

Original Article

A STUDY OF KNOWLEDGE, ATTITUDES AND PRACTICES REGARDING CONTRACEPTIVE SERVICES AMONG HEALTH WORKERS IN SANGLI DISTRICT OF MAHARASHTRA, INDIA

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ABSTRACT

Background: Government Health workers play important role in awareness and acceptance of contraceptives. Hence review of their functioning is essential. In this context this study was conducted to assess the knowledge, attitude and practices regarding contraceptive services among health workers.

Methodology: It is a Cross-sectional study conducted over a period of 3 months. Calculated Sample size was 150 with simple random sampling technique. Clearance from the institutional ethical committee and concerned authorities of the college had been taken for the study. Study tool was Pre-designed self administered Questionnaire, for assessing knowledge, attitude and practices regarding contraceptive services among Government Health workers from randomly selected Primary Health Centers (PHCs).

Results: Of the 153 subjects, mean scores for knowledge, attitude and practices regarding contraceptive services were respectively 12.29, 9.58 and 11.27. There was no significant difference in knowledge of those under 35 yrs and those above it; but there was statistically significant difference in attitude and practices regarding contraceptive services. The knowledge and practices regarding contraceptive services regarding emergency contraception were associated with designation with ANM faring better in it.

Conclusion: Although the health workers fared well in knowledge, attitude and practices regarding contraceptive services, there is room for further improvement.

Keywords: Contraceptive Behavior; Community Health Worker; Nurse-Midwives; Public Health Nursing; Community Health Center; India.

INTRODUCTION

Each year, about 79 million unintended pregnancies occur worldwide¹. The World Health Organization (WHO) estimates that in the developing countries one woman dies every eighth minute due to unsafe abortions². According to the new

worldwide estimates of abortion rates and trends, the overall abortion rates are almost similar in both developing and developed world³.

However, unsafe abortions are dominating in developing countries⁴, where it is a major Public health problem. Community health workers can

act as a bridge between the community and their health facilities and can use various Contraceptive methods to significantly reduce the mortality and morbidity related to unsafe abortions ⁵.

It is well established fact that community health workers play important role in creating awareness and subsequently acceptance of contraceptives. Similarly they can also act like a vehicle to drive the movement against unwanted pregnancies and unsafe abortions.

They are trained by the govt. to fulfill this task and they act as depot holder for contraceptives. But still the problem of unsafe abortions is rampant. Hence review of their functioning is absolutely essential. The studies regarding knowledge, attitude and practices regarding contraceptive services by Health Workers are very few and all are concentrated towards Emergency contraception. When considering the local scenario the picture becomes even hazier.

This study is an effort to identify the quality of functioning of Health workers from Sangli district of Western Maharashtra; as the contraceptive services machinery, by evaluating their knowledge, attitude and contraceptive services.

METHODS

It is Cross- Sectional Study, conducted over a period of 3 Months (September 2013- December 2013). Based on the observed prevalence in previous such study the calculated sample size was 147.173 $\square\square$ 150 $\square\square$ Sampling Technique used was Cluster Random Sampling. Study Subjects were Community Health Workers from selected Government Primary Health Centers.

Study tool used was Pre-designed, Self Administered Questionnaire based on Published literatures and modified according to cultural set up of this area, with the help of expert faculty. To maintain anonymity of participants there was no mention of personal identification information like name, address, PHC, etc in the questionnaire. The questionnaire was divided in four sections. First section had questions regarding relevant socio-demographic factors like age, gender, designation, education etc. Second section had twenty questions regarding the knowledge, methods of prescription, side-effects, contraindications etc. regarding the contraceptives including emergency contraceptives. The questions had three options "YES", "NO" and "UNSURE". Each correct answer (either YES or NO, depend-

ing on question) was awarded one point during analysis, while wrong answer or selection of "UNSURE" option was considered zero. Hence all the scores from this section were between 0 and 20. Third Section was regarding the attitude of health workers regarding prescription of various contraceptives. This section had 15 questions, which had to be answered either "YES" or "NO". The answer which could be deemed as positive attitude was awarded one point, while other answer was considered zero. All the scores from this section were between 0 and 15. Fourth Section was regarding the practices regarding contraceptive services of health workers regarding prescription of various contraceptives. It had 15 questions regarding actual practice of supply or motivation or prescription of various contraceptives by health workers to the eligible couples or women. Each question had to be answered either "YES" or "NO". The answer appropriate answer was awarded one point while the other answer was awarded zero points. The scores from this section had to be between 0 and 15. Finally during the analysis all the participants were divided in two groups i.e., < 50% and > 50% for each of the three attributes knowledge, attitude and practices regarding contraceptive services respectively.

Clearance from the institutional ethical committee of college has been taken. The permissions for conducting the study were taken from the Chief Executive Officer, Zilla Parishad and District Health Officer of Sangli district. Primary Health Centers (PHCs) from where data is to be collected were selected randomly by chit method. The permission for the study was taken from the in-charge Medical Officer of the respective PHC.

Community Health workers from a particular PHC were contacted during their meeting / training sessions. They were not informed about the study before hand. Then they were briefed about the study, its procedure and its objectives. They were informed about voluntary nature of participation and were assured about anonymity. All those voluntarily consented were included in the study. They were given required privacy and space for completion of questionnaire. The Medical officer or any higher authority was not present during the filling up of questionnaires. The completed questionnaires were collected in sealed drop-box, which was opened after completion of total data collection. Same procedure was repeated in all the selected PHCs. The private hospitals and other staff are not as-

sociated with distribution of contraceptives hence they were excluded from study.

RESULTS

Total 174 health workers participated in the study. But out of them 153 had submitted completed the questionnaire and hence were included in the final analysis.

Out of 153 participants, Accredited Social Health Activists (ASHA) were 108 (70.59%) and Auxiliary Nurse Midwives (ANM) were 45 (29.41%). Considering the education 78 (50.98%) were educated up to secondary school (10 years of formal education), 41(26.80%) were up to Higher Secondary (10+2 years formal education) and 34 (22.22%) were up to graduation. Considering age 74 (48.37%) were under 35 years of age and 79 (51.63%) over 35. (Table 1)

Table 1: Table showing Age, Education and Designation distribution of the Health workers

Age	Education			Total
	Secondary School (%)	Higher Secondary School (%)	Graduation (%)	
Below 35 years				
ASHA	19 (37.25)	21 (41.18)	11 (21.57)	51 (100)
ANM	8 (34.78)	5 (21.74)	10 (43.48)	23 (100)
Total	27 (36.49)	26 (35.14)	21 (28.38)	74 (100)
36 years and above				
ASHA	34 (59.65)	13 (22.81)	10 (17.54)	57 (100)
ANM	17 (77.27)	2 (9.09)	3 (13.64)	22 (100)
Total	51 (64.56)	15 (18.99)	13 (16.46)	79 (100)
Total				
ASHA	53 (49.07)	34 (31.48)	21 (19.44)	108 (100)
ANM	25 (55.56)	7 (15.56)	13 (28.89)	45 (100)
Total	78 (50.98)	41 (26.80)	34 (22.22)	153 (100)

Table 2: Table showing descriptive statistics regarding scores of Knowledge, Attitude and practices regarding contraceptive services of the Female Health Workers

	Knowledge	Attitude	Practices
Total Score	20	15	15
Mean	12.29	9.58	11.27
Std. Error of Mean	0.19	0.10	0.18
Median	12	9	11
Mode	12	9	11
Std. Deviation	2.34	1.24	2.20
Range	11	6	9
Minimum	6	7	6
Maximum	17	13	15
Percentiles			
25	11	9	10
50	12	9	11
75	14	10	13

The mean score out of 20, for Knowledge was 12.29. Both median and mode were 12 respectively. The standard deviation was of 2.34. The

mean score out of 15 for both attitude and practices regarding contraceptive services were 9.58 and 11.27 respectively. (Table 2)

The knowledge was associated with designation. Higher percentage of ANM had better Knowledge and practices regarding contraceptive services as compared to ASHA. There was no difference in attitude of ASHA and ANM. (Table 3)

There was no secular trend in knowledge and attitude of health workers with their education level. Higher % of secondary school educated health worker had better practices regarding contraceptive services followed by higher secondary education. (Table 4)

Knowledge was independent of age group. Higher percentage of under 35years had attitude >50% as compared to those above 35years. However percentage of participants having age above 35 years had better practices regarding contraceptive services as compared to those below 35%. (Table 5)

Table 3: The association of Designation of Health Workers with Knowledge, Attitude and Practices regarding Contraceptive Services

Designation	Knowledge		Attitude		Practices		Total
	< 50%	> 50 %	< 50%	> 50 %	< 50%	> 50 %	
ASHA	31 (28.7)	77 (71.3)	8 (7.41)	100 (92.59)	15 (13.89%)	93 (86.11%)	108 (100%)
ANM	3 (6.67)	42 (93.33)	4 (8.89)	41 (91.11)	0 (0%)	45 (100%)	45 (100%)
Total	34 (22.22)	119 (77.78)	12 (7.84)	141 (92.16)	15 (9.8%)	138 (90.2%)	153 (100%)

Chi-Square = 8.93 , df = 1 , p value= 0.00 Chi-Square = 0.1 , df = 1, p value= 0.76

Figures in the parenthesis indicates percentage

Table 4: The association of Education of Health Workers with Knowledge, Attitude and Practices regarding Contraceptive Services

Education	Knowledge		Attitude		Practices		Total
	< 50%	> 50 %	< 50%	> 50 %	< 50%	> 50 %	
Secondary School	19 (24.36)	59 (75.64)	4 (5.13)	74 (94.87)	0 (0)	78 (100)	78 (100)
Higher Secondary School	10 (24.39)	31 (75.61)	0 (0)	41 (100)	6 (14.63)	35 (85.37)	41 (100)
Graduation	5 (14.71)	29 (85.29)	8 (23.53)	26 (76.47)	9 (26.47)	25 (73.53)	34 (100)
Total	34 (22.22)	119 (77.78)	12 (7.84)	141 (92.16)	15 (9.8)	138 (90.2)	153 (100)

Figures in the parenthesis indicates percentage

Table 5: The association of Age of Health Workers with Knowledge, Attitude and Practices regarding Contraceptive Services

Age	Knowledge		Attitude		Practices		Total
	< 50%	> 50 %	< 50%	> 50 %	< 50%	> 50 %	
Below 35 years	16 (21.62)	58 (78.38)	1 (1.35)	73 (98.65)	13 (17.57)	61 (82.43)	74 (100)
36 years and above	18 (22.78)	61 (77.22)	11 (13.92)	68 (86.08)	2 (2.53)	77 (97.47)	79 (100)
Total	34 (22.22)	119 (77.78)	12 (7.84)	141 (92.16)	15 (9.8)	138 (90.2)	153 (100)

Chi-Square = 0.03 , df = 1 , p value= 0.86 Chi-Square = 8.36 , df = 1, p value= 0.00 Chi-Square = 9.77 , df = 1 , p value= 0.00

Table 6: Descriptive statistics regarding scores of Knowledge, Attitude and Practices regarding contraceptive services towards Emergency contraceptives of the Female Health Workers

	Knowledge	Attitude	Practices
Total Score	7	7	4
Mean	4.71	4.16	1.92
Median	5	4	2
Mode	5	4	2

The mean score out of 7, for Knowledge regarding emergency contraception was 4.71. Both me-

dian and mode were 5 respectively. The mean score out of 7 for attitude regarding emergency contraception was 4.16 and the mean score for practices regarding contraceptive services was 1.92. (Table 6)

The knowledge and practices regarding contraceptive services were statistically associated with designation. Higher percentage of ANM had better knowledge and practices regarding contraceptive services as compared to ASHA. There was no difference in attitude of ASHA and ANM. (Table 7)

Table 7: The association of Designation of Health Workers with Knowledge, Attitude and Practices regarding contraceptive services regarding Emergency Contraception

Designation	Knowledge		Attitude		Practices		Total
	< 50%	> 50 %	< 50%	> 50 %	< 50%	> 50 %	
ASHA	18 (16.67%)	90 (83.33%)	30 (27.78%)	78 (72.22%)	94 (87.04%)	14 (12.96%)	108 (100%)
ANM	1 (2.22%)	44 (97.78%)	8 (17.78%)	37 (82.22%)	13 (28.89%)	32 (71.11%)	45 (100%)
Total	19 (12.42%)	134 (87.58%)	38 (24.84%)	115 (75.16%)	107 (69.93%)	46 (30.07%)	153 (100%)

Chi-Square = 6.09 , df = 1, p value= 0.014 Chi-Square = 1.70 , df = 1, p value= 0.192 Chi-Square = 51.08, df = 1, p value= 0.00

DISCUSSION

Mean score for knowledge was nearly 12 out of 20. Hence the health workers have fair knowledge regarding the contraception. The mean score for attitude was 9 out of 15. Hence they also fairly good attitude towards contraception with mean score 11 out 15 the health workers had followed good practices regarding contraceptive services while prescribing it.

ANM in according to their skill and education had better knowledge than ASHA. Similarly their medical knowledge and experience has resulted in better practices regarding contraceptive services as compared to ASHA. However even though lacking in education and experience ASHA had equally good attitude towards contraception.

Education did not seem to have any particular effect on knowledge and attitude. However it has revealed that more educated health worker were more apprehensive in field work which reflected in contraceptive services.

Both young and old health workers had equivalent knowledge which can be credited to training. However as expected young health workers had better attitude towards contraception.

However in practices regarding contraceptive services health workers above 35 years of age did better. This could be attributed to more opportunities they would have encountered as well as generally people are more receptive to experienced person than young.

In a study done by H Suhaimi et al in Malaysia the percentage of well informed nurses was about 50% and among midwives it was 33%⁶. In the current study it was 93% for ANM and 71% for ASHA difference can be attributed to difference in way the national programme is conducted. Even the difference in collection of information can also be an important factor. Average score of knowledge and attitude regarding emergency contraceptives was about 50% however average score of practice was below 50%

ANM due to superiority in training had better knowledge regarding emergency contraception. However both ANM and ASHA had positive attitude towards it.

But considering practices regarding contraceptive services there was substantial difference between them, very few ASHA workers were actively involved in work related to emergency contraception.

Similar research done was by Hamza M. Abdulghani et al in Karachi, Pakistan⁷ and Sevil U et al in Turkey⁸. The overall knowledge and attitude towards emergency contraception was unsatisfactory compared to there in the current studies knowledge was found to be better as well as attitude.

The difference can be due to various socio-cultural demographic factor as well as difference in study tool.

CONCLUSION

The health workers had performed fairly well in knowledge, attitude and practices regarding contraceptive services. But, further strengthening of training and awareness is required to achieve better success.

Limitation of the study: As the study is based on self administered questionnaire by study subjects the reporting bias cannot be completely eliminated. Study is confined to selected PHCs from one district, hence the results cannot be generalized for health workers in the state or country.

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