclusion called cile (Anvar, 2015 [Uzbekistan]; Sattarov, 2012 [Azerbaijan]). It was very common for members experiencing infertility to attribute it to something that happened in that period, such as an accidental encounter seeing an infertile neighbor from a window. After one member asked for suggestions in dealing with a cilo curse, commenters responded with varying success. "I had a cilp curse removed. I didn't believe in such things but my grandmother did. In November I had the curse removed and in December I got pregnant." The members shared recommendations for infertility healers broadly. Such practitioners gain new clients through word-of-mouth (Anvar, 2015 [Uzbekistan]; Braux, 2017 [Azerbaijan]; Perelmutter, 2014 [Russia]). And like so much else, the efficiency of information sharing on social media has accelerated practices, and these healers are more visible and more easily accessed than in the past, but also promotes practices that may be unsafe or exploitative. Nahar (2022 [Bangladesh]) found that spiritual healers can sometimes exploit desperate infertile women.

Within discussions of spiritual healing, procedures that put women in physically dangerous bindings and consumption of human bodily fluid were discussed. One treatment, bel çəkdirmək, whereby the abdomen is tied tightly with fabric, has a goal to change the uterus' position. This binding could be dangerous but was often discussed. There are concerns about some healer infertility treatments causing harm (Nahar, 2022 [Bangladesh]; Nazik et al., 2015 [Turkey]). This is not to say all alternative treatments are dangerous or only women in Azerbaijan use them. And as Unnithan-Kumar (2001) argues, faith healers may provide greater emotional support for infertility than medical professionals. That said, spiritual healers can prey on women, and treatments can be risky.

Discussion and conclusion

In this study, we examined how Azerbaijani women use a Closed Facebook group to seek and exchange support related to infertility. *Gelins* use this community for support in ways similar to others experiencing infertility. However, the emotional, social, and informational isolation and support inadequacy that characterizes *gelins*' lives undoubtedly influences support exchanges, due to the lack of offline resources available. Emotional support provided in the community may help with the lack of attachment and emotional isolation in their spousal relationships, supplementing it or perhaps serving as primary emotional support. Venting and validation may have also alleviated uncertainty. Social isolation was *possibly* alleviated through relationships, but more often through a general sense of being welcomed into the group and availability and a sense of attachment. Informational support was undoubtedly provided, which can help *gelins* overcome informational isolation. However, informational support sometimes encouraged unsafe practices.

This study provides evidence that scholarly understanding of support manifests differently in varied cultural environments and that assumptions about support availability and support partners in particular may not be as generalizable as theory would suggest, given the different martial relational norms that we have highlighted in Azerbaijan and that relational norms globally do vary. And certainly people do turn to non-spouses for support in many contexts. But this study demonstrates women can find primary support online in the face of isolation.

While we know people turn to online groups when they have lower levels of in-person support (Meng et al., 2021; Namkoong et al., 2017), this case provides evidence of deeper inadequate support resources. This online support is possibly the *only* support these women receive, demonstrating online support need not be only complementary or supplementary but primary. Future theorizing could do more to not presume partner support availability, which would allow for greater understanding of the roles of different sources of support.

This qualitative work can also tie to recent quantitative research comparing offline and online support (Meng et al., 2021; Wright, 2016). It remains unclear under what circumstances online support has a stronger effect on coping than offline support. While the current study cannot demonstrate any causality, it does point to an extreme of inadequate offline resources and the effect online support can have. The current study is not precisely about support adequacy, as we cannot explicitly, entirely, and always determine what the *gelins* in this group want, in terms of support. However, online support may help individuals overcome support inadequacy and should be studied further.

Often studies consider individuals that cannot find adequate support offline because they have difficulty finding similar others, like others with a particular disease. For the *gelins* in this study, it is not so much that similar others are not physically nearby, but rather that they are so isolated in their households that they are not able to access offline support.

While not explicitly referencing support, Costa (2021) and Wallis' (2013) use of immobility mobility concept is useful, whereby homebound women in Turkey and China use social media to engage in alternative forms of sociality and go beyond their limitations while isolated at home. The concept could be linked to supportive communication.

Another notable cultural factor is with social isolation, norms around female friendship in Azerbaijan make it difficult to compare against studies of women online in other cultural contexts. If it is indeed the case that social relationships are critical in coping with infertility (High and Steuber, 2014; Jansen and Saint Onge, 2015), learning how that manifests with different relational norms would be a contribution. Future research should consider how social relationships are constructed under such circumstances and how women view their effects. While conceptually different, the possibility for profound effects is there. Further, as Unnithan-Kumar (2001 [India]) argues, women's reproductive agency is often lessened "because of the dislocation of their relationship with friends and family at marriage" (p. 30), so an exploration of the effects of *any* support could be illuminating.

The context of infertility amplifies both the isolation experienced by *gelins* and the urgency of finding a solution—there is, with little exaggeration, a ticking clock hanging over *gelins*, and the consequences of established infertility are severe. In seeking support via a Facebook group, members address their emotional, social, and informational isolation and support inadequacy in one place.

Another contribution of this study is informational isolation, a state where access to informational support is constrained from those that would benefit from it. And *gelins'* lack of access to reproductive health information in particular and mother-in-law gate-keeping is one of the more severe aspects of isolation. A notable finding was the amount of sexual education exchanged in the group. Like Kudaibergenova (2018 [Kazakhstan]) and Younas et al. (2020 [Pakistan]) argue, spaces like these may be the *only* place for frank sexual discussion for Azerbaijani women. While there is work on information poverty and literacy, this informational isolation concept, tied to emotional and social isolation, allows for an understanding of the antecedents of such isolation that can be better tied to the outcomes associated with receiving informational support. Future research could bring together work on various populations that experience informational isolation to examine the concept. From this study, we see people want support, even without available resources, and will try to get what they need; this helps us understand how people can use online spaces to address inadequate support.

Limitations

There are limitations of this study. Members of the group do not represent all *gelins*, notably because of their technology access. Those able to use Facebook could be more likely to have greater resources otherwise. The most isolated *gelins* likely do not have Facebook. Nonetheless, if we assume some members experience *gelin* life as per literature, this potential power does matter. We also acknowledge that not all Azerbaijani women face the same levels of isolation and that the women in this group are not representative of all Azerbaijani women. However, there is a research bias toward more elite women and this study provides an exception.

The study design prevented greater understanding of these women's lived experiences, but it is difficult to draw direct conclusions about isolation and its relationship to support. Also due to the data analyzed, we do not have the ability to always know how support was enacted nor confirm support satisfaction. There is some evidence the women felt satisfied though. It is customary in this group to reply to *every* response to a support request with a thank you. This is an exemplar gratitude reply: "Ladies, I read all of your comments and you're all correct. Thanks to each and every one of you. Thank you so much for your support. I'll tell my doctor. What a great group this is."

We also acknowledge there may be unintended consequences following support received and support may address the symptoms rather than the root cause. Support for *gelins* addresses symptoms—albeit to potentially positive ends—rather than challenging or dismantling the patriarchal structures that shape women's lives. We caution that actions resultant from support exchanged online, like putting advice into practice, may have consequences. Therefore, we draw on this case study to suggest the limits of online support; while these spaces may be effective tools for addressing social, emotional, and informational isolation, these "prosocial" outcomes stop short of ameliorating the need for larger change. We point to work by Younas et al. (2020) arguing such groups become "spaces where the rules of patriarchy are suspended" (p. 8) and that through support seeking they can "subvert their patriarchal constraints in their offline lives" (p. 8). We did

not find evidence for this, but this line of thinking is interesting and we encourage future research to continue considering it.

We emphasize that the authors are not Azerbaijani, and while this affords distance, we have tried to present Azerbaijani society, *gelins*, and this group as respectfully and ethically as possible. We acknowledge we are studying women who exist in a different cultural situation with a different valuation of women than the authors. We note, however, the novelty and potential of online spaces for women in addressing immediate needs and leveraging limited power under obligations tied to reproduction. We echo women's empowerment scholars' hopes that participating in online women's spaces carries long-term effects for women's well-being, and in dismantling larger patriarchal systems that impact women's lives.

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Note

 There are differences in socioeconomic status and urbanness (Habibov et al., 2017). Nonetheless, the values, beliefs, and behaviors described here are considered ideal. And although some women may not live with their in-laws, that is the scaffolding of relational norms. In the 2013 Caucasus Barometer, the *mean* number of adult household members was 3.58, with a range of 1–10 (*standard deviation* 1.32). Over three-quarters of households have more than three adults, and over half have more than four.

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