
**FACTORS ASSOCIATED WITH INFERTILITY AMONG WOMEN ATTENDING THE
GYNAECOLOGY CLINIC OF THE UNIVERSITY OF PORT HARCOURT TEACHING
HOSPITAL, RIVERS STATE**

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ABSTRACT :*The study investigated the factors associated with infertility among women attending the gynaecology clinic of the University of Port Harcourt Teaching Hospital. Two (2) research questions and one hypothesis guided the study which adopted the descriptive survey as its working design. The population of the study consisted of 60 women which also constituted the study sample. Total sampling method was adopted as the population size was rather too small to allow for representativeness of study findings. However, out of the 60 respondents sampled only 58 were valid for data analysis. The instrument for data collection was a validated questionnaire structured on the modified 4- point Likert scale with a frequencies and reliability index of 0. 80. The research questions were answered using simple frequencies and percentages while the hypothesis was tested using chi- square inferential statistics. Results revealed that out of the 58 respondents, 46 (79.0%) affirmed that the health related factors contributing to infertility among women include hormonal imbalance, recurrent infections, repeated use of contraceptive medications and uterine disorder; 44 (76.0%) affirmed that the lifestyle related factors that contribute to infertility in women include smoking, excessive alcohol consumption excessive intake of fatty substances, physical stress, drug abuse and poor reproductive hygiene. Based on the findings of the study, the researchers recommended appropriate preventive measures for infertility such as lifestyle modification, regular medical check- ups, behavioural change, and healthy dietary pattern, good knowledge of ovulation and appropriate treatment of existing diseases or infection.*

Key Words: Infertility, Gynaecology, Utrine Disorder, Contraceptive Medication, Life Style Modification

INTRODUCTION

Child-bearing is one of the motives of marriage, especially in the African society. The absence of fertility in a couple leads to a lot of negative consequences on marriage such as separation, divorce, polygamy and domestic violence. The negative consequences of infertility are stronger in developing countries than in the western societies and these are mainly characterized by personal suffering and social stigmatization (Van Balen & Gerrist, 2001).

Infertility is a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse or is the inability of a sexually active, non-contracepting couple to achieve pregnancy in one year. It is a common and severe health problem which not only affects one's ability to have children, but also has emotional, economical, psychological, family and societal effects (Douglas, 2007). Infertility affects both men and women. Yet women, particularly in developing countries, may bear the sole blame for the barren marriages.

In many areas infertility is a socially acceptable basis for divorce by the husband (Singh, 1996, Yeboah, Wadhwano, & Wilson, (1992). An estimated 34 million women, predominantly from developing countries have infertility which resulted from maternal sepsis and unsafe abortion (long term maternal morbidity resulting in a disability). Infertility in women was ranked the 5th highest serious global disability, World Health Organisation (WHO, 2019). Infertility can be due to the women (33%), the men (33%) and by both sexes or due to unknown problem (33%) approximately. Infact in Africa, it is a taboo to point out that a man has failed in the bedroom. Infertility is the inability of sexual active, non-contracepting couple to achieve pregnancy in one year (WHO, 2019).

In Nigeria, infertility in most cases is a social stigma for the childless couple. Infertility is supposed to involve the couple but women are always blamed. The infertile woman in most cultures in Nigeria is despised and treated as an out-cast by her mother-in-laws and other relatives and in the event of her husband's death, she has no claims to his wealth (Nwosu & Onwe, 2015). Infertility among Nigerians is therefore seen as a humiliating personal tragedy for the couple, but especially so for the female partner.

Reproductive failure therefore has far-reaching social implications in Nigeria where the main reason for marriage is often to have children irrespective of whether or not the couples are in love. Sangeetha (2014) asserted that fertility plays a vital role in a woman's life. In our tradition fertility is the most important part of marital life. The feeling of being conceived is wonderful, and the mother is bound with joy on the first kick of her child in uterus, indeed results in stress. Eric, Imabong, & John, (2014) asserted that infertile women tend to cope with immense stress and social stigma behind their condition, which can lead to considerable mental distress.

The long term stress involved in attempting to conceive a child and the social pressures behind giving birth can lead to emotional distress that may manifest as mental illness. Women who suffer from infertility might deal with psychological stressors such as denial, anger, grief, guilt, and depression. There can be considerable social shaming that can lead to intense feelings of sadness and frustration that potentially contribute to depression and suicide. The implications behind infertility bear huge consequences for the mental health of an infertile

woman because of the social pressures and personal grief behind being unable to bear children (Eric et al 2014).

Studies show that infertility affects the personal well-being of women that are involved (Abbey, Andrew & Halman 1991, Stanton, Tennen, Afflick & Mendola, 1991 and Hollos, 2003). In fact in these areas, infertility has been an unbearable social problem for the women, the couple, the extended family and the entire community. It is seen as an agent of genealogical termination and as such it is frowned and hated by all, but feared most by women. In particular, childless women suffer a lot because women are always blamed for childless situation and motherhood is often the only way for a woman to stabilize her position with her husband's family and community (Nwosu & Onwe, 2015). A recent study observed that more than 186 million people are infertile worldwide (Marcia & Pasquale 2015). The center for Disease Control (CDC, 2006-2010) revealed that 1.5 million women in the US (6%) are infertile couples. Women who are childless suffer from array of social economic and factors that contribute to their infertility. Research shows about one in five couples in Nigeria have difficulty conceiving or carrying a pregnancy to term.

In many cultures, childless women suffer discrimination, stigma and ostracism. Relatives when gathered together talk a lot about their children or being pregnant and having children. Stigmatization can be extreme in some countries, where infertile people are viewed as a burden on the socioeconomic well-being of a community. Stigma extends to the wider family, including siblings, parents and in-laws who are deeply disappointed for the loss of continuity of their community (WHO, 2010, Dimka, 2013). The work of a woman is to give birth to children: cultural constructions of infertility in Nigeria.

Empirical researchers have found the link between the variables of interest in this study. Factors associated with infertility among women have been found to be associated with greater burden on women who are childless as they suffer from array of social, economic and emotional difficulties around the world such as strong stigma, feelings of guilt, role failure, loss of self-esteem, abandonment by the family social isolation and impoverishment (Uddin, Haque, Nejum & Wahed (2018).

Infertility among Nigerian couple (Ekwere, Achibong, Basse & Ekabua, 2007) reported that prevention and prompt treatment of infection, particularly the sexually transmitted infections could be beneficial in the reduction of infertility among couples. Studies have revealed that infertility profile among Northwestern Nigerian women, and a dominance of secondary with probable genital tract infection being a major contributor to infertility (Panti & Sununu, 2014) and in Osun State, Southwestern Nigeria (Sule, Erigbali & Eruom, 2008) have also revealed that tubal factor, uterine factor and ovarian factor, cervical cancer, pelvic infection, disease and endometriosis as common causes of infertility. Research also shows that about one in five couples in Nigeria have difficulty conceiving or carrying a pregnancy to term. Fehintola, Fehintola, Ogunlaja, Awotunde, Ogunlaja & Onwudiegwu (2017).

Social meaning and consequences of infertility in Ogbomoso, Nigeria reported high premium placed on infertility within marriage has placed a larger population of them under pressure from their husbands (25%) their mother in-laws (40%) and community (14%) and also women regard infertility to be caused by multiplicity of factors and that fruitful expectations also put enormous burden on those women suffering from infertility including adverse

psychosexual effect. One recent study in Nigeria Dimka & Dein (2013) reported in accordance with previous studies of infertility in other cultural groups indicated the disruptive influence of missing motherhood.

Katz and Katz (1987) had observed that in society where childlessness carries a strong social stigma and where children offer assurance of both personal immortality and old age insurance, infertility is also a serious problem for the childless women.

Fehintola, Fehintola, Ogunlaja, Awotunde, Ogunlaja & Onwudiegwu (2017). Social meaning and consequences of infertility in Ogbomoso, Nigeria reported high premium placed on fertility within marriage has placed a larger population of them under pressure from their husbands (25%) their mother in-laws (40%) and community (14%) and also women regard infertility to be caused by multiplicity of factors and that fruitful expectations also put enormous burden on those women suffering from infertility including adverse psychosexual effects.

Objective of the study

The objective of the study is to identify factors associated with infertility among women attending gynecology clinic at University of Port Harcourt Teaching Hospital, Choba, Port Harcourt. This is to add to the existing studies that contribute to both factors responsible for infertility in couple especially among childless women attached to this condition. Emotional difficulties around the world such as strong stigma, feelings of guilt, role failure, loss of self-esteem, abandonment by the family, social isolation and impoverishment (Uddin et al, 2008).

METHODOLOGY

Research Design

The research design used for this investigation was a descriptive survey. It comprised the survey of factors associated with infertility among women attending gynecology clinic at University of Port Harcourt Teaching Hospital Choba, Port Harcourt.

Research Setting

This study was carried out in the gynecology clinic of the department of obstetrics and gynaecology of the University Teaching Hospital. The University of Port Harcourt Teaching Hospital (UPTH) is along East-West Road, Port Harcourt, Rivers State. It is a major tertiary care teaching and research facility in Rivers State. University of Port Harcourt Teaching Hospital originally commenced its operations in 1980 and was officially commissioned by the Federal Government years later (1985). When it started out there were 60 beds mainly in use. After relocating to its permanent site in 2006, the hospital's capacity was expanded to 500 beds. University of Port Harcourt Teaching Hospital is managed through three-tier managerial system consisting – the Board of Management Hospital Committee (HMC) and the Departments. Nearly, 200,000 patients are seen annually in both outpatient and inpatient settings, as well as over 3000 surgical operations a year. Average bed occupancy rate in 12 months has risen above 70%. Besides offering medical services, the hospital tends to provide clinical education and training to students, nurses, and other healthcare professionals. Over the years, many research activities and results from its organized units have appeared on several major national and international medical and scientific journals.

Departments in the hospital include; Accident and Emergency, Accounts, Administration, Anesthesiology, Catering, Central Sterilization Service Department (CSSD), Communication, Community Medicine, Computer Science, Dentistry, Dialysis, Ear, Nose and Throat, General Out Patient Department, Intensive Care Unite, Internal Medicine, Laundry, Maintenance, Medical Illustration Unit, Medical Laboratory Services (Chemical Pathology, Hematology and Blood Bank, Medical Microbiology and Parasitology, Anatomical Pathology), Medical Records, Medical Social Welfare, Neuropsychiatry, Nuclear Medicine, Nurse Practice Development Unit, Obstetrics and Gynaecology, Ophthalmology, Oral Maxillo-Facial, Orthopedic Department, Pediatric Services, Pharmacy, Physiotherapy, Radiology, Stores, Surgical Department, Works and Services (www.upthng.org). The gynaecology clinic is run by the department of Obstetrics and Gynaecology.

Target Population

The target population was women of child-bearing age who are married but have not been able to have a child or more as desired after a year of unprotected sexual intercourse in the gynaecology clinic of the department of Obstetrics and Gynaecology.

Sample Population

A sample size of 60 respondents were studied from the number of women who attended the gynecology clinic who are married but have not been able to have a child as desired after a year or more of unprotected sexual intercourse and no use of contraceptive.

Sampling Technique

The sampling technique for this study was total population sampling. Total population sampling is a type of purposive sampling, which is a type of non-probability sampling technique. In total population sampling, the entire population is chosen for the study. This occurs when either the study population is small or the population shows an uncommon characteristic.

Instrument for Data Collection

The instrument for data collection was a self-structured questionnaire consisted of four sections; (A, B, and C). Section A elicited information on socio-demographic data, Section B: contained items on factors contributing to infertility among women presented on a 4-point Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree. Section C contained items on the Lifestyle Related Factors Contributing to infertility among Women.

Validity of the Instrument

The self-structured questionnaire was submitted to two (2) specialists in measurement and evaluation and the field of study that accessed the face and content validity of the instrument and their comments were used to make necessary corrections before administration.

Reliability of the Instrument

The reliability of the instrument was determined using the Test-retest method. Copies of the questionnaires were administered to 10 respondents attending gynaecology clinic in Port Harcourt Teaching Hospital and re-administered after two weeks. The data collected was coded and analyzed using the Pearson Moment Correlation Coefficient. A value of 0.82 was obtained

which was considered adequate for the study. The respondents used for the reliability were excluded from the study population.

Procedure for Data Collection

A self-structured questionnaire was used to collect data from the participants. The questionnaires were made anonymously to ensure confidentiality and were administered by the researchers within a week. Necessary information was provided to the respondents to guide the filling of the questionnaires, each of which was collected after completion on the spot.

Method of Data Collection

Data collected was coded on a spreadsheet using descriptive statistics of frequencies and percentages of the research questions and inferential statistics of Chi-square test for the hypothesis testing.

Ethical Considerations

Approval was obtained from the ethical committee of the Institution where the study was carried out. The consent of individual respondents participating in the study was sought and the necessary explanations made before administering the questionnaires. They were assured of the confidentiality of their responses.

Results

Table 1 Socio-Demographic Data (n=58)

S/N	ITEMS		FREQUENCY	PERCENTAGES
1	Age	20-29 years	3	5.2%
		30-39 years	6	10.3%
		40-49 years	20	34.5%
		Above 49	29	50.0%
2	Educational	Primary	2	3.40%
		Secondary	20	34.5%
		Tertiary	36	62.1%
3	Occupational Status	Students	2	3.40%
		Self-employed	8	14.0%
		Unemployed	36	62%
		Civil servant	32	54.6%
4	Religion	Christian	53	91.45
		Muslim	5	8.60%

Table 1 shows 3(5.20%) were aged 20-29 years, 6(10.3%) were aged 30-39 years, 20(34.5%) were aged 40-49 years. Concerning educational qualification and occupational status 29(50.0%) were aged above 49 years. 2(3.40%) had primary education, 20(34.5%) had secondary education, 36(62.1%) had tertiary education. 2(3.40%) were students, 8(14.0%) were unemployed, 36(62.1%) were self-employed 32(54.6%) were civil-servants. Concerning religion 53(91.4%) were Christians and 5(8.60%) were Muslims.

Research Questions

Table 2: Health Related Factors Contributing to infertility among Women attending the Gynecology Clinic of the University of Port Harcourt Teaching Hospital (n=58).

S/N	Items	SA	A	D	SD
1	Hormonal imbalance can also cause infertility	20(34.5%)	24(41.4%)	10(16.7%)	4(6.90%)
2	Recurrent infection can predispose a woman to infertility	22(38.9%)	26(45.0%)	6(10.3%)	4(6.90%)
3	Repeated use of contraceptive medications can also cause infertility.	24(41.4%)	22(38.9%)	6(10.3%)	4(6.90%)
4	Uterine disorder such uterine fibroid can also predispose a woman to infertility	18(31.0%)	26(45.0%)	8(14.0%)	6(10.3%)
5	Mean Response Sum of Correct and Incorrect Answers	21(36.0%) 46(79.0)	25(43.0%)	8(14.0%) 12(21.0%)	4(6.90%)

Table 2 shows the health related factors contributing to infertility among women. 20(34.5%) strongly agreed, 24(41.4%) agreed, 10(16.7%) disagreed, 4(6.90%) strongly disagreed that hormonal imbalance can also cause infertility. 22(38.9%) strongly agreed, 26(45.0%) agreed, 6(10.3%) disagreed, 4(6.90%) strongly disagreed that recurrent infection can predispose a woman to infertility. 24(41.4%) strongly agreed, 22(38.9%) agreed, 6(10.3%) disagreed, 4(6.90%). 18(31.0%) strongly agreed, 26(45.0%) agreed, 8(14.0%) disagreed, 6(10.3%) strongly disagreed that uterine disorder such uterine fibroid can also predispose a woman to infertility. The mean responses showed, 46(79.0%) affirmed that the health related factors contributing to infertility among women include hormonal imbalance, recurrent infections, repeated use of contraceptive medications and uterine disorder.

Table 3: Lifestyle factors that Contributes to Infertility among Women attending the Gynecology Clinic of the University of Port Harcourt Teaching ³ Hospital (n=58)

S/N	Items	SA	A	D	SD
1	Smoking can make a women become infertile	24(41.4%)	22(38.9%)	6(10.3%)	4(6.90%)
2	Excessive alcohol consumption can predispose a woman to infertility	18(31.0%)	26(45.0%)	8(14.0%)	6(10.3%)
3	Excessive intake of fatty substances can also cause infertility	23(40.0%)	19(33.0%)	6(10.3%)	10(16.7%)
4	Physical stress can predispose a woman to infertility	20(34.5%)	22(38.9%)	9(16.7%)	4(6.90%)
5	Drug abuse can also cause infertility in women	20(34.5%)	24(41.4%)	10(16.7%)	4(6.90%)
6	Poor reproductive	22(38.9%)	26(45.0%)	6(10.3%)	4(6.90%)

	health/hygiene can expose a woman to risk of being infertile				
7	Unhealthy sexual practices that also cause infertility among women	20(34.5%)	24(41.4%)	8(14.0%)	6(10.3%)
	Mean Response Sum of Correct and Incorrect Answers	21(36.0%) 44(76.0)	23(40.0%)	8(14.0%) 14(24.0%)	6(10.3%)

Table 3 shows the lifestyle factors that contribute to infertility among women attending the gynecology clinic of the University of Port Harcourt Teaching Hospital. 24(41.4%) strongly agreed, 22(38.9%) agreed, 6(10.3%) disagreed, 4(6.90%) strongly disagreed that smoking can make a women become infertile.

18(31.0%) strongly agreed, 26(45.0%) agreed 8(14.0%) disagreed, 6(10.3%) strongly disagreed that excessive alcohol consumption can predispose a woman to infertility. 23(40.0%) strongly agreed, 19(33.05) agreed, 6(10..3%) disagreed, 10(16.7%) strongly disagreed that excessive intake of fatty substances can also cause infertility. 20(34.5%) strongly agreed, 22(38.9%) agreed, 9(16.0%) disagreed, 7(12.05) strongly disagreed that physical stress can predispose a woman to infertility. 20(34.5%) strongly agreed, 24(41.4%) agreed, 10(16.7%) disagreed , 4(6.90%) strongly disagreed that drug abuse can also cause infertility in women. 22(38.9%) strongly agreed, 26(45.0%) agreed, 6(10.3%) disagreed while 4(6.90%) strongly disagreed that poor reproductive health/hygiene can expose a woman to risk of being infertile. 20(34.5%) strongly agreed, 24(41.4% agreed, 8(14.0%) disagreed, 6(10.3%) strongly disagreed that unhealthy sexual practices that can cause infertility among women. The mean scores revealed that 44(76.0%) of the respondent affirmed that the lifestyle related factors that contribute to infertility in women include smoking, excessive alcohol consumption, excessive intake of fatty substances, physical stress, drug abuse and poor reproductive hygiene.

Hypothesis Testing

Ho: There is no significant difference between the opinion of the respondents on the health related factors that contribute to infertility and their religion

Table 4: Chi-Square Analysis of Difference in the Opinion of the Respondents on the Health Related Factors that Contributes to Infertility

Health Related Factors Responses	Religion	Total	χ^2_{Cal}	χ^2_{tab}	Df	Inference	Decision
	Christianity	Islam					
Positive responses	42	4	46	0.002	3.84	1	$\chi^2_{Cal} < \chi^2_{tab}$
Negative Responses	11	1	12				

Total	53	5	q	
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Hypothesis

There is no significant difference between the opinion of the despondence on the health related factors on infertility based on their religion. Chi-square (X^2) test was used to test the hypothesis at 0.05 level of difference.

Null Hypothesis

There is no significant difference between the opinion of the despondence on the health related factors and infertility based of their religion.

Alternate Hypothesis

There is a significant difference between the opinion of the despondence of the health related factors on infertility based on their religion.

From the analysis above, $X^2_{cat} < X^2_{tab}$ (see Appendix III) at $df = 1$ and P-value of 0.05, hence value is insignificant and the null hypothesis accepted. This implies that the null hypothesis which states that there is no significant difference in the opinion of the respondents on the health related factors that contribute to infertility based on their religion is accepted.

Summary of Major Findings

1. The health related factors contributing to infertility among women include hormonal imbalance, recurrent infections, repeated use of contraceptive medications and uterine disorder.
2. The lifestyle related factors that contributes to infertility in women include smoking, excessive alcohol consumption, excessive intake of fatty substances, physical stress, drug abuse and poor reproductive hygiene.
3. There is no significant difference in the opinion of the respondents on the health related factors that contribute to infertility based on their religion is accepted.

DISCUSSION

Factors Associated With Infertility.

The present investigation focused on factors associated with infertility among women attending gynecology clinic. More importantly the study attempted to explore if health related factors will explain infertility in women. It was found that several factors are associated with infertility among women. Some of the factors include; hormonal imbalance, recurrent infections, repeated use of contraceptive medications and uterine disorder. This implied that health problems or illness, dysfunction or anomalies within women's body could predispose them to infertility. The finding is in consistent with the findings of Sangeetha (2014) which revealed that the major factors associated with infertility include reproductive infections and disorders, physical, physiological and psychological imbalance as well as contraceptive medication abuse. The result also corroborated with the assertion of Mallikarjuna & Rajeshwari, (2015, Sultana, Adhikary, Tanira, Keya & Akhter, 2014, Uddin et al, 2018, Sule et al, 2008) that there is a positive correlation between health problems and the prevalence of secondary infertility among women and also health related problems as contributory factors.

It was further found that the lifestyle related factors contribute to infertility in women which include; smoking, excessive alcohol consumption, excessive intake of fatty substances, physical stress, drug abuse and poor reproductive hygiene. This result was supported with the previous findings showing that lifestyle related factors are associated with infertility (Kalima, Munalula, Ahmed & Vwalika, 2017; Romero, 2012; Sathya, Babasubramanyam, Gupta, & Verma, 2010).

The study observed a contrary finding that there is no significant difference in the opinion of respondents on the health related factors that contribute to infertility based on their religion. This implied that religious background does not significantly influence the perception or opinion of women on the health related factors that contribute to infertility. The finding is in line with the previous research (Metwally, Li & Ledger, 2011) that religion does not in any way predict the opinion of women on infertility.

Summary

This study attempted to determine the factors associated with infertility among women attending the gynecology clinic of the University of Port Harcourt Teaching Hospital. Two objectives were used to guide the study. The study was a descriptive study and a sample size of 58 respondents (women) participated in the study. Total sampling method was adopted as the population size was rather too small to allow for representative of study finding. A structured validated and modified 4-point likert scale with a reliability index of 0.8 was used for data collection for the study. Data collection was done using the direct delivery and retrieval method which allowed for high return rate of the instrument.

Data generated were presented on tables and analyzed using frequency and simple percentage, while hypothesis was tested with chi-square. The study revealed factors associated to infertility among women as; hormonal imbalance, recurrent infections, repeated use of contraceptive medications and uterine disorder, the lifestyle related factors contributing to infertility among women include; smoking, excessive alcohol consumption, excessive intake of fatty substances, physical stress, drug abuse and poor reproductive hygiene, there is no significant difference in the opinion of the respondents on health related factors that contribute to infertility based on their religion. Thus, with the findings, the study had proffered lasting solution to the identified problem of secondary infertility among women of child bearing age.

CONCLUSION

Infertility is a global phenomenon that has constituted a socially destabilizing condition for couples carrying several stigmas and cause of marital disharmony. The study investigated the factors associated with infertility among women attending the gynecology clinic of the University of Port Harcourt, Teaching Hospital (UPTH). The research observed that the major contributory factors to infertility are health related problems and the practice of lifestyle related problems. Hence the need for appropriate education of preventive measures for infertility such as lifestyle modification, regular medical check-ups, behavioural change, healthy dietary pattern, good knowledge of ovulation and appropriate treatment of existing diseases or infection.

Implication of the study

The study has added to the existing literature and knowledge associated with infertility among women. Again, from the findings of this study it was revealed that the major factors contributing to infertility among women could be health or life-style related factors. The health related factors may be associated with poor clinical presence, poor knowledge on fertility issues and underlying health problems. The adoption of unhealthy lifestyle has also been implicated as a contributing factor to infertility. There is therefore need for public health workers, psychologists and other relevant individuals, groups and agencies to build support programmes aimed at making women see the benefits for routine health checks and treating adequately any underlying health problem.

RECOMMENDATIONS/SUGGESTIONS

Based on the findings of the study, the following have been suggested;

- Health care workers, especially nurses, clinical psychologists should provide women with necessary information to guide and modify their behaviours and life-style habits, such as health checks on periodic basis, adopting healthy life-style, maintenance of good reproductive and personal hygiene (behavioural intervention programmes aimed at discouraging unhealthy life-style among women).
- Enlightenment programmes should be organized through workshops and health education seminars in order to enhance the knowledge of women on fertility and related life issues at primary, secondary and tertiary health institutions.
- Health campaigns on infertility and the preventive measures should also be provided at the three levels of health institutions as well as the communities.
- Women of child bearing age desiring to achieve conception should work in physically and psychologically less stressful environment.
- Private agencies and non-governmental bodies should also build intervention programmes and prevention measures to discourage risk factors of infertility among couples.
- Government should formulate and implement policies that will promote appropriate management of infertility among women of child bearing age.

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