COMPARATIVE STUDY ON EFFECT OF HIGHER EDUCATION IN WOMEN ON FAMILY PLANNING AWARENESS

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ABSTRACT: A comparative study of 200 adult women of reproductive age (18 to 45 years) was conducted to assess effect of higher academic education on the family planning awareness. A stratified random sample of women volunteers who attended health check-up or health awareness camps in an urban slum of Mumbai was selected and divided in to two groups. Group A included 100 women who had minimum education up to graduation. Group B included 100 women who had education less than 10th standard. Using an interview technique, each woman respondent was requested to answer 12 questions. It was observed that two groups of women respondents were almost similar on socio-demographics but formal education had enhanced awareness status among Group A as compared to Group B respondents. However a significant number of women in Group A lacked proper awareness about family planning practices. The study findings emphasized the need of imparting sex education including family planning awareness programs even in educated clients like high school and college students.

KEY WORDS: Family Planning, Awareness, Education, sex education, Contraceptives.

INTRODUCTION: India faces three major challenges today in the form of three 'P' – that is Poverty, Population Explosion and Poor Health Awareness. Although the economic condition and the living standard of average Indian population seems to be apparently improving and percentage of girls seeking higher education is also growing, India is still marching ahead very fast to become the number one most populous nation! The current population of India is 1.27 billion[1]. On this background study was conducted to assess effect of higher academic education in women on Family Planning Awareness.

METHODS: A comparative study was carried out in an urban slum in Mumbai from December 2012 to June 2013 with the approval from ethical committee. A cross sectional survey was conducted on a sample of adult women of reproductive age (18 to 45 years) who volunteered to participate in the study. The target study group was represented by 568 women who attended free eye checkup camps or health awareness programs conducted by health agencies and health care providers for women in population at large. Assuming that approximately 50% adult women in the slum might have correct knowledge about practicing family planning methods (Sharma Vasundhara et al[7]), a sample size of 96 women was required in each group to estimate true proportion in the population with 10% relative precision and 95% confidence level. Therefore a stratified random sample of 200 women from the study group was selected. Inclusion Criteria was that the respondent women should be those adult women of reproductive age (18 to 45 years) who were willing to participate and who met the required educational criteria.

Those women who were not willing to participate and those who did not meet age and educational criteria were excluded from the study sample.

The study sample was equally divided in to two groups. Group A included 100 women who had minimum education up to graduation. Group B included 100 women who had education less than 10th standard. Study participants in both the groups were administered a common, structured and pilot tested questionnaire through interview technique. The questionnaire included information on socio-demographics of the women respondents in addition to a core set of questions covering various aspects reflecting their knowledge about family planning practices. There were 12 close-ended questions asked to each participant: 1) whether married or not? 2) Her ideas about how conception occurs? 3) What does Family Planning mean? 4) From where did you come to know about this term? 5) What are the contraceptive devices that you are aware of? 6) Do you know what 'Safe period' means? 7) Where can you get contraceptive devices from? 8) Do you know what emergency contraception means? 9) In the event of failure of contraception or unwanted pregnancy what can be done? 10) Who will decide about use of contraceptives, spacing and family size in your family? 11) Were you provided any sex education at the educational institute? 12) Do you recommend Sex Education to be incorporated in the curriculum in 9th and 10th standard?

Descriptive analysis of the responses was done, frequency distributions were generated, percentages were calculated and comparison among the groups was carried using chi-square test and binomial (Z) test for two sample proportions using STATA version 10.3, 2009. A p-value <0.05 was considered for statistical significance.

RESULTS: Baseline characteristics of the women respondents in both the groups are presented in Table 1.It is evident that the two groups of women respondents were almost comparable on socio-demographic characteristics except education.

S.NO.	FACTOR	GROUP A (GRADUATION AND ABOVE)(n=100) %	GROUP B (10TH STD AND BELOW) (n=100) %
1	**Religion (in %)**		
	Hindu	76	80
	Muslim	4	3
	Buddhist	18	15
	Christian	2	1
	Other	None	1
2	**Residence (in %)**		
	Rural	27	30
	Urban	73	70
3	**Marital Status (in %)**		
	Married	63	76
	Unmarried	21	9
	Widow	9	12
	Separated	7	3

4	**Occupation (in %)**		
	Housewife	48	52
	Working	51	49
5	**Family Income Per Annum (in %)**		
	Below 1.2 Lacs	16	19
	1.2 to 2.4 Lacs	57	51
	Above 2.4 Lacs	27	20

TABLE – 1 – BASELINE CHARACTERISTICS OF WOMEN RESPONDENTS

76% of women in Group A and 80% in group B were Hindu while 18% were Buddhist in Group A and 15% in Group B.

In Group A 27% were from rural background and 73% from urban background whereas in Group B 30% belonged to rural background and 70% to urban background.

63% women in Group A as against 76% in Group B were married, and a slightly higher proportion of women in Group A were found to be unmarried in comparison to Group B.

48% women in Group A and 52% women in Group B were housewives while 51% in Group A and 49% in group B were working.

In Group A 16% and in Group B 19% had annual income less than 1.2 Lacs; 57% in Group A and 51% in Group B had annual income 1.2 to 2.4 Lacs; 27% and 20% in Group A and B respectively had income over 2.4 Lacs.

Respondent's answer to the questions regarding knowledge and practice about family planning methods are enumerated in Table 2.

S.NO.	QUESTION	GROUP A (GRADUATION AND ABOVE) (n=100) %	GROUP B (10TH STD AND BELOW) (n=100) %
1	**Marital Status and awareness about the term "Family Planning" (in %)**	Group A Number (%) having knowledge	Group B Number (%) having knowledge
	Married/Widow/ Separated (N=170/85%)	76/79 N=79 (96.2%)	85/91 N=91 (93.4%)
	Unmarried (n= 30/15%)	18/21 N=21 (85.7%)	7/9 N=9 (77.77%)
2	**Ideas about Conception (in %)**		
	Aware about fertilization procedure	58	33
	Pregnancy results after sexual relationship	36	48
	No idea	2	9

	God's Gift	1	3
	Others	3	7
3	**What does Family Planning mean? (in %)**		
	Restricting Family size	55	59
	Spacing and Restricting Family size	35	21
	No Idea	0	3
	Sterilization Procedure	6	10
	Medical termination of Pregnancy	4	4
	Others	0	3
4	**From where did you come to know about this term? (in %)**		
	Peers/Friends, Colleagues/ Neighbor	64	68
	Parent	12	3
	Spouse	0	2
	Teachers	2	1
	Doctors	7	3
	Media (Books, Magazine, TV, Radio, Hoardings etc)	15	23
5	**What are the contraceptive devices that you are aware of? (in %)**		
	Only Condoms	2	6
	Only IUCD	3	2
	Only OC pills	2	9
	Only Injectable contraceptives	2	0
	Multiple contraceptive devices	91	80
	None	0	3
6	**Do you know what 'Safe period' means? (in %)**		
	Yes	38	12
	No	52	80
	Wrongly informed	10	8
7	**Where can you get contraceptive devices from? (in %)**		
	Medical shop	3	5
	Free of charge at Government Hospitals and Family Planning centers	3	13
	Any other hospitals	3	2
	ANM/ AASHA workers	1	11
	Husband brings	1	7

	Aware of Multiple Sources	86	53
	Do not know	3	9
8	**Do you know what emergency contraception means? (in %)**		
	Yes	34	17
	No	29	44
	Wrongly Informed	37	39
9	**In the event of failure of contraception or unwanted pregnancy what can be done? (in %)**		
	Medical Termination of pregnancy	54	29
	Tablets for withdrawal bleeding	35	42
	Eat certain food that will facilitate abortion	1	6
	Exert and exercise physically	2	4
	Go to a quack (Daai)	0	4
	Introduce herbs, etc in Vagina or deep inside (Cervix)	0	1
	Nothing can be done. Continue pregnancy	8	14
10	**Who will decide about use of contraceptives, spacing and family size in her family? (in %)**		
	Decision In consensus with the husband	64	34
	Herself	22	3
	Husband	9	32
	In laws	3	29
	Her Parents	2	0
	Astrologer/ Religious Guru	0	2
11	**Were you provided any sex education at the educational institute? (in %)**		
	Yes	26	17
	No	69	44
	Do not remember	5	39
12	**Do you recommend Sex Education to be incorporated in the curriculum in 9th and 10th standard? (in %)**		
	Yes	78	41
	No	16	48
	Do not know	6	11

TABLE – 2 – ANSWERS TO THE QUESTIONS

96.2% of married and highly educated women and 93.4% married and less educated women had heard about the term – "Family Planning" whereas 85.7% of unmarried and highly educated women as against 77.77% unmarried and less educated were aware of this term.

A significantly higher proportion (58%) of women in Group A had proper knowledge about how fertilization occurs as against only 33% in Group B (p=0.0002).

When asked about the meaning of Family Planning, 55% in Group A and 59% in Group B said it is restricting family size; 35% in Group A and 21% in Group B felt that it means spacing (p=0.275); 6% in Group A and 10% in Group B opined that it means Sterilization procedures; 4% each in both the groups understood that Family Planning means Medical Termination of Pregnancy and 3% in Group B had no idea about what Family Planning means. In Group A all the women had at least some idea about the term Family Planning.

Although more number of women in Group A got information about family planning from doctors (7% versus 3%) but in Group B more number of women received this information from media (15% versus 23%), but otherwise no significant differences were observed in primary sources of information among the groups. Interestingly there were 2 % women in group B who were told about family planning for the first time by their husbands.

Higher proportion (91%) of women in Group A knew about more than one method of contraception as compared to 80% women in Group B (p=0.0272). Only 3% women in Group B had no knowledge about any contraceptive devices.

A very high proportion (80%) of women in Group B had no clue about what safe period means as compared to 52% women in Group A (p=0.0001).

Similarly 86% in Group A and 53%in Group B were aware of multiple sources of getting contraceptive devices including Free devices available at Government hospitals and centers. This difference in knowledge of women was also statistically significant (p=0.0001). Almost double the number of women in Group A knew meaning of emergency contraceptives as against those in Group A (p=0.0058).

54% in educated group A against 29% in Group B (p=0.0003) were aware about Medical Termination of Pregnancy including medical and surgical methods. In Group B 42% women felt that they can get rid of such pregnancy by taking tablets for withdrawal bleeding irrespective of period of gestation and 14% said that once pregnant, nothing can be done; the pregnancy has to continue.

Although a significantly higher proportion of educated women would take decision about family size in consensus with their husbands as compared to less-educated women (64% versus 34%, p=0.0001) but surprisingly a considerable number in Group A (22%) would not hesitate to take such decision alone. In 66% of women of Group B, decision about family size was taken not by the couple but by some other family members.

Of those who could remember, almost equal proportion of women (approx.26%) in both the groups said they did receive formal sex education in their educational institutes.

When asked if Sex Education should be a part of curriculum in high schools, 78% women in Group A answered "Yes" while in Group B only41% supported it (p=0.0001).

DISCUSSION: Group A consisted of 100 women with higher education up to graduation or above whereas Group B consisted of 100 women with education up to 10th standard and below. The basic characteristics of women in both the groups like religion, occupation, family income, rural versus

urban background, marital status matched well. As far as awareness about the term - "Family Planning" is concerned, married vs. unmarried comparison showed difference in awareness level but only marginally significant (p=0.099). Among married women no significant role of education was noticed though educated women have slightly higher (but non-significant) awareness (p=0.414) about the term "Family Planning". Similarly among unmarried women also no significant role of education could be found though educated mothers have higher (but non-significant) knowledge (p=0.593). Thus, most of the women – whether married or unmarried and whether highly educated or not – had heard of the term –"Family Planning".

The present study indicated that formal academic education had significant effect on the proper knowledge about how fertilization occurs. 58% women of Group A as against only 33% in Group B knew about the process of fertilization. However 42% of highly educated women did not have proper knowledge about it in spite of the formal higher education. This is a matter of concern. Along with academic education, they need to be educated about subjects like Family Planning which are actually useful in life.

When asked about the meaning of Family Planning, 55% in Group A and 59% in Group B said it is restricting family size; 35% in Group A and 21% in Group B felt that it means spacing as well as restricting family size – which is significant. As regards to spacing Aggarwal H et al[2] noticed this problem in their study as well. In group A all the women had at least some idea about the term Family Planning whereas 3% women in Group B had no idea about what it means. Tuladhar H et al[8] in their study also observed that with increase in level of education, awareness also increased.

When asked about how they came to know about this terminology, in both the groups, majority of them came to know from peers, friends, colleagues or neighbors. Formal education in Group A had hardly made any difference. Parents, teachers and doctors who should have been the prime sources of information play insignificant role as far as spreading awareness of family planning among women. However media has played significant role in spreading awareness about family planning especially in less educated group B; 23% of them got to know about family planning from various media. Guria Madhumita et al[3] in their study appreciated vital role of media in this regard.

Majority of women in both Groups- 91% in Group A and 80% in Group B knew about more than 1 method of contraception. 3% in Group B had no knowledge about any contraceptive devices. Simple measures like 'safe period' can play effective role in family planning. Women in high schools and colleges can be made aware about menstrual cycle and safe period by the teachers as well. 52% in Group A and 80% in Group B had no clue about what safe period means. Majority of women in our study had no idea that pregnancy can be avoided by this simple measure too.

Majority of women in both the groups – 86% in Group A and 53%in Group B were aware of multiple sources of getting contraceptive devices. They were aware that IUCD, Condoms, Oral Contraceptive pills are available for free at Government hospitals and centers.

There was lack of awareness about emergency contraception and many of them were wrongly informed about it. Similar observations were cited by Kakani et al[4]. In the study by Olivera Radulović etal[6] most of the interviewees with a higher degree gave the best definition of contraception. In the study by Sharma Vasundhara et al[7], more than 90% of the women were aware about both male and female sterilization methods, pills, intra-uterine contraceptive device (IUCD), condoms, and traditional methods (breastfeeding, withdrawal and rhythm method) of family planning.

Once the conception has occurred but the pregnancy is unwanted, 54% in educated group A were aware about Medical Termination of Pregnancy including medical and surgical methods. In Group B 42% women felt that they can get rid of such pregnancy by taking tablets for withdrawal bleeding irrespective of period of gestation and 14% said that once pregnant, nothing can be done; the pregnancy has to continue. Although Medical Termination if Pregnancy should not be used as a measure of birth control, awareness about Medical Termination of Pregnancy can prevent some unwanted childbirths.

Surprisingly in 66% of women of Group B, decision about family size was taken not by the couple but by husband alone or by in laws or by astrologer or by religious Guru. G. Mallika et al[5] in their study observed similar thing. In group A, 64% decisions were made by the couple in consensus. Significant positive effect of higher education was noticed in the educated group.

Only 26% in Group A and 17% in Group B received formal sex education in the educational institute. There seems to be lot of scope for work on this front. It is the need of the time that formal education should include sex education and family planning awareness programs.

Women were keen on getting proper information on the sensitive subject like family planning. Although many of them were shy, when asked if Sex Education should be a part of curriculum in high schools, 78% women in Group A answered Yes and in Group B 41% supported it.

The results in our study quite matched with a study of 'The influence of education level on family planning' by Olivera Radulović et al[6].

In the study by Sharma Vasundhara et al[7] all women in the study were in favor of practicing family planning but only 55.9% actually used and there was no rural- urban relation. In the present study as well 78% women in Group A and 41% in Group A showed acceptance.

CONCLUSION: Although more and more number of girls is taking formal and higher education in educational institutes, the ignorance about family planning is still significant. The need of the time is not only to educate the women on the subject of family planning but impart proper scientific information to them. The study emphasizes on the need of sex education including family planning awareness programs in high school and colleges. Author strongly recommends Sex Education in high school – especially in 9th to 11th standard.

REFERENCES:

1. Google.co.in:http://www.indiaonlinepages.com/population/india-current-population.html
2. Aggarwal H, Vaid S, Vaid N: 2005Anthropol, 7: 35- 40:Comparison of the level of awareness of family planning measure in the urban and urban-slum women:
3. Guria Madhumita, De Debasis, Bera Tushar Kanti, Ghosh Debidas: J Hum Ecol, 27(2): 101-104 (2009): Awareness Level of Family Planning Practices in School Going Adolescent Girls of Different Socio-economic Groups in Rural Sectors, West Bengal.
4. Kakani A., Jaiswal A.: International Journal of Reproduction, Contraception, Obstetrics and Gynecology: 2012 Dec; 1(1):3-6: Awareness level of family planning methods in adolescent girls of different socio-economic groups in rural sectors, in central India.
5. Mallika G., Saritha V., Vara Lakshmi P., Kiranmai: Indian Journal of Innovations and developments: Volume: Awareness, Use and Barriers of Family Planning:

6. Olivera Radulović, Čedomir Šagrić, Aleksandar Višnjić, Ana Tasić: FACTA UNIVERSITATIS: Series: Medicine and Biology Vol.13, No 1, 2006, pp. 58 - 64 UC 37.046:613.88:314.33.6: 'The influence of education level on family planning':
7. Sharma Vasundhara; Mohan Uday; Das Vinita; Awasthi Shally: Journal of Family Medicine and Primary Care: Vol. 1, issue 1, 2012; page 43-47: Socio demographic determinants and knowledge, attitude, practice: Survey of Family Planning
8. Tuladhar H; Marahatta (Khanal) R: Nepal Med Coll J 2008; 10(3): 184-191: Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital.

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