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## A study on knowledge of female reproductive aspects among participants of refresher course in women studies

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### Abstract

Female Reproduction is a complex process, which comprises many aspects. Knowledge on Female Reproductive Aspects among faculty members of under graduation as well as post-graduation is essential, because they play key role in providing correct information to students, peer group and general public wherever an opportunity. The present study aims at examine the knowledge of female reproductive aspects among participants of refresher course in women studies and to suggest policy for enhancing the knowledge.

**Keywords:** Female Reproduction, Menarche, Amenorrhea, Conception, Chromosomes, Infertility, Sterility, Reproductive Span, Menopause, Sexual Dysfunction, Contraception, Fertile Period

### Introduction

Reproductive health refers to the diseases, disorders and conditions that affect the functioning of the male and female reproductive systems during all stages of life. Disorders of reproduction include birth defects, developmental disorders, low birth weight, preterm birth, reduced fertility, impotence, and menstrual disorders. Research has shown that exposure to environmental pollutants may pose the greatest threat to reproductive health. Exposure to lead is associated with reduced fertility in both men and women, while mercury exposure has been linked to birth defects and neurological disorders. A growing body of evidence suggests that exposure to endocrine disruptors, chemicals that appear to disrupt hormonal activity in humans and animals, may contribute to problems with fertility, pregnancy, and other aspects of reproduction. A woman's reproductive system is a delicate and complex system in the body. It is important to take steps to protect it from infections and injury, and prevent problems-including some long-term health problems. Taking care of yourself and making healthy choices can help protect you and your loved ones. Protecting your reproductive system also means having control of your health, if and when, you become pregnant.

Health needs of women can be broadly classified under four categories (Fathalla, 1997). First, women have specific health needs related to the sexual and reproductive function. Second, women have an elaborate reproductive system that is vulnerable to dysfunction or disease, even before it is put to function or after it has been put out of function. Third, women are subject to the same diseases of other body systems that can affect men. The disease patterns often differ from those of men because of genetic constitution, hormonal environment or gender-evolved lifestyle behavior. Diseases of other body systems or their treatments may interact with conditions of the reproductive system or function. Fourth, because women are women, they are subject to social diseases which impact on their physical, mental or social health. Examples include female genital mutilation, sexual abuse and domestic violence. The reproductive system, in function, dysfunction and disease, plays a central role in women's health. This is different from the case with men. A major burden of the disease in females is related to their reproductive function and reproductive system, and the way society treats or mistreats them because of their gender. While more men die because of what one may call their "vices", women often suffer because of their nature-assigned physiological duty for the survival of the species, and the tasks related to it. Reproductive health implies that, apart from the absence of disease or infirmity,

people have the ability to reproduce, to regulate their fertility and to practice and enjoy sexual relationships. It further implies that reproduction is carried to a successful outcome through infant and child survival, growth and healthy development. It finally implies that women can go safely through pregnancy and childbirth, that fertility regulation can be achieved without health hazards and that people are safe in having sex. (Fathalla, 1988).

Reproductive health is an integrated package (Fathalla, 1996). Women cannot be healthy if they have one element and miss another. Moreover, the various elements of reproductive health are strongly inter-related. Improvements of one element can result in potential improvements in other elements. Similarly, lack of improvement in one element can hinder progress in other elements. Pelvic infection, for example, accounts for about one-third of all cases of infertility, worldwide, and for a much higher percentage in sub-Saharan Africa (WHO, 1987). The resultant infertility is also the most difficult to treat. The magnitude of the problem of infertility will not be ameliorated except by a combat of sexually transmitted diseases (STDs), by safer births that avoid postpartum infection, and by decreasing the need for or the resort to unsafe abortion practices. The reproductive health concept is not limited to mothers. Nor is it limited to women in the childbearing age. It recognizes the special health needs of adolescents related to their acquisition of the sexual and reproductive capacity before they have completed their social preparation for adult life. It recognizes that mature women, beyond the childbearing period, still have important health needs related to the reproductive system which they still carry and to the cessation of ovarian function. The concept also recognizes that the health of the adult builds on the health of the child, and that this is probably no more true than in the area of reproductive health. Finally, the concept of reproductive health is not limited to women. Men too have reproductive health needs, and responding to these needs of men is also important for women.

### Importance of the Study

The Reproductive Health aspects of women have little access to information, are often intimidated and lack self-confidence. The opportunities to learn about health issues in general and reproductive health aspects of women in particular are limited because of social taboos. The accurate knowledge on Reproductive Health aspects of women among teaching faculty is essential, because they discuss as well as disseminate information to peer groups, general public and particularly among public. Thus, teaching faculty needs more knowledge on Reproductive Health aspects of women. Therefore, an in depth primary study on reproductive health knowledge will help to identify areas where intervention is required urgently. Since the prevention of HIV/STD transmission in public is one of the primary objectives of HIV/AIDS control programmes, strategies have to be developed to reach people who are not exposed. This study will help policy makers, programme planners and trainers to better understand the level of knowledge and assess the needs of teaching faculty for developing an appropriate reproductive health aspects to deliver in-service programmes as well as information, Education and Commutation (IEC) approaches related to sexual and reproductive health concerns of teaching faculty

especially graduates and post graduates levels, because they are the key persons in providing information to various persons in a right way.

### Objectives

1. The broad objective of study is to study the socio-economic and demographic factors, reproductive health knowledge among the teaching faculty who participated in women studies refresher course..
2. To suggest measures for including topics on some crucial: reproductive health aspects of women in in-service training classes for teaching faculty.

### Methodology

The present study is based on primary data collected from the participants of refresher course in women's studies at Human Resource Development Center, S.V.University, Tirupati, Andhra Pradesh. A questionnaire containing information on background information as well as on crucial reproductive health aspects of women distributed to the total forty two participants. Two participants are not given information on many aspects. Therefore, they are not included in the study. The total sample size is forty comprising twenty women and another 20 men. Frequency tables are prepared for analysing the data. The major limitation of the study is that the present paper confined to only forty participants. The results reflect the response pattern of the respondents.

### Results and Discussion

The data pertaining to background characteristics as well as knowledge on reproductive health aspects of women are analyzed and discussed briefly hereunder. Table-1 contains background characteristics of the respondents and table-2 furnishes information on knowledge on some major reproductive health aspects of women among the respondents who participated in women's studies refresher course held from 10-08-2015 to 29-08-2015 at Human Resource Center, Sri Venkateswara University, Tirupati, Andhra Pradesh.

**Table 1:** Background Characteristics of Respondents

S.No	Characteristics	Number	Percent
1	Place of Birth		
	Rural	23	57.5
	Urban	17	42.5
2	Age in completed years		
	≤ 30	19	22.5
	31-40	50	50.0
	≥ 41	11	27.5
3	Education domine at graduation level		
	Arts	22	55.0
	Science	18	45.0
4	Educational Level Respondent at present		
	Post-Graduation	8	20.0
	Ph.D.	32	80.0
5	Employment cadre of the respondent		
	Lecturer	19	47.5
	Assistant Professor	21	55.2
6	Total years of service		
	≤ 10	21	52.5
	11-19	11	27.5
	≥ 20	8	20.0
7	Sex		
	Male	20	50.0
	Female	20	50.0

It can be noticed from table-1 that nearly three-fifths (57.5 percent) of respondents were born in rural areas and rest (42.5 percent) were born in urban areas. Regarding the present age, half (50.0 percent) of the respondents are in 31-40 years followed by little over one-fourth (27.5 percent) are in  $\geq 41$  years and rest (22.5 percent) are in  $\leq 30$  years. Little over half (55.0 percent) of the respondents were studied arts at graduation level and rest (45.0 percent) were science graduates. Four-fifths (80.0 percent) of respondents are educated upto Ph.D and rest (20.0 percent) of respondents are having post-graduation of level of

education at present. Little over half (55.2 percent) of are Assistant Professors and rest (47.5 percent) of the respondents are lecturers. Over half (52.5 percent) of respondents are having teaching service of  $\leq 10$  years followed by little over one-fourth (27.5 percent) of are having 11-19 years and one-fifth (20.0) of respondents are having  $\geq 20$  years of teaching service. Male and female respondents are in equal proportion. Data on Knowledge of respondents on Reproductive Health Aspect of Women are furnished in table-2.

**Table 2:** Knowledge of respondents on Reproductive Health Aspect of Women

S. No	Reproductive Health Aspect of Women	Aware		Not aware	
		Number	Percent	Number	Percent
1	The key to reproductive health in all aspects of a woman's sexual life. (Hormones)	26	65.0	14	35.0
2	Menarche (Starting point of menstrual cycle)	19	47.5	21	52.5
3	Usually a girl starts menstruating at about (13-15 years of age)	34	85.0	6	15.0
4	Amenorrhea (Lack of periods)	18	45.0	22	55.0
5	Conception (Become pregnant)	24	60.0	16	40.0
6	. The mother's egg contains (X-chromosome)	20	50.0	20	50.0
7	Sex of the baby is determined by (Two chromosomes, X and Y)	29	72.5	11	27.5
8	The combination of X, X chromosomes causes (Birth of female baby)	28	70.0	12	30.0
9	Which partner that causes for birth of a boy (Male partner)	27	67.5	13	32.5
10	The sex of baby can be known by ultrasound (Between 10- 12 weeks)	16	40.0	24	60.0
11	. Infertility (Not being able to become pregnant after a year of trying)	28	70.0	12	30.0
12	Sterility (Incapable of producing offspring)	19	47.5	21	52.5
13	The reproductive span of women (Between 15-49 years of age)	33	82.5	7	17.5
14	Menopause (No longer get pregnant naturally)	22	55.0	18	45.0
15	Menopause typically occurs (Between 45 and 55 years)	36	90.0	4	10.0
16	Female sexual dysfunction (lack of interest in or enjoyment of sexual activity)	14	35.0	26	65.0
17	The emergency contraceptive pill can be taken to avoid unprotected intercourse (.Within five days (120 hours))	8	20.0	32	80.0
18	The fertile period (for become pregnancy) is (The 8th day from the first day of the period to the 20th day of the cycle)	22	55.0	18	45.0

It can be noticed from table-2 that the knowledge on some female reproductive health aspects is quite good among respondents, while in some aspects, it is not at satisfactory level, which discussed in detail hereunder.

### Hormones

Hormones regulate menstruation, fertility, menopause, and sex drive (libido). The main hormones affecting the menstrual cycle and fertility are produced by glands in the brain and by the ovaries. About 65.0 percent of respondents are aware that the hormones as the key to reproductive health in all aspects of a woman's sexual life,

### Menarche

Menarche is also known as puberty, which is the entry point of a girl to reproductive period. Females physically ready to become pregnant after menarche. Less than half (47.5 percent) of the respondents are aware the concept of Menarche. An overwhelming (85.0 percent) of respondents are aware that usually a girl starts menstruating at about 13-15 years of age.

### Amenorrhea

Amenorrhea is the medical term for absence of menstrual periods. Amenorrhea is abnormal except before puberty, during pregnancy and early breastfeeding, and after menopause--hyperlink. Any woman who misses more than three periods in a year's time should see a doctor to find the cause. Only less than half (45.0 percent) are aware the concept the amenorrhea as a lack of periods.

### Conception

The ovaries produce estrogens and progesterone, both of which help prepare the uterus for pregnancy. If pregnancy doesn't occur, menstruation, the shedding of the lining of the uterus, marks the end of the menstrual cycle. If any of the hormones involved in the menstrual cycle are out of balance, the result can be irregular or missed period's leads to conception. Three-fifths (60.0 percent) of respondents are aware of Conception (become pregnant).

### **Baby's Sex determination**

Sex is determined by two chromosomes, X and Y. A female is XX, a male is XY. Since women completely lack the Y chromosomes, they always contribute an X chromosome to the baby. The sex is determined by whether the sperm that fertilizes the egg is carrying another X or a Y. The male determines the boy/girl sperm ratio, but it's the female body that determines the winner. If 'boy' sperm fertilizes egg, it's a boy, and visa versa. "While it is true that the males' sperm contains the chromosomes responsible for your baby's' gender. It is, we believe the condition of the women's' cervical mucus, reproductive tract and follicular fluid that determines which of the two types of sperm will successfully reach and fertilise the egg at the time of conception." It is a common misconception that the male determines the sex. Males have an amount of X and Y sex chromosomes, whereas females have only X sex chromosomes. This leads most people to believe that males decide the gender of their baby. But the male partner always provides equal numbers of X and Y spermocytes (therefore yielding a 50% chance of males and 50% chance female offspring).

The most recent research has shown, it is actually the female's reproductive system (which has equal amounts of X and Y sperm provided) that handles the odds of male vs. female offspring. Y chromosomes are lighter (weight less) and thus reach the ovaries more quickly. Some female bodies hold these fast migrating "male" spermocytes longer, thus increasing the chance of male offspring. Only half (50.0 percent) of the respondents are aware that the mother's egg contains X-chromosome only. About 72.5 percent of respondents are aware that the sex of the baby is determined by two chromosomes (X and Y). Seven-tenths (70.0 percent) of respondents are aware the concept that combination of X, X chromosomes causes birth of female baby. Over three-fifths (67.5 percent) of respondents are aware that the male partner causes for birth of a boy, because the Y chromosomes exists only in males.

### **Ultrasound Test**

Most pregnant women find out their baby's sex (if they choose to know) during their mid-pregnancy ultrasound, usually between 16 and 20 weeks. However, the technician may not be able to tell for sure if she can't get a clear view of the baby's genitals. Only, four-fifths (40.0 percent) of respondents are known that the sex of baby can be known by ultrasound between 10- 12 weeks of pregnancy.

### **Female infertility**

Demographic defines infertility as an inability of those of reproductive age (15-49 years) to become or remain pregnant within five years of exposure to pregnancy (DHS). An inability to become pregnant with a live birth, within five years of exposure based upon a consistent union status, lack of contraceptive use, non-lactating and maintaining a desire for a child. Primary infertility means when a woman is unable to ever bear a child, either due to the inability to become pregnant or the inability to carry a pregnancy to a live birth she would be classified as having primary infertility. Thus, a woman whose's pregnancy spontaneously miscarries, or whose pregnancy results in a still born child, without ever having had a live birth would present with primarily infertility. Secondary infertility means when a woman is unable to bear a child, either due

to the inability to become pregnant or the inability to carry a pregnancy to a live birth following either a previous pregnancy or a previous ability to carry a pregnancy to a live birth, she would be classified as having secondary infertility. Thus those who repeatedly spontaneously miscarry or whose pregnancy results in a stillbirth, or following a previous pregnancy or a previous ability to do so, are then not unable to carry a pregnancy to a live birth would present with secondarily infertile. Infertility is the inability of a sexually active couple, not using birth control, to get pregnant after one year of trying. It refer to the biological inability of an individual to contribute to conception. About one quarter of female infertility is caused by a problem with ovulation. Normally, each month an egg matures within its own follicle (a sort of bubble) in the ovary and is released into the fallopian tube. This process of ovulation is the fertile time of the menstrual cycle. Seven-tenths (70.0 percent) of respondents known the concept of infertility, which means not being able to become pregnant after a year of trying.

### **Menopause**

Menopause is the time in a woman's life when her menstrual cycles end and she can no longer get pregnant naturally. Menopause is the point at which a woman stops menstruating As a woman nears age 50 or so, the ovaries are close to running out of eggs, estrogens levels begin to drop, and the first signs of menopause may appear. About 55.0 percent of respondents are aware of the concept of menopause; causes no longer get pregnant naturally. An overwhelming proportion (90.0 percent) of respondents is that menopause typically occurs between 45 and 55 years age of women.

### **Female Sexual Dysfunction**

Female sexual dysfunction is defined as a lack of interest in or enjoyment of sexual activity that is distressing to a woman. It can result from a loss of sex drive (libido), an inability to become aroused or to reach an orgasm, or painful intercourse. A combination of many personal, interpersonal, and medical factors may contribute to sexual dysfunction, when a woman nears age 50 or so, Periods may become irregular, but a woman may still be able to get pregnant. Once the ovaries have stopped producing eggs, however, fertility ends. After menopause, women may experience sexual dysfunction as a result of lower levels of hormones. Little over one-third (35.0 percent) of respondents only are known about Female sexual dysfunction as a lack of interest in or enjoyment of sexual activity.

### **Emergency Contraceptive**

The emergency contraceptive pill regimen recommended by World Health Organisation is one dose of levonorgestrel 1.5 mg, taken within five days (120 hours) of unprotected intercourse. Only 20.0 percent of respondents are aware that the emergency contraceptive pill cab taken to avoid unprotected intercourse within five days (i.e.120 hours).Little over half (55.0 percent) of respondents are only aware that the fertile period (to become pregnancy) is the 8th day from the first day of the period to the 20th day of the cycle.

### **Conclusion**

The knowledge on female reproductive aspects are essential for teaching faculty, because they are key persons in providing information to students, peer groups as well as public at most better. But, the findings reveal that knowledge on some female reproductive aspects among respondents of refresher course in women studies is quite good, while not satisfactory in some aspects.

### **Suggestion**

Based on the findings of the present study, it suggested that information on crucial aspects of women reproduction should be provided to the faculty members by including certainly two sessions in every of refresher course.

### **References**

1. Fathalla MF. 1988. Research needs in human reproduction In: Research in Human Reproduction: Biennial Report (1986-1987). Edited by E. Diczfalusy, P.D. Griffin & J. Khanna. World Health Organization, Geneva. p.341
2. Fathalla MF. 1996. Safe motherhood and child survival: The importance of family planning and the interdependence of services. In Family Planning, Fathalla MF. 1997. From obstetrics and gynecology to women's health- The road ahead. Parthenon publishing group, Lancs, UK and New York.
3. World Health Organization. 1987. Infections, pregnancies and infertility: perspectives on prevention. Fertil Steril 47:964-968.