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A Comparative Study of Mothers on Their Awareness Level about Family Planning Practices in Remote Villages of Purba and Paschim Medinipore, West Bengal, India

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Abstract:

Population explosion is a burning problem in our country. The objectives of this study was to 1) To compare the knowledge of mothers about family planning practices due to generation advancement. 2) To find out the various factors associated with their knowledge. It was a stratified random sampling method. Data of mothers were collected from remote villages of Purba and paschim Medinipore, West Bengal for the periods of 2004-2006. The mothers of previous generation along with positive knowledge and followers of family planning practices were 20% and in present generation it was 75%. Mothers of previous generation having positive knowledge but not following the family planning practices were 35% and in present generation it was 15%. Mothers with lack of knowledge were 45% in previous generation and were found only 10% in present generation. Along with their discrepancy of education, caste and economical status, knowledge level was changed. The source of their knowledge was also different. Positive attitude of husband and other family members of mothers were more in present generation than previous generation. So, knowledge level of mothers about contraception will be increased by improvement of their educational level by which population explosion may be controlled.

Keywords: Contraception, caste, education, economical status, generation of mother

1. Introduction

Family planning is sometimes used as a synonym for the use of birth control; however, it often includes a wide variety of methods, and practices. It is most usually applied to a female-male couple who wish to limit the number of children they have and/or to control the timing of pregnancy which is also known as spacing children. Family planning may encompass sterilization, as well as abortion (Mischell, 2007). Family planning services are defined as “educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved” (Mischell, 2007). WHO has started the dimension of family planning starting from proper spacing and limitation of births to sex education, genetic counseling, teaching home economics and nutrition (Varma and Achhpal, 1980). China’s ‘one-child policy’ forces couples to have no more than one child. Beginning in 1979, the policy was instated to control the rapid population growth that was occurring in the nation at that time (Kane and Choi, 1999). The knowledge attitude and practices (KAP) about Family planning is high in educated family but it is not so in low-economic family as per report of Gupta and Sinha (2006). In India problems are more difficult and complicated because of marked socio-economic diversity and if the quality of ‘Family planning service’ is not improved population explosion can’t be controlled (Gupta and Sinha, 2006). This comparative study was undertaken to find out the variation of knowledge of two generations mothers about family planning practices in Purba and Paschim Medinipore districts, West Bengal. We also determined the factors affecting their knowledge gain linked with family planning practices.

2. Materials and Methods

A stratified random sampling method was followed for data collection and then followed multistage random sampling. It is a door to door questionnaire method survey. For this purpose data were collected for 2004-2006 from Purba and Paschim Medinipore districts, West Bengal, India. Mothers selected for previous generation at the age group 56- 75 yrs. and present generation was 20-55 yrs. Data were analyzed by two-tail Chi-Square test of independence to get the level of significance at every comparison about family planning in different generation of mothers.

3. Results

The positive knowledge and followers mothers of previous generation (N= 800) were 20% and in present generation (N= 1100) it was 75%. Positive knowledge but not followers mothers of previous generation was 35% and in present generation it was 15%. Mothers who have lack of knowledge were 45% in previous generation and only 10% in present generation (Fig.1). In illiterate group of both generations, knowledge and practice levels both were less than higher educated group (Table-1). In general caste of both generations was more aware than other castes (Table-2). Similarly, in middle- high- socioeconomic group awareness level was more than low-socio-economic group of both generations (Table-3). Difference was also noted in their knowledge about different contraceptive methods i.e. withdrawal, safe/ danger period, surgical technique, physiological barrier, hormonal pill and emergency contraceptive pill (Table-4). The sources of knowledge of previous generation mothers was maximum (57%) from mothers/ elder person of family/ friend circle but in present generation it was maximum (52%) from ICDS/PHC/teachers (Fig. 2). Positive attitude of husbands and other family members were more in present generation than previous generation (Table-5).

4. Discussion

Family planning in India is based on efforts largely sponsored by the Indian Government. In 1965-2009 period, contraceptive usage has been increased rapidly more than tripled and the fertility rate has more than halved, but the national fertility rate is still high enough to cause long-term population growth. India adds up to 10 lakh people to its population every 15 days (Rengal 2000; Pati 2003). Low female educational levels and the lack of widespread availability of birth control methods were hampering the use of contraception in India which has been supported by another study (Ramu, 2006).

From our study, it has been revealed that greater number of knowledgeable and follower mothers about contraceptive method were noted in present generation than previous generation. Educational level was the major factor for this awareness level (Balakrishna, 1971). This may be due to their generation gap and generation wise educational improvement as well as economical improvement. Association between literacy level and attitude adoption of family planning was to be significant in a number of studies (Balakrishna 1971; Singh 1976). According to their caste, maximum knowledgeable and followers mothers were seen in General caste than SC, ST and OBC caste in both present generation and previous generation mothers which may be due to social and cultural improvement in General caste (Aggarwal et al., 2005).

The results revealed that the awareness level of different methods of family planning was significantly high in middle- high and middle socio-economic groups than low-socio-economic group. It may be concluded that socio-economic factors plays a vital role for awareness building on the family planning method (Beekle and Mc Cabe, 2006). So, this variation was not only due to the educational status, but also the socio economic status of the family members (Gage 1995).

Mothers of previous generation were totally not aware about emergency contraceptive method which may be due to their low interest/they were indifferent /they were not aware about the demerits of overpopulation (Gandhi, 1999).

In case of present generation of mothers continuous effort of ICDS/ PHC from door to door enhances their knowledge (Watsa, 1994).

In case of present generation of mothers, their husband and other family members showed positive attitude to followed family planning methods due to low level of education as well as low economical status but in case of previous generation of mothers they were not so much conscious about the bad effects of overpopulation (Aggarwal et al., 2005)..

The most interesting result is that when the comparison about the knowledge in family planning was done between present and previous generation of mothers in different caste without considering the educational levels, economic levels etc, there was no significant association between the variables which highlighted the importance of education, economic status and others for improvement about knowledge in family planning.

From overall study, it may be stated that, in previous generation mothers, there was lack of education, lack of knowledge and attitude in this field. As there educational status was low, so there was scarcity of job and economical problem. Though ICDS/PHC plays an important role in both present and previous generation mothers but there was a significant variation.

5. Conclusion

It may be suggested that if continuous effort will give to mothers by ICDS/PHC, then positive mind set up to follow contraception method will be increased. Family interference, social superstition, geographical barriers or any types of barriers can be removed by the educational improvement. So, Govt. will take more steps for strengthening the educational system, impact of ICDS, by different campaigning and advertisement by different media.

6. References

1. Mischell, D.R.(2007) Family planning: contraception, sterilization, and pregnancy termination. In: Katz, VL, Lentz, GM, Lobo RA, Gershenson, D.M., eds. Comprehensive Gynecology. 5th ed. Philadelphia, PA: Mosby Elsevier. Chap 14.
2. Verma, A. and Achhpal, B. (1980). Towards Better Families: An integrated approach to family life education. A monograph by family planning association of India (FPAD), Baroda, Pp.1-35.
3. Kane, P. and Choi, C.Y. (1999).China's one child family policy. BMJ. 319: 992-994.

4. Gupta, S. and Sinha, A. (2006). Awareness about reproduction and adolescent changes among school girls of different socioeconomic status. *The Journal of Obstetrics and Gynecology of India*. 56: 324-328
5. Rengel, M. (2000). *Encyclopedia of birth control*. Greenwood Publishing Group, ISBN 1-57356-255-6.
6. Pati, R.N. (2003). *Socio-cultural dimensions of reproductive child health*. APH Publishing, ISBN 978-81-7648-510-4, Pp. 51.
7. Ramu, G.N. (2006). *Brothers and sisters in India: a study of urban adult siblings*, University of Toronto Press, ISBN 0-8020-9077-X, Pp. 1-269.
8. Balakrishna, S. (1971). *Family planning knowledge attitude and practice*. National Institute of Community Development Survey Report, Hyderabad, Pp. 139.
9. Singh, K. (1976). *National Population Policy*. Ministry of Health and Family Planning, New Delhi.
10. Aggarwal, H., Vaid, S., Vaid, N. (2005). Comparison of the level of awareness of family planning measure in the urban and urban-slum women. *Anthropology*. 7: 35-40.
11. Beekle, A.T. and Mc Cabe, C. (2006). Awareness and determinants of family planning practice in Jimma, Ethiopia. *International Nursing Review*. 53: 269-276.
12. Gage, A.J. (1995). Women socio-economic position and contraceptive behavior in Togo. *Study Family Plan*. 26: 264-277.
13. Gandhi, A.B. (1999). Reproductive health of adolescent girl. *Journal of Obstetrics and Gynecology of India*. 49:132-135.
14. Wasta, M.C. (1994). *Young Sexuality*. Mumbai (SECERT). Family Planning Association of India.

Annexure

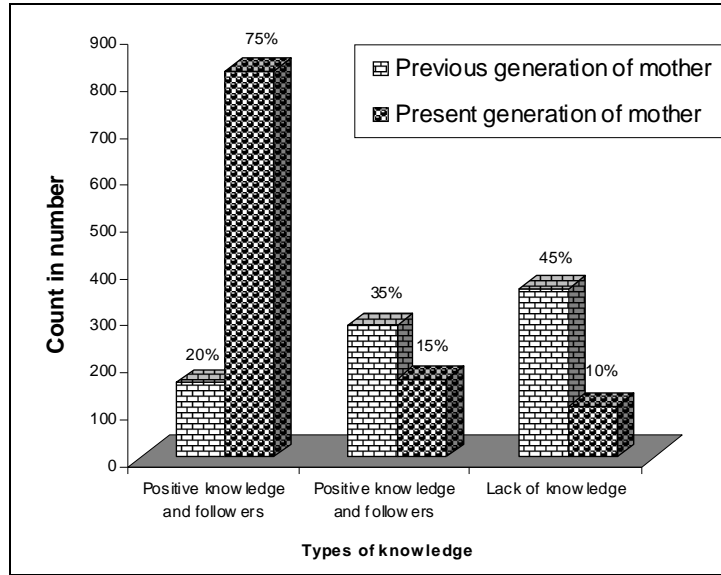


Figure 1: Knowledge about family planning methods and follow up the methods in previous generation (N=800) and present generation (N=1100) of mothers. Data are expressed in number and percentage. Significant association were found between knowledge about family planning and generation advancement of mother $\chi^2 = 66.16, df=2, p<0.001$.

Education Level	Illiterate			Primary to below Secondary			Secondary to below Higher Secondary (HS)			Higher Secondary (HS) to below Graduate			Above Graduate									
	Total No	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total No	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total No	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total No	Knowledgeable and non-followers	Knowledgeable and non-followers		Lack of knowledge					
Previous generation (N= 800)	420	15 (4)	180 (43)	225 (53)	250	50 (20)	70 (28)	130 (52)	80	55 (69)	20 (25)	5 (6)	50	40 (80)	10 (20)	Nil	0	Nil	Nil	Nil	$\chi^2 = 193.78, df=6, p<0.001$	Association between knowledgeable cum followers and knowledgeable non followers with advancement of education of mothers about family planning
Present generation (N= 1100)	120	18 (15)	22 (18)	80 (67)	110	60 (55)	20 (18)	30 (27)	210	168 (80)	42 (20)	Nil	300	255 (85)	45 (15)	Nil	360	324 (90)	36 (10)	Nil	$\chi^2 = 181.00, df=6, p<0.001$	
$\chi^2 = 18.25, df=2, p<0.001$ $\chi^2 = 26.42, df=2, p<0.001$ $\chi^2 = 7.37, df=2, p>0.05$ $\chi^2 = 0.87, df=1, p>0.05$																						
Association between knowledge level about family planning and advancement in generation of mother i.e. comparative analysis between previous and present generation of mothers within same educational level.																						

Table 1: Study on association between knowledge about family planning with educational level in present and previous generation of mothers as well as association between knowledge about the field with advancement of generation having same educational level. (Data expressed in number and percentage in parentheses).

Caste	General				SC				ST				OBC					
	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge		
Previous generation (N= 840)	100	70 (70)	15 (15)	15 (15)	200	40 (20)	60 (30)	100 (50)	210	30 (14)	70 (34)	110 (52)	290	20 (6)	135 (47)	135 (47)	$\chi^2 = 130.00$, df=6, p<0.001 $\chi^2 = 14.44$, df=6, p>0.05 $\chi^2 = 8.44$, df=2, p>0.05 $\chi^2 = 59.4$, df=2, p<0.001 $\chi^2 = 65.13$, df=2, p<0.001 $\chi^2 = 72.28$, df=2, p>0.001 Association between knowledge level of mother with their advancement of generation in same caste	Association between knowledgeable followers and knowledgeable non followers about family planning among mothers with caste variation within same generation of mothers
Present generation (N= 1100)	412	351 (85)	47 (11)	14 (4)	253	185 (73)	40 (16)	28 (11)	233	162 (70)	36 (15)	35 (15)	202	127 (63)	42 (21)	33 (16)		
Association between knowledge level of mother with their advancement of generation in same caste																		

Table 2: Study on association between knowledge levels about family planning with different castes in different generation of mothers (previous and present) as well as association between knowledge in the contraceptive field with advancement of generation having same caste. (Data expressed in number and percentage in parentheses).

Economic level	Low socio-economic group				Middle socio-economic group				Middle-high socio-economic group					
	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge	Total	Knowledgeable and followers	Knowledgeable and non-followers	Lack of knowledge		
Previous generation (N= 800)	546	46 (8)	200 (37)	300 (55)	177	52 (29)	65 (37)	60 (34)	77	62 (80)	15 (20)	Nil	$\chi^2 = 128.40$, df=4, p<0.001 $\chi^2 = 48.45$, df=4, p<0.001 $\chi^2 = 56.61$, df=2, p<0.001 $\chi^2 = 51.39$, df=2, p<0.001 $\chi^2 = 7.24$, df=1, p>0.05 Association between knowledge level of mothers within same economic group but different generation of mothers	Association between knowledge and lack of knowledge about family planning with variation of economic status within same generation of mother
Present generation (N= 1100)	395	229 (58)	71 (18)	95 (24)	315	234 (74)	66 (21)	15 (5)	390	362 (93)	28 (7)	Nil		
Association between knowledge level of mothers within same economic group but different generation of mothers														

Table 3: Studies on association between knowledge levels about family planning in different economic groups between previous and present generation of mothers as well as association between knowledge in the field with advancement of generation of mothers within same economic group. (Data expressed in number and percentage in parentheses).

Generation of mother \ Different Methods	Previous generation (N=440)	Present generation (N=990)
Withdrawal	89(20)	218(22)
Safe/Danger Period	17(4)	198(20)
Surgical Technique	119(27)	129(13)
Physiological Barrier	110(25)	109(11)
Hormonal pill	105(24)	247(25)
Emergency contraceptive pill	Nil	89(9)
Association between knowledge level about different contraceptive methods with generation advancement of mothers $\chi^2 = 30.13, df=5, p<0.001$		

Table 4 : Comparison of knowledge about different contraceptive methods among generation advancement of mothers in the field of family planning (Data expressed in number and percentage in parentheses).

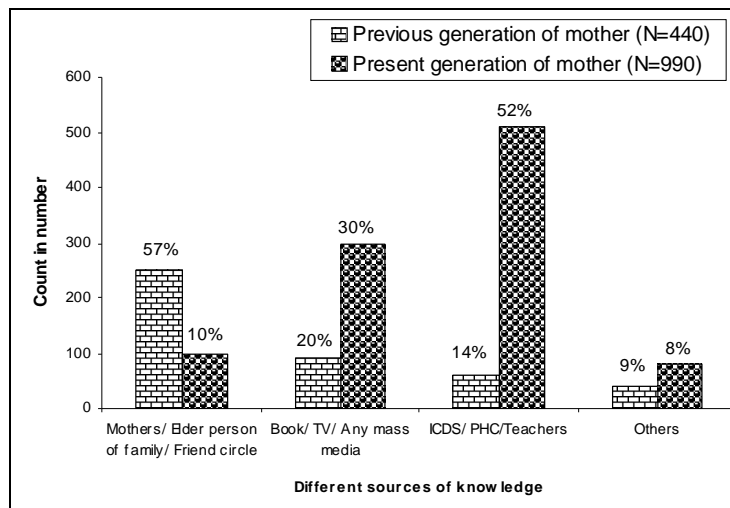


Figure 2: Comparisons of the different sources of knowledge about different methods for contraception among different generation of mothers. (Data expressed in number and percentage in parentheses). Association between different sources of knowledge with generation advancement of mothers $\chi^2 = 56.91, df=3, p<0.001$

Attitude of husband			Significant association between attitude of husband to follow the contraceptive method with generation advancement of mothers $\chi^2 = 54.43, df=1, p<0.001$
Generation	Previous generation (N=440)	Present generation (N= 990)	
Attitude Type			
Positive attitude	88(20)	713(72)	
Negative attitude	352(80)	277(28)	
Attitude of other family members			Significant association between attitude of other family members to follow the contraceptive method with generation advancement of mothers $\chi^2 = 24.56, df=1, p<0.001$
Positive attitude	132(30)	644(65)	
Negative attitude	308(70)	346(35)	

Table 5: Role of husband and other family members for adoption of family planning practices in present and previous generation of mothers (Data expressed in number and percentage in parentheses).