Infertility is not only a health problem, but is also a central existential intrapersonal and relational conflict. Infertility treatments are invasive, expensive, time-consuming, emotionally draining. All over the world there are numerous traditional methods used in the treatment of infertility. This investigation was carried out to determine the traditional practices of infertile women in a rural county in Eastern Turkey. This is a descriptive study carried out in 105 primary infertile women. Data were collected between September 2007 and April 2008 by using a questionnaire. Data analysis included descriptive statistics. 55% of the women were in the 25–34 year age range. It was observed that only 17% of the women applied to a gynecologist without using any traditional applications while 83% of the women applied for traditional applications. The most prevalent traditional practices were consulting traditional healers, visiting mausoleums where religious leaders were buried, using traditional drugs, use of written fertility amulets. Various traditional practices against infertility are prevalent rural counties. Some of these practices may be potentially harmful for women. Health professionals should be aware that infertile women may sometimes follow questionable traditional practices and advices.

**Key words:** women's health, traditional practices in Turkey, infertility, infertile women.

**Introduction**

Infertility is defined as the inability to conceive after at least 1 year of unprotected intercourse. The lifetime prevalence of infertility in industrialized countries is 15–26%. Data collected by the World Health Organization (WHO) through Demographic and Health Surveys in developing countries indicate that about 186 million married women (excluding China) were infertile in the year 2002, however, the full scale of the problem is not known. Infertility rates vary dramatically between countries and regions, due to the varying incidence of preventable conditions, which can lead to infertility. In some areas, particularly in sub-Saharan Africa, up to one-third of couples are infertile and among them approximately 52% suffer from acquired infertility. On the other hand, the percentage of secondary infertility is lowest in Asia and in developed countries; 23% and 29%, respectively. The incidence and patterns of infertility in Turkey have never been studied systematically.

Infertility is not only a health problem, but is also a central existential intrapersonal and relational conflict, and it is shown that infertility has a strong impact on women's psychological health. Ethnographic studies of infertile individuals describe feelings of distress, loss of control, social isolation, and stigma when couples try unsuccessfully to achieve pregnancy. These same studies make it clear that if the role blockage represented by infertility is distressing, treatment regimens may be a source of equal or greater distress. Infertility treatments are invasive, expensive, time-consuming, and emotionally draining. Treatment involves the repetitive raising and dashing of the hope of pregnancy, perhaps resulting in an increase in the salience of parenthood identity and a heightened sense of distress in the face of the failure to attain parenthood. Studies of treatment populations also suggest that infertility stress is associated with lower quality of marriage and general well-being, especially for women. These factors have forced childless families, especially childless women, to use various non-medical practices to have a child. The Islamic religion gives great importance to the reproduction and continuity of the fam-
ily, and adoption is not preferred as an alternative. Therefore, the treatment of infertility is perceived as a responsibility

All over the world there are numerous complementary and alternative medicines used in the treatment of infertility. The more frequently applied methods include various traditional drugs, acupuncture and some religious practices, such as sacrificing animals. In Turkey, consulting traditional midwives, visiting mausoleums where religious leaders are buried and praying, consulting religious leaders, carrying written amulets, sacrificing animals and using traditional drugs are among the commonly used traditional practices for the treatment of infertility. The traditional practices appear to constitute a significant reproductive health problem, particularly because of their negative effects on women's health. Nevertheless, this important aspect of the issue is greatly ignored both by healthcare providers and the general population.

Women continue performing these practices without knowing that they can carry certain risks or be dangerous for them. Nationwide training and scanning programs are required in order to prevent and reduce certain morbidities.

The more the midwives and nurses know about the values, beliefs and traditional infertility practices of women throughout the country, the better they will be able to meet their needs and gain their co-operation.

The frequency and types of traditional practices may however vary from one community to another. The frequency of traditional practices is expected to decrease as a result of the increase in modern medical facilities and social insurance systems.

This investigation was carried out to determine the traditional practices used by infertile women in Erzurum, Turkey.

Methods

Study design and sample population

This research was carried out in a rural county (Pasinler) in Eastern Turkey. Pasinler is located 37 km to the East of Erzurum. The area of Pasinler is 1460 km², and the total population is 44,644. In terms of socio-economic development, it falls in the lower range of the region. About 80% of the population lives in the plain area and 20% in the mountainous area. Most of the families in Pasinler are occupied in agriculture and stock-breeding. The climate of this region is dry in summer, with maximum temperatures ranging between 27 and 35°C, and cold in winter, with minimum temperatures ranging between −22 and 4°C.

A descriptive study was carried out on married women who applied to the obstetric and gynecologic clinic of the state hospital. The study included 105 participants. Seventeen doctors, 20 nurses and 7 midwives are employed in the state hospital.

The inclusion criteria for the women in this study were (1) being married (2) having primary infertility (3) being admitted to the hospital between 08.00 and 16.00 hours during work days (4) living in local villages.

The study was approved by the local ethics committee. In order to obtain their verbal consent, all participants were informed of the purpose of the study, ensured that the collected information would be used solely for scientific purposes, would be kept confidential and not shared by others except the researchers.

Procedures

Data were collected on a standardized questionnaire, by face-to-face interviews conducted between September 2007 and April 2008. After the medical check, the participants were taken to the interviews conducted by the research team in a private room within the hospital where they could feel comfortable. All interviews were conducted in Turkish. The interviewer read the questions to the women and recorded their answers in the questionnaire form. Each interview took about 10 minutes.

A specific survey tool was developed for this study. The questionnaire was also discussed with academic and clinical experts in the field of infertility.

The socio-demographic/obstetric questionnaire contained closed questions and was developed specifically for this study and used to obtain data on the profiles of the interviewed women. The following items were included in the questionnaire: age, education level, occupation, age of marriage, duration of marriage, contraception, dwelling conditions etc.

Different traditional practices for infertile women were determined using open-ended questions asked face-to-face by the interviewer in the survey. The participants were also asked to reply to questions such as which traditional practices they used for infertility and from whom they learned these practices.

Statistics

Data were recorded and analyzed using the Statistical Package for the Social Sciences software (SPSS Inc., USA, version 11.0). Data analysis included descriptive statistics.

Results

Sample characteristics

Among the infertile women included in the study, 55% were from 25-34 years of age, 47% were primary school graduates. The majority (76%) of the infertile women married at the age of 15-24 years, 48.6% of them had been married for about 1-5 years.

In addition, it was detected that 70% of the women didn't use any family planning method, and that 30% of infertile women didn't know to whom the reason of infertility belongs (Table 1).
It was found that 17% of the women did not use any of the traditional approaches while 83% of the women did actually use these methods. In addition, it was found that 61% of infertile women who practiced traditional applications used old wives’ medicines, 27% used amulets specifically written for this purpose, 21% went to the hodjas, local midwives, 11% visited tombs or burial places, and 11.4% vowed to make offerings (Table 2).

It was found that 36% of the women who used old wives’ medicine received plant juices such as mallow, tree root liquids, parsley, stinging nettle, and 36% of the women placed objects such as dirty wool, trout or garlic in their vaginas and 17.2% of the women sat on musky food substances such as pumpkin, rye and stinging nettle (Table 3).

It was found that 56% of the women who used old wives’ medicine learned this application from their friends and neighbors, and that 44% learned from their relatives or mothers in law. Thirty-nine percent of the participants expressed the wish to search for medical help for infertility themselves, while 23% of the women sought medical help at their husbands’ request.

**Discussion**

Our studies demonstrated that most infertility (48% of all cases) results from physical problems in the woman’s reproductive system. The results of the studies from Tur-
Turkey and from other parts of the world have shown that infertility mainly arises from abnormalities in the woman's system. However, in Turkey, the percentages for female infertility are higher than in other countries. The fact that in our community women are more commonly said to be infertile than men and that compared to men, women are more willing to visit physicians, might be among the reasons for the higher percentage of female infertility.

This study demonstrates that 17% of women do not use traditional methods, while 82.9% do apply these methods. In the study of Kayihan et al., 71% of the women expressed the opinion that they knew the traditional methods but only 14% of them admitted that they applied them. The percentages of women who used traditional methods were reported as 27.3% in studies conducted by Ayaz and Efe and 48% in the study of Pasinoglu. The results of our study are not very similar to those reported by Bayik et al.’s system. However, in Turkey, the percentages for infertility mainly arises from abnormalities in the woman. These results indicate that infertile women are under unconsciousness behind this popularity may include the fact that the study was conducted in a rural area where people in the villages could easily have access to local homemade medicines, low level of education, lack of transport facilities to more developed centers, lack of or high price of lodging facilities in places where more developed centers are located and the need to wait for a long time using modern methods.

In summary, some of the local medicines and remedies used by the participants in our study are drinking juices extracted from some plants, sitting on plant mashes or placing them in the vagina. Obviously, placing plant mashes in the vagina can be potentially harmful by changing the vaginal flora and pH and thus affect vaginal protection from genital infections. Genital infections can decrease the chance of medical treatment for infertility.

Conclusions

The results of the present study indicate that infertile women use traditional methods in order to get pregnant and have a child. Various traditional practices against infertility are prevalent in rural counties. Some of these practices may be potentially harmful for women. Women should be educated about all the unhealthy effects of traditional methods used in the treatment of infertility. The use of modern medical treatments should be encouraged and supported. Healthcare professionals must prevent infertile women from using unhealthy traditional methods or abusing medical treatments. Offering emotional support to the couples during the treatment of infertility can also be considered.

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REFERENCES

TRADICIONALNE PRAKSE TURSKIH NEPLODNIH ŽENA: PRIMJER IZ RURALNOG OKRUGA

SAŽETAK