Fitriani, I. S., et al. (2025). *Nurse and Health: Journal of Nursing. 14 (1): 12-29*
http://ejournal-kertacendekia.id/index.php/nhjk/index

Review Article: Systematic Review, Meta-Analysis, Integrative Review, Scoping Review

TRADITIONAL CULTURAL SOCIO-RELIGIOSITY PRACTICES IN GLOBAL INFERTILITY TREATMENT: A SYSTEMATIC REVIEW

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Article Info:
Received: September, 18th, 2024
Revised: December, 12th, 2024
Accepted: December, 12th, 2024

DOI:
https://doi.org/10.36720/nhjk.v14i1.678

Abstract

Background: Infertility, a complex and diverse issue and in global, particularly within rural regions, it has been observed that a vast majority, approximately 80%, of individuals turn to practitioners of traditional medicine for assistance with various ailments, including infertility.
Objective: Identify traditional practices used in the treatment of infertility in different countries, including herbal therapies, cultural rituals, and spiritual approaches.
Design: In a systematic literature review conducted through the P.R.I.S.M.A, the keywords based on the research questions were "traditional medicine," "infertility," and "cultural practices." In processing article data for filtering using Zotero and scispase applications. The quality assessment tool of this study uses the Mixed Methods Appraisal Tool (MMAT).
Data Sources: Databases including Google Scholar, PubMed, Science Direct, Wiley Library, and Scopus, from 2014 to 2024 searching on September 2024.
Review Methods: Databases were selected for extract data then detailed analysis. The exclusion criteria are those that cannot open full access to the article, and the purpose of the theme is not linear. By synthesizing existing literature. The search yielded 1310 Google Scholar entries, four from Scopus, 233 from Science Direct, 3 from PubMed, and 188 from Wiley Library, 18 valids articles.
Results: Particularly in global, that of rural and urban populations opt for traditional medicine. In developing countries, particularly within rural locales, it is to address numerous health challenges, including infertility. Modifications in diet and lifestyle, rooted in traditional medicine, have been demonstrated to enhance the treatment of infertility significantly. Support from family, friends, and professionals, though necessary, is insufficient to fulfil the needs of individuals facing infertility, who are especially susceptible to complex stresses
Conclusion: The study reveals that the use of traditional medicine such as herbal therapies, cultural rituals, and spiritual approaches is very common, especially in developing countries and rural areas. Factors such as accessibility, affordability, and cultural beliefs are the main reasons people choose this method, however, although many traditional practices show positive results.

Keywords: *Cultural, Infertility, Practices, Socio-Religiosity, Traditional*

E-ISSN
2623-2448
P-ISSN
2088-9909

INTRODUCTION

Infertility, a complex and diverse issue, impacts a significant portion of the globally productive population, presenting itself as a major public health challenge (Harris et al., 2016)(Sepahvand et al., 2023)(Sahraian et al., 2024) Currently, the rate of infertility in the global population varies in each region of each country, including in Indonesia(Alizadeh et al., 2017) with the prevalence value increasing by 3.5% to 16.7% for developed countries. Meanwhile, the prevalence rate in developing countries is 6.9% to 9.3% (Bennett et al., 2015). The leading causes in infertility cases are the second couple's factor with a value of 25.5%, the factor from men or women only with a value of 23.9%, the factor from female fallopian tube problems with 12.6% and the unclear causative factor with a value of 11%, many factors (women only) with a value (9.2%), cases of endometriosis (7.7%), cases of ovulation dysfunction (5.9%), and reduced ovarian reserve (4.1%) (WHO World Health Organization, 2021). Between 2011 and 2017, infertility was predominantly caused by male factors. However, from 2018 through 2020, various causes predominantly led to infertility (Wiweko et al., 2024)(Mashaah et al., 2024) In developing countries, particularly within rural regions, it has been observed that a vast majority, approximately 80%, of individuals turn to practitioners of traditional medicine for assistance with various ailments, including infertility. This widespread reliance on traditional practices is attributed to their cost-effectiveness, ease of accessibility, and numerous health advantages, notably the minimal side effects associated with their use (Baakeleng et al., 2023)

The health system's rapid development and economic significance encompass the widespread utilization of herbal medicine worldwide (Hasanpoor-Azghady et al., 2019). Traditional medicine is utilized by up to 80% of the population in Africa to address their healthcare requirements. Similarly, in Asian nations like China, approximately 40% of all healthcare services comprise traditional medicine (Kaadaaga et al., 2014). In Sub-Saharan Africa, similar to other regions, Uganda exhibits a considerable engagement with traditional medicine, attributable to its easy availability and cost-effectiveness. Particularly in rural districts, these plant and shrub extracts, integral to primary healthcare, serve multiple therapeutic purposes. The systemic review underlines those traditional herbal treatments for various ailments, including infertility, embody critical elements of Uganda's cultural practices in medical care.
The Centers for Disease Control and Prevention and the World Health Organization in the Americas suggest that the search for early treatment for infertility, through diagnosis and initiation of treatment (Miller, 2021) is a promising intervention to reduce the long-term adverse effects of untreated infertility and to help identify other underlying health conditions (Carson & Kallen, 2021). However, the search for treatment and the utilization of reproductive endocrinology services in the United States seems to benefit only married women of white ethnicity (Huang et al., 2023) Although income is often considered the most influential factor influencing the search for treatment, 19 states currently require some form of insurance coverage for infertility. However, many disparities between racial and ethnic groups continue to exist (Huang et al., 2023)In traditional medicine, the etiology and other risk factors are still being determined for the level of search for traditional medicine in Korea based on sociodemographics that contribute to it, which is still low (Cebert-Gaitors et al.,

2022)(Huang et al., 2023) When women experience infertility problems, what often happens in the community in sociocultural life is still a stigma (Petok, 2015) that contains gender bias that women are the strongest party to blame for husband and wife (Zanettoullis et al., 2024) Indonesia is a secular country; its laws and social norms around IVF or sophisticated infertility treatment are very similar to mainstream Islamic beliefs. Many norms are codified in Indonesian law, which shows the spread of Islam in the political sphere. Other norms remain uncodified but still govern clinical practice, so Islamic law effectively prohibits the practice of specific procedures. Poverty and inequality also affect the need and availability of fertility clinics in Indonesia. Despite the high rate of infertility among the poor, Indonesia's limited health insurance does not provide coverage for infertility treatment of any kind and the use of A.R.T. is limited to the wealthy. Fertility clinics are almost entirely located in major cities in Indonesia, which adds another barrier to obtaining A.R.T. for rural residents who cannot afford to travel to the city centre. Of course, it is conceivable that rural residents may want treatment in Indonesia's cities to protect their privacy. Given the cost of treatment at these clinics, the additional travel costs for these people will make treatment more difficult(Purvis, 2015) Identify traditional practices used in the treatment of infertility in different countries, including herbal therapies, cultural rituals, and spiritual approaches. As such, this review describes the interaction between traditional medical approaches, the influence of religious beliefs, and the role of family and community in shaping attitudes towards infertility. Ultimately, this systemic review to contribute to the broader discourse on reproductive health, cultural competence in healthcare, and the integration of traditional practices in the modern medical framework, provides insights for healthcare providers and policymakers in developing and developed countries such as Indonesia and beyond to observe this cultural dimension will not only enrich knowledge about infertility care but also provide a holistic perspective on the reproductive health challenges faced by many people globally today.

METHODS

Design

In a systematic review conducted through the P.R.I.S.M.A, keywords such as infertility, traditional therapy, and lifestyle culture were employed to search authoritative. Population is an individual or couple who experiences infertility in various countries. Interventions used traditional cultural practices, including herbal medicine, rituals, and spiritual approaches. The comparisons used are modern medicines such as assisted reproductive technology (ART) or without traditional intervention. The outcome of this study is pregnancy rates, psychological well-being, and social and cultural perceptions of infertility. The researchers determined the relevant databases for the search of these studies using PubMed, Scopus, ScienceDirect and wiley libraries. The keywords based on the research question were "traditional medicine," "infertility," and "cultural practices." In processing article data for filtering using Zotero and scispase applications.

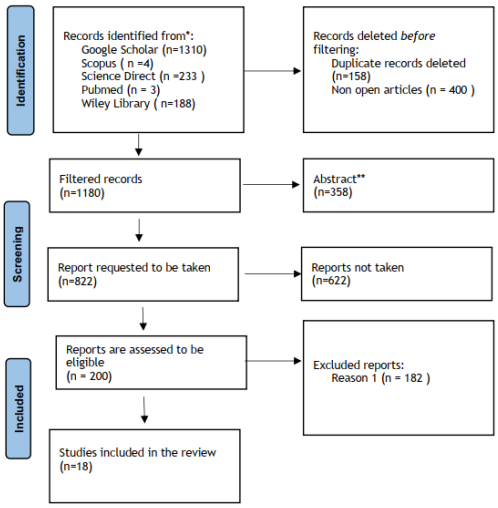
Search Methods

Include: inclusion criteria, which stipulated originality, publication within the English languages, and alignment with the research aims.

Search Outcome

In a systematic review conducted through the P.R.I.S.M.A, keywords such as infertility, traditional therapy, and lifestyle culture were employed to search authoritative.

1. Picture Flow processed Systemic Review



Quality Appraisal

Of all the articles included in the library, the process of identifying duplicate articles was carried out as many as 1180 articles, then the abstract screening process without full text as many as 558 articles, and the next screening process was to review and record full text articles with cognate themes as many as 200 articles, of the 200 articles were validated with the criteria of articles that had a theme according to the included and valid selection as many as 18 articles. This study quality assessment tool uses the Mixed Methods Appraisal Tool (MMAT) because it is for a systematic review that includes a combination of quantitative and qualitative studies.

Data Abstraction

The valid data is then extracted and synthesized, then analyzed and compiled

Data Analysis/ Synthesis

The valid data in the form of a table and calculated as a percentage of the existing theme.

RESULTS

Table 1. List of Articles

No	Tittle & Author	Aimed	Result
1.	Views of traditional practitioners on the causes of female infertility, Baakeleng et al., 2023	This study aims to explore the perspectives of local traditional practitioners regarding the origins of female infertility within the Ngaka Modiri Molema health district in South Africa. This investigation delves into the cultural practices linked to global treatment strategies.	The analysis indicates that social studies provide a comprehensive array of services for managing and treating infertility in rural females. Consequently, themes such as holistic care in infertility, infertility treatment, and historical documentation related to infertility have been identified.
2.	Characteristics and Outcomes of Herbal Medicine for Female Infertility, E Kim et al., 2022	The objective is to explore how patients who seek pregnancy are influenced by traditional treatments for infertility at clinics specializing in Korean medicine (K.M.).	During the specified period, the clinic was visited by 6,194 patients, of which 1,786 were female patients undergoing infertility treatment to conceive. It was recorded that 586 out of these 1,786 women with infertility issues successfully conceived, representing a success rate of 32.8%. Of the pregnant women, treatment

			involving K.M. was received by 476. In contrast, 92 women underwent a combination of K.M. and in vitro fertilization (IVF), and K.M., along with intrauterine insemination (IUI), was utilized by 18 women.
3.	Prevalence and socio-economic factors affect traditional medicine use among adults of Katikekile sub-county, Toronto district, Uganda. Logiel, et al. 2021.	The research explores how adults in the Katikekile District of Moroto district utilize traditional medicine and identifies the variables influencing this practice.	In Katikekile District, 68% of adults utilize traditional medicine. It is observed that these practices are predominantly adopted by the older population, who frequently consider traditional medicine as their initial approach to treating various ailments. The factors influencing this preference include the local availability of medicinal herbs at no cost and the inaccessibility and financial burden associated with facility-based
			healthcare services. Traditional methods are extensively embraced due to their cultural significance, the challenges posed by global medical expenses, and the remoteness of modern healthcare facilities.
4.	Acupuncture and herbal medicine for female infertility: an overview of systematic reviews. J. Lee et al. 2021.	The aim is to synthesize and evaluate the systematic reviews and meta-analyses concerning the effects of acupuncture and herbal medicine on infertility, thereby furnishing substantiation to aid in clinical decision-making processes.	Publications from eight research initiatives originated in China, whereas the United States, the United Kingdom, and Australia each produced three studies. It has been indicated that there is a discrepancy in the effectiveness of acupuncture in treating infertility among women. The clinical pregnancy rates have been enhanced by herbal remedies administered to women with anovulation, those suffering from polycystic ovary syndrome, and those

			undergoing Assisted Reproductive Technology (A.R.T.) as part of traditional and cultural practices for infertility treatment.
5.	The social construction of infertility among Iranian infertile women. Azghady ,et al. 2019.	This study aims to elucidate the psychosocial mechanisms through which Iranian women experiencing infertility socially construct this condition.	Empowerment through effective coping strategies is essential for infertile women striving to attain stability in life and escape societal judgments. It has been determined that the social perception of infertility among these women is shaped significantly by a multitude of interactive factors revolving around the pivotal idea of stabilizing life and eluding external evaluations.
6.	Vitamins combined with traditional Chinese medicine for male infertility. Wang, et al.2020.	The latest research aims to ascertain the effectiveness and security of combining traditional Chinese medicine (T.C.M.) with vitamins in male infertility treatment.	The empowerment of infertile women through effective coping strategies is essential for them to achieve stability in life and to escape societal judgments. It was observed that the social construction of infertility among these women is shaped by multiple interactive factors, with a focus on traditional practices and the central goal of managing life's challenges.
7.	Exploring the cultural perspectives and implications of infertility among couples in the Talensi and Nabdam Districts of the upper east region of Ghana. Kuug A, et al. 2023.	The investigation was aimed at delving into the implications and cultural viewpoints of both genders suffering from infertility within the Talensi and Nabdam districts in Ghana's Upper East Region.	The significance of understanding traditional practices related to infertility treatments in rural Ghana has been demonstrated. Given the cultural predilections prevalent among many communities in Ghana, particularly in the context of the present study, public health practitioners and policymakers must integrate culturally sensitive approaches to fertility interventions.

8.	The social and cultural meanings of infertility for men and women in Zambia: legacy, family and divine intervention. Howe S, 2020.	The objective is to delineate the methods through which infertility is perceived within Zambia's social and cultural contexts, impacting both genders.	A variety of social, emotional, spiritual, and medical strategies are employed by people suffering from infertility to cope with their experiences. Nonetheless, an intervention is only deemed satisfactory if it culminates in the birth of a child.
9.	Prevalence and factors associated with the use of herbal medicine among women attending an infertility clinic in Uganda. Kaadaaga H, 2014.	The aim is to ascertain the frequency and the determinants linked with the utilization of herbal medicine among women visiting the clinic for infertility treatment.	A high prevalence, precisely 76.2%, was recorded for the utilization of herbal medicine among women attending infertility clinics. The selection of herbal remedies was influenced by various factors, including the age and education level of the women, their marital status, the length of time they had been infertile, their nullity, and the duration of their marriages. It was frequently observed that the commencement of medical treatment was postponed, and it was noted that the majority of these women chose not to reveal their use of herbal medicine to their physicians.
10.	Financial costs of assisted reproductive technology for patients in low- and middle-income countries: A systematic review. Njagi P, et al. 2023	Objective: The affordability of assisted reproductive technology (A.R.T.) for patients in low- and middle-income nations and the associated direct expenses are examined.	It has been observed that 76.2% of women attending infertility clinics are users of herbal medicine. Factors such as the age of the subjects, their educational attainment, marital status, the length of time they have been infertile, nullity, and the length of their marriages were linked to this usage. The initiation of medical treatment tends to be postponed, and it was reported that most subjects did not reveal their use of herbal remedies to their physicians.
11	Individual and	The aim is to explore how	The prevalent stigma at the

	community-level impact of infertility-related stigma in Malawi. Bornstein, 2020.	the stigma associated with infertility is produced and its repercussions.	community level profoundly influences decisions regarding the use of contraceptives and the scheduling of childbirth. This stigma not only compels women and men to prevent the onset of infertility but also to dodge infertility itself.
12	Naturopaths' approach to care of women with infertility, Maunder A, 2023.	The management of female infertility by naturopaths, encompassing their methodologies, decision-making in clinical settings, sources of knowledge, and considerations of safety during the provision of naturopaths, are discussed.	The naturopathic approach to the management of women with infertility is holistic, taking into account physical, emotional, and environmental factors and promoting natural healing mechanisms. More excellent knowledge of scientific methods for clinical decision-making and increased awareness of side-effect reporting will improve naturopathy care
13	The Impact of	The objective is to assess	The management of infertility can

	Traditional Medicine-Based Lifestyle and Diet on Infertility Treatment in Women Undergoing Assisted Reproduction, Alibeigi Z, 2020.	how a diet and lifestyle oriented towards traditional medicine influence infertility treatment.	be significantly enhanced by adopting dietary and lifestyle changes rooted in traditional and cultural practices.
14	Female infertility and herbal medicine: An overview of the new findings	Narrating herbal treatment of want with infertility	In the pharmaceutical industry and traditional medicine, compounds derived from these plants are recognized for their safety in treating women's health issues. These substances not only modulate the endocrine pathways in females and alleviate menopausal symptoms but also address reproductive ailments such as polycystic ovary syndrome (PCOS), premature ovarian failure (P.O.F.), endometriosis,

			hyperprolactinemia, and hypothalamic dysfunction. Furthermore, due to their anticancer, antioxidant, and antidepressant properties, these compounds hold potential for global applications in cultural practices and infertility treatment.
15.	Religious and cultural interpretations of artificial insemination in South-West Nigeria. Igbolekwu C, 2023.	The study explores personal, cultural, and religious perceptions of artificial insemination, investigating how these interpretations integrate with traditional practices in the context of global infertility treatments.	54.2% of the participants acknowledged that their religious denominations endorsed some form of artificial insemination. Differently, support for artificial insemination was denied by 61.1% of the respondents who were Roman Catholics, while acceptance was confirmed by 75% of Shia Muslims and 65.0% of Pentecostal participants.
16	An anthropology study of 'Rathikama Bali Yagaya (Bali ritual) in traditional folk medicine to treat infertility. Srishan, et al. 2020.	The objective of Indigenous medicine places significant emphasis on the cultural significance of rituals, and traditional folk medicine employs various practices for treating infertility globally.	In the process of creating the Rathikāma Bali ritual, a statue is crafted depicting a woman seated on a man's lap, her upper torso undraped, with a 'punkalasa'—a pot symbolizing prosperity—held in her right hand, and a 'sewla,' or Cuckoo bird, cradled in her left. The commencement of the ritual involves placing the Bali statue before the patient, a practice known locally as baliya pāwā deema. Subsequently, traditional compositions, both in poetic and prose forms, referred to as 'Namaskārā' and 'Vēēdimālāwa,' are delivered. The ritual, encompassing various rites, extends until the break of dawn. It is held in cultural belief that observing the Bali statue, coupled with the auditory experience of poetry and the intake of local

			medicinal concoctions, will remediate the ailment by morning.
17.	Infertile women's healing experiences of complementary and alternative medicine, Sharifi F et al, 2021.	This study investigates how women experiencing infertility employ complementary and alternative medicine (C.A.M.) and describes their personal healing journeys. The research focuses on understanding the incorporation of traditional methods within the broader scope of cultural practices and global approaches to infertility treatment.	Infertile women understood C.A.M. treatments as a remedy for "healing the body and mind." Integration of C.A.M. into conventional medical therapies for infertility should be considered.
18.	Herbal remedies are used for treating infertility in males and females by tradition al healers in the West Bank/Palestine rural areas, Jaradat et al. 2019.	The primary aim is to amass and chronicle ethnopharmacological information regarding plant-based remedies employed by healers in rural West Bank to address male and female infertility. These methods are rooted in traditional practices.	A broad array of herbal remedies is utilized by herbal healers in the West Bank region of Palestine to treat infertility in both males and females.

From the article obtained, there are research results that around 80% of the population in rural areas of developing countries use traditional medicine to treat infertility. Some of the traditional approaches used include herbs, spiritual rituals, and combinations with modern therapies such as IVF or IUI. Herbal treatments such as in Traditional Chinese Medicine (TCM) have a significant success rate in women with ovulation dysfunction or PCOS. In some studies, the use of traditional therapy combined with modern methods increased the pregnancy rate by 30-40%. Infertility is often associated with social stigma and gender bias, where women are more often blamed in many cultures. Family and community support is an important factor but not always enough to reduce psychological distress. Lifestyle changes, such as antioxidant-based diets, have a positive impact on improving fertility. The tradition-based approach helps to reduce reliance on advanced reproductive technologies.

DISCUSSION

Herbal Medicine

In 2018, the World Health Organization (WHO) revealed that 88% of its member countries have admitted to including traditional herbal medicines. Particularly in Global, the Nigerian, it is estimated that between 75% and 80% of the rural and urban population choose traditional medicine. This underscores the enduring role of traditional practices as a primary treatment modality in areas where

modern treatment approaches are not available(Njagi et al., 2023), much global attention is now focused on exploiting natural and local resources as the main source of pharmaceutical raw materials and many original therapeutic medicinal plants to treat and manage erectile dysfunction, low libido, and low sperm count for infertility problems, especially in men. They tend to have a good knowledge of herbal plants and their traditional uses. Their level of knowledge varies based on age, years of practice, and level of Education (Ohemu et al., 2024) The utilization of herbal medicines by individuals facing male infertility is often favored due to its affordability, accessibility, and minimal side effects, especially when compared to conventional treatments. Traditional Chinese Medicine (TCM) is more effective in improving reproductive ability, including sperm quality and addressing reproductive problems in women (Y. Wang et al., 2024)

In Australia, many women with infertility use traditional integrative and complementary medicine (T.C.I.M.) with a naturopathic doctor. Naturopathy, which originated in Europe, covers 40% of countries recognized by the World Health Organization. In Australia, where it ranks among the most common forms of traditional, complementary and integrative medicine (TCIM), naturopathy is consulted by 6.2% of the population (Maunder et al., 2024).

More and more women are turning to herbal medicines for fertility treatments, motivated by the adverse impact of chemical drugs on reproductive health, their large costs, and the complexity of contemporary fertility procedures. Recognized as a viable substitute for chemical medicine, herbal remedies contain compounds that offer phytoestrogenic, antioxidant, and nutrient benefits. This shift reflects a broader trend towards traditional and cultural practices in the global landscape of infertility medicine (M. Wang et al., 2020) Derived from a variety of natural sources such as leaves, bark, flowers, roots, and fruits, herbal herbs consist of plants and their extracts (Patra & Unisa, 2022) When used either as a standalone treatment or in conjunction with IVF and IUI, traditional medicine has been shown to treat female infertility Effectively.(Kim et al., 2022).

Rituals and Spiritualization in Infertility Medicine

In developing countries, especially in rural areas, it is estimated that about 80% of traditional practitioners cope with infertility. This preference is attributed to the accessibility, affordability, and broad health benefits associated with such traditional practices, especially their minimal adverse reactions (Akbaribazm et al., 2021). In Sub-Saharan Africa, the etiology of infertility is often associated with a variety of factors, both medical and non-medical, such as contraceptive use (10). Traditional practitioners address infertility issues through medical (e.g., hormonal imbalances) and spiritual (such as the influence of evil relatives). Spiritual causes are often associated with biomedical problems (Osei, 2014). Thus, one participant suggested that evil spirits induced post-caesarean infections rather than failure in biomedical interventions. Beyond Zambia's borders, infertility that pursues fertility care is in line with divine intentions (Howe et al., 2020).

In Traditional Chinese Medicine (TCM), reproductive health is approached holistically, emphasizing balance and harmony. This traditional practice not only remains central to the local health paradigm but also significantly shapes an individual's perception of its efficacy in adjacent areas. The primary method for overcoming infertility continues to be an effective natural remedy, which is deeply rooted in this cultural practice. Globally, the allure of this traditional infertility treatment has been amplified by its long-standing application and cultural integration into Chinese society (Zhou et al., 2019).

In Ghana's Talensi and Nabdam districts, most participants observed that childless male

couples were subjected to ridicule and social isolation. After their death, the treatment of their bodies reflects the inhumanity of this traditional practice; They were buried in remote areas, underscoring fears that their presence could make the soil infertile. In addition, the act of piercing their genitals post-mortem serves as a grim symbol that these organs are failing to produce offspring during their lifetime. Such practices highlight the deep cultural stigma surrounding infertility(Kuug et al., 2023).

In Karnataka, India, despite the accessibility of Western methods of medicine, women continue to hold on to the belief that overcoming infertility requires cultural practices. As a result, the majority of them resort to traditional practices, including the use of herbal herbs and healing rituals, in the belief that these methods will help them overcome infertility.

Lifestyle Practices Related to Tradition and Culture

Various behaviors significantly affect the health impact of an individual's way of life in general. These include dietary choices, recreational habits, tobacco use, physical activity, and involvement with health-medical facilities. This set of behaviors, which are traditional lifestyle practices, is crucial in improving or damaging (Nayeri et al., 2022)(Arafa et al., 2020). Modifications in diet and lifestyle, rooted in traditional medicine, have been shown to significantly improve the treatment of infertility. As a result, applying such traditional practices can reduce the need for advanced techniques. In addition, when assisted reproductive technology is used, the efficacy of these techniques can be enhanced by integrating traditional medicine practices (Alibeigi et al., 2020).

Analysis of Spiritual and Community Support for the Effectiveness of Cultural Beliefs and Attitudes Towards Infertility Treatment

Many personal and social problems can be triggered by infertility, in addition to its medical complications (Zippl et al., 2024)Phenomenon It often manifests as a developmental psychological crisis (Datta et al., 2016) The impact of infertility is profound, extending from social exclusion and divorce to stigma, which in turn leads to isolation and various psychological disorders (39). Support from family, friends, and professionals, while necessary, is not enough to meet the needs of individuals facing infertility, who are particularly vulnerable to complex stressors (Kruglova et al., 2021) (Sax & Lawson, 2022) Community Online peer support serves as a virtual gathering space where individuals dealing with infertility can share experiences and offer support to each other (Lin & Shorey, 2023).

In the context of Iranian culture, not having children is viewed with displeasure, as offspring is considered a blessing of a divine nature. This perception is underscored by various legislative texts, Traditional patriarchal values, which emphasize continuity and preservation of the lineage, exacerbating the challenges faced by women. Thus, infertility increases the double difficulties faced by women in this context. The sense of inability to reproduce and the general social reaction to this group of people in society underlies most of the mental distress for the group of people with infertility(Zahra et al., 2019)(Taebi et al., 2021).

Clinical settings seem to be perceived and experienced negatively by women, influenced by prevailing health-related stigmas (Sent et al., 2021) Women, especially those from low-income groups and racial/ethnic minorities (Bell, 2016) Women perceive the lack of referrals as a result of doctors' decisions influenced by race and women's income (Alibeigi et al., 2020). In addition, implicit bias has been an established factor causing disparities in treatment, especially among minority populations in a variety of diseases, including women's health (Cebert-Gaitors et

al., 2022) Since ancient times, traditional practitioners in Sri Lanka have defined the use of herbs, foods, and rituals to manage and curb infertility in women (Baakeleng et al., 2023)Deep traditional Sri Lankan medicine, a variety of treatments are available to cure infertility, including the 'Balinese Sabaragamuwa Rathikāma ritual' aimed at both sexes. The cultural significance of rituals in traditional medicine has been the focus of research studies, especially the 'Balinese Rathikāma ritual', which is used to treat infertility (Srishan et al, 2020).

In Indonesia, socio-cultural factors are a barrier to access to infertility services in urban areas (Wiweko et al., 2024) Communities, especially in rural areas where modern medical facilities may be limited or non-existent, often rely on these practices that are embedded in ancient wisdom and local customs (Patra & Unisa, 2022) The reliance on cultural practices presents an interesting area of study, particularly in understanding how these methods affect an individual's experience of infertility and their willingness to seek alternative treatments.

The approach to fertility issues in the Middle East is deeply rooted in Islamic jurisprudence, which offers a framework for the evaluation and utilization of assisted reproductive technologies. This integration of religious guidance and contemporary medical practice marks a distinct characteristic of the region's handling of fertility challenges. Through this integration, the opportunities provided by medical advances are aligned with the preservation of traditional values, which significantly influences cultural views on fertility and reproductive technology. In this cultural methodology, the pragmatic acceptance of modern Assisted Reproduction Technology (ART) coexists with religious beliefs, creating a unique blend. The perspective held is neither purely traditional nor entirely contemporary; Instead, it manifests as a subtle blend that respects religious doctrine while acknowledging the needs and advantages of modern medical interventions. This combination of faith and empirical science exemplifies the adaptability and diversity of Islamic culture when dealing with the complexities of contemporary existence (Matthews, 2021) (Tremayne & Akhondi, 2016).

Challenges and Limitations of Traditional Practices

Thorough research on bioactivity and comprehensive analysis of diverse compounds isolated from plant extracts can lead to the development of new and effective drugs after extensive pharmacological investigation, phytochemistry, and toxicology. (Akbaribazm et al., 2021). Reported side effects of herbal treatment for infertility include ovarian hyperstimulation syndrome, unruptured luteinized follicle syndrome, and multiple pregnancies (Lee et al., 2021) Male infertility requires a detailed examination of multifactorial pathophysiological processes and related theories, which limit the application of traditional therapies (Esteves et al., 2017) (Kim et al., 2022).

CONCLUSION

The study reveals that the use of traditional medicine such as herbal therapies, cultural rituals, and spiritual approaches is very common, especially in developing countries and rural areas. Factors such as accessibility, affordability, and cultural beliefs are the main reasons people choose this method.

However, while many traditional practices show positive results, there are limitations in this approach, such as the lack of a strong scientific basis and the risk of potential medical misunderstandings. In addition, the social stigma against infertility, especially against women, adds significant psychological pressure. Family and community support is necessary but often insufficient. This conclusion highlights the importance of integration between traditional and modern medical approaches to provide more holistic

and effective solutions in addressing the challenge of infertility globally.

ACKNOWLEDGMENT

Thanks to University Of Muhammadiyah Ponorogo East Java Indonesia for being to teached made this article.

DECLARATION OF CONFLICTING INTEREST

Nothing.

FUNDING

Nothing.

AUTHOR CONTRIBUTION

Inna Sholicha Fitriani: managing research, compiled the article & becoming a correspondent

Yusuf Hamdani Abdi : Compiled the article

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Cite this article as: Fitriani, I. S., et al. (2025). Traditional Cultural Socio-Religiosity Practices in Global Infertility Treatment: Systemic Literature Review. Nurse and Health: Journal of Nursing, Volume 14 (1), 12-29. https://doi.org/10.36720/nhjk.v14i1.678