

**KNOWLEDGE, ATTITUDE AND MYTHS ON INFERTILITY: A REVIEW ARTICLE****Uzma Eram***

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Keywords: infertility, knowledge, attitude, myths**Abstract**

Infertility is a disease of the reproductive system which affects both men and women with almost equal frequency. While there is no universal definition of infertility, a couple is generally considered clinically infertile when pregnancy has not occurred after at least twelve months of regular unprotected sexual activity. Psychologically, the infertile woman exhibits significantly higher psychopathology in the form of tension, hostility, anxiety, depression, self-blame and suicidal ideation. Social stigma regarding infertility is especially common across South Asia. The aim of this study was to review the literature on knowledge, attitude and myths on infertility.

Introduction

Infertility is a disease of the reproductive system which affects both men and women with almost equal frequency(1). While there is no universal definition of infertility, a couple is generally considered clinically infertile when pregnancy has not occurred after at least twelve months of regular unprotected sexual activity(2). Psychologically, the infertile woman exhibits significantly higher psychopathology in the form of tension, hostility, anxiety, depression, self-blame and suicidal ideation(3). Social stigma regarding infertility is especially common across South Asia. For e.g. in Andhra Pradesh, India 70% of women experiencing infertility reported being punished with physical violence for their failure(4). Women are verbally or physically abused in their own homes, deprived of their inheritance, sent back to their parents, looked down upon by society, or even have their marriage dissolved or terminated if they are unable to conceive(5,6,7). In Tanzania for instance, evil forces are often thought to be the cause of infertility(8). Lack of physical activity and using Fast foods(9,10) are the underlying factors of many infertility related diseases and are linked to testis function and sperm production disorders in men(11-14) and Polycystic ovarian syndrome in women(15). In most cases, these problems can be addressed by simple changes in one's life style(16,17). Stress could also negatively affect fertility(18,19). Smoking can also cause erectile dysfunction and affect the sperm motility [20-24]. Studies show that mobile phone signals can increase the production of deformed sperms or the reduction of the amount produced sperm (25).

The aim of this study was to review the literature on knowledge, attitude and myths on infertility.

Review Of Literature

The results of a study of **Pakistan**(26) indicate that knowledge about infertility is limited in the study population. For instance, more than half of the participants were misinformed that use of IUCD and OCPs may lead to infertility. The most interesting finding of this study was that the majority of individuals would prefer alternative treatment options, if unsuccessful with the allopathic medicine. Also, half of the participants considered a test tube baby an unacceptable option, despite its acceptability by religious dictums. Another significant finding regarding perception of infertility was subjects' beliefs in the evil forces and supernatural powers as a cause of infertility, which correlated with their education level. One of the surprising results found in this study was that only 46% of the participants correctly identified mid-cycle as the most fertile period during the female's menstrual cycle. The lack of accurate information in this case may lead to improper timings of sexual intercourse, thus possibly delaying the pregnancy. The participants in this study correctly identified most of the causes of infertility but also incorrectly highlighted factors that do not cause infertility such as use of IUCD and OCP. This may lead to underutilization of contraception for incorrect fear that the method will cause sterility. In this study, it was noted that alternative medicine options, such as visiting Hakeems(15%) and pirs (faith healers) (13%) were considered acceptable. This reflects prevalence of the strong belief that all ailments cannot be cured by medical science. Another interesting finding of this study was the correlation between beliefs in evil forces or supernatural powers



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as causes of infertility and the education level of the subjects. Some respondents (30%) believed that if the female is not able to conceive, she may be possessed by an evil spirit. The less educated participants were more likely to attribute the causes of infertility to an evil force or supernatural power, outside human control. It was disturbing to discover that people believe husbands should be allowed to remarry and have a second wife in case he is not able to conceive with the previous wife. According to Islam, the religion of majority of Pakistan, infertility is not a ground for divorce for either the male or the female. Yet this study showed that people were still in favor of divorce. Knowledge about treatment option for infertility, such as IVF, is very low because it is an advanced option with limited availability in Pakistan. Amongst the respondents who knew about it, 55% considered it unacceptable because of beliefs that it's not allowed in Islam or that the procedure may use foreign egg or sperm. A study in Iran (27) showed that the awareness level of women regarding risk factors such as Cell phone radiations and Fast foods was significantly higher than men's. On the other hand, the awareness level of men regarding infertility risks of chloride in swimming pool was significantly higher than women. The study results suggested that the average awareness level of women regarding the infertility risk factors in the study area was higher than that of men. The overall awareness level of both men and women was 44% which is not very high. The level of awareness about Cell phone radiations, air pollution, Anxiety, Fast foods, Smoking, alcohol and some medical drug consumption was relatively higher than the other risk factors.

A Study in Nigeria (28) reported that 61.6% of respondents spontaneously mentioned sexually transmitted infections (STI) when asked about causes of infertility, but only 36% spontaneously mentioned irregular menstruation and even fewer 30% recognised it as a cause of infertility after it was mentioned. A substantial number did not recognise smoking, alcohol consumption and diabetes mellitus as risk factors for infertility. Over a third of women however spontaneously mentioned evil spirits and witchcraft as causes of infertility. 73.6% said the woman is blamed for infertility in the community, 71.4% women felt it should not be a reason for divorce, while 40.4% said it was a reason to marry another wife. Majority of the respondents (97%) viewed infertility as a disease and half of the sample felt that the woman alone should seek treatment. Only 28% of participants reported the hospital as the first place of treatment. Awareness of treatment options like drugs and surgery was high (97% and 66.3%, respectively) among the respondents.

The results of another study (29) demonstrated that the participants were knowledgeable about the risk factors for infertility but were not as knowledgeable at recognizing factors that had no effect on fertility (myths and healthy behaviours), and believed that these factors actually increased a woman's fertility potential. In contrast to good risk knowledge, false beliefs were abundant. Participants erroneously believed that they could increase their fertility by, e.g. moving to the countryside, using specific coital techniques, eating fruit and vegetables or adopting a child.

An article reported (30) the negative consequences of infertility are much stronger in developing countries than in the Western societies and these are mainly characterized by personal suffering and social stigmatization. In Nigeria, there has been a general belief that women are at fault for any case of infertility. That is why in some communities like Mbandi, a name for infertile women (*Nwanyiaga*) but no name for an infertile man. However, in spite of the fact that men contribute about 40% to the infertility pool, yet only less than 20% of people in Africa believe strongly that men could be infertile. Over 90% of the African people overtly or covertly believe that infertility is a woman issue that does not concern men. The majority of childless women visit traditional infertility healers most, their first point of call is usually the hospital. The greatest stigmatization comes from mother-in-law. The attitude of mother-in-laws towards their infertile daughters-in-law is usually unfavorable. The attitude of in-laws is relatively unfavourable towards the childless woman and in the long-run; they do support her dehumanization because they believe that the childless woman is aiding the termination of their lineage. As such, in-laws encourage the marriage of a second wife in attempt to ensure the continuation of their lineages. Other women do look down on the childless women, most of the time believe that the childless women are the architect of their condition. The unfavourable attitude exhibit against the childless women by other women include, gossip, scornful laughter downgrading looks, direct/indirect reference to their plight and sometimes open confrontation. The attitude of most children to the childless at times demands pity. The attitude exhibited by most children towards infertile women is not good. They do not usually respect the childless women. Sometimes, children do mock the childless women, calling them witches and they hardly help or assist them in any chore. Thus, childless women are strongly stigmatized in Nigeria.



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In a study in Ghana(31), it was asked from the infertile females under study whether they avoided people or activities that reminded them of their inability to have children, 61% of the women responded in the affirmative. In addition, about 76% of the women indicated that they avoided situations that would make them feel uncomfortable. A higher percentage of women (91%) tried to keep their feelings to themselves, 96% of women kept others from knowing how bad things were, and 95% tried to keep their feelings from interfering with other things too much. In addition, most women (95%) refrained from discussing their problems with anyone other than their husbands /partners . In coping with their infertility problems, the majority of women (99%) prayed . Findings show that 99% of women believed it was God's will and if He chose they would eventually conceive; and 98% hoped a miracle would happen . This finding could mean that women depended on their religion to cope with their situation. The majority of the women(61%) did not blame themselves for their fertility problems. Below were some of the statements from the women:

'I pray to God because He alone can provide'

'I have the hope that the Lord will answer my prayers at the appropriate time'

'I trust in God. I use the experiences of Sarah and Hannah in the Bible to console myself'

'I actively involve myself in church activities and this strengthens me'

'I listen to testimonies of others in church who previously were nothaving children but now have.'

The social meaning of infertility in south-west Nigeria(32) mentioned that the Yoruba word *agan* defines a person who has never been pregnant despite having been married for some time, which in the medical literature refers to primary infertility. By contrast, *idaduro* is used to describe a person who has difficulty in achieving another pregnancy after having had one or more babies, a situation of secondary infertility. *Agan* is generally regarded as being more serious than *idaduro* , however *idaduro* could be particularly serious if there is no male child among the surviving children. Abortion, and promiscuity or 'waywardness' during youth, were consistently put forward as causes of infertility. We discovered a common belief, regardless of the level of socio-economic status and education, that contraceptives themselves cause infertility. Many people believe that the use of exogenous hormones will eventually disrupt the body's natural functions. The belief in supernatural causes of infertility is widespread, bordering on uniformity. The belief that some women are witches, and that curses can be placed on either or both of the couple extends from the illiterate up to the most educated and elite members of society. Even some obstetricians and gynaecologists who treat infertility patients with modern methods believe that witchcraft exists and can cause infertility. Also, it is believed that a woman can be infertile as a result of a vow she took in an earlier life not to bear children. There is also the belief in the phenomenon of *Ogbanje* whereby a woman repeatedly gives birth to a child who is not destined to live beyond the first birthday. When groups were asked about the traditional treatments available to treat infertility, there was a wide variety of responses. Most common was the use of preparations of either boiled or fresh herbs, sometimes boiled together with roots and animal meat such as rat or goat, and either drunk by the woman, inserted into the vagina, or used to wash the body and/or genitals. Commonly, respondents mentioned the use of black soap used to wash the genitals and breasts. These rituals were usually carried out with incantations, but respondents could rarely describe the incantations, saying that the herbalist keeps this information very secret. The herbalist may also prescribe certain rituals or actions, such as the woman bathing at night at a place where roads meet, or making sacrifices of food to evil spirits that may be causing her problem, and leaving the items at a crossroads. She and her husband may also be asked to have intercourse at such a place, or she may be asked to perform rituals at the market place at night. The egg was used variously by people who wanted to curse a woman, who might leave an egg behind her door to prevent her from getting pregnant; or the herbalist would tie an egg above his house which would prevent the woman from having spontaneous abortion. A common consequence of a couple's infertility is the expulsion of the woman from the husband's house, with or without divorce. People most commonly responded by saying the husband would 'send her packing'.

One study of gynaecological morbidity in the slums of Baroda(33) has observed in focus group discussions and case studies that emotional harassment is often expressed by infertile women; for example, "My mother-in-law -- always fights with me and if she has her own way she will see to it that I am divorced and my husband remarried."



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A study of the socioeconomic determinants of divorce in **Bangladesh(34)** concludes that the divorce rate is strongly associated with childlessness.

A **study in South Africa(35)** reported that the participants resorted to isolating themselves from family functions and social gatherings as a means of coping with their infertility. For many of these women, the experience of living with infertility even in the company of loved ones can be a very lonely and painful experience, so much so that to isolate oneself from family functions and social gatherings feels less painful and agonising. Another strategy employed by some of the participants for coping with infertility was avoiding pregnant women and mothers and all activities related to pregnancy and honouring mothers, as it was just another reminder of their inability to conceive and their failure as women. Escapism involves the practice of not thinking about infertility, motherhood, babies or any fertility issues. Some of the participants said they worked more, engaged in shopping, sleeping and basically anything to keep their minds off it.

Conclusion

Efforts should be made to make policies that will address the problems faced by the infertile women. This will help to reduce the pressure on such women and prevent their possible negative actions. There is a need to promote socially valued roles for women other than that of motherhood. Women should be valued for their individuality and their contribution to society rather than their reproductive ability.

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