Enhancement of Knowledge Regarding Puerperal Sepsis among Female Health Workers

Rajwant Kaur[1], Reena Jairus[2]

[1]Lecturer, Sri Guru Ram Das College of Nursing, S.G.R.D. Medical Institute of Sciences and Research, Vallah, Amritsar, India

[2]Professor, College of Nursing, C.M.C. & Hospital, Ludhiana

Abstract: *The present study was undertaken to enhance the knowledge of female health workers regarding puerperal sepsis. Sixty female health workers (30 experimental group and 30 control group) were selected by purposive sampling technique from Urban health centres of Ludhiana. Their knowledge regarding puerperal sepsis was assessed at baseline by structured questionnaire. The structured teaching programme was developed and administered to thirty female health workers in experimental group and control group was not exposed to intervention. After seven days, post test was conducted among both groups. Findings revealed that the mean pretest knowledge score and SD of both groups was 21.10±3.72 and 21.97±4.27 respectively and 22.50±4.30 and 33.87±5.29 was mean posttest knowledge score respectively. The paired 't' test was calculated and found highly significant difference between pre and post-test knowledge score in experimental group and non – significant in control group. ANOVA test showed that there was significant association between post-test knowledge score and age and experience of female health workers and no association with other variables i.e education, in service education attended and source of information regarding puerperal sepsis. Hence, it is recommended that such cost effective intervention should be held frequently in management of puerperal sepsis at grass root level in community.*

Keywords: Structured teaching programme, Puerperal sepsis, Knowledge, Female health workers, grass root level

1. Introduction

Puerperal sepsis remains the most important cause of mortality and mortality following childbirth. Postpartum infection occurs in about 1 to 8% of vaginal deliveries, and it is five to ten times higher following a caesarean section. Puerperal sepsis morbidity affects 2 to 10% of patients. [10]

WHO estimates globally 5, 29,000 maternal deaths occur each year, out of which 1, 36,000 (25.7%) happen in India. In India, the maternal mortality rate is more than 407 per 100,000 live births.[4] Pregnancy-related sepsis was the commonest cause of all maternal deaths. It is clear that the absence or inappropriate use of management protocols has been a major factor in a large number of maternal deaths due to pregnancy-related sepsis. [2]

Aseptic precautions advances in investigation tools, improvement in MCH services, and the use of antibiotics, presence of skilled health care staff and trained birth attendants at deliveries result in early referrals in cases of complications have played a major role in reducing the incidence of puerperal sepsis.[3] The Centre has revised the guidelines for antenatal care and postnatal care. As per this new initiative, the government will empower the ANMs, LHVs, staff nurses and Multipurpose Health Workers to undertake certain life saving measures like allowing them to dispense drugs to prevent Postpartum Haemorrhage (PPH), puerperal sepsis, major causes of death during child birth, and administering drugs during childbirth.[5]

As per the report of the various studies[1,5,7], the female health workers have low knowledge about emergency to stabilise the patient prior to referral and identify and manage complications arising during pregnancy and prevention and treatment of pregnancy related problems and hence there was an urgent need to redesign the basic training of health workers working in management of gynaecological problems.

2. Materials and Methods

A quasi experimental study was conducted to find out the effect of a structured teaching programme on puerperal sepsis. Out of 26 urban MCH&FW health centres, 12 centres were selected for the present study. Sixty female health workers (30 in control group and 30 in experimental group) were selected by purpose sampling technique from selected health centres.

Puerperal sepsis knowledge questionnaire with 44 items relating to knowledge regarding general aspects such as introduction, causes, pathology, signs and symptoms, investigation, treatment and prevention was prepared, validated by subject experts and reliability of tool was 0.82. Structured teaching programme preparation evolved developing lesson plan, which was organized as introduction of puerperal sepsis, prevalence and incidence, causes, signs and symptoms, treatment and prevention of puerperal sepsis.

Before commencing the task of data collection written permission was obtained from Civil Surgeon Ludhiana and Medical Officers of health centers. Written consent was obtained from each subject after giving assurance of confidentiality. At first pretest of control group was taken and group was not exposed to the structured teaching programme. The posttest was taken after 7days. After completing posttest of control group, pretest of experimental group was taken and structured teaching was administered to the experimental group. After administration of structured teaching posttest was taken after 7 days. The data obtained was analyzed by using descriptive and inferential statistics.

3. Results

Regarding age, in control group majority (40%) of female health workers were in age group of 41-50 years and in experimental group, majority (40%,40%) were in age group of 31-40 years and 41-50 years respectively. In both control group and experimental group maximum number (43.3%, 50%) of female health workers were studied upto senior secondary, majority (30%,33.3%) had 6-10years experience, maximum(66.7%,73.3%) had attended short term training, majority(56.7%, 53.3%) of female health workers had source of information from T.V and radio respectively.

Table 1: Comparison of Pretest and Posttest Mean Knowledge Score among Female health workers Regarding Puerperal Sepsis in Control and Experimental Group, N=60

		Pretest		Posttest		df	't'
		Mean	SD	Mean	SD		
Control	30	(a)21.10	3.72	(a')22.50	4.3	29	1.41 [NS]
Experimental	30	(b)21.97	4.27	(b')33.87	5.29	29	25.15*
		df	't'		Df		' t '
	a+b	58	0.70NS	a'+b'	58		81.78*

NS-Non Significant *at p<0.05

Table 1 shows that in control group, the pretest and post-test mean knowledge score was 21.10 and 22.50, which was found statistically non significant. In experimental group, the pretest mean knowledge score was 21.97, which increased to 33.87 in the post-test, found statistically significant. Hence it was interpreted that structured teaching programme was effective.

Table 2: Pretest and Posttest Knowledge level among female health workers in Experimental and Control group

Level of Knowledge	Score	Control Group				Experimental Group			
		Pretest		Posttest		Pretest		Posttest	
		n	%	n	%	n	%	n	%
Excellent	≥35	0	0	0	0	0	0	11	37
Good	29-34	2	6.7	2	6.7	4	13	14	47
Average	22-28	13	43.3	17	56.7	11	37	5	16
Below Average	<22	15	50	11	36.7	15	50	0	0

Table 2 reveals that in control group maximum female health workers (50%) had below average pretest mean knowledge score followed by average (43.3%) and good (6.7%). The posttest mean knowledge score of 56.7% of female health workers was average, followed by below average (36.7%) and good (6.7%). In experimental group, 50% female health workers had below average pretest mean knowledge score followed by 36.7% had average and 13.3% had good. In post-test mean knowledge score of 36.7% female health workers was excellent, 46.7% was good and 16.7% was average. Majority of female health workers had good and excellent posttest mean knowledge score. Thus, it showed that there was an impact of structured teaching programme.

4. Discussion

In present study, in both control and experimental group maximum (50%, 50%) female health workers obtained below average pretest mean knowledge score. In control group, maximum (56.7%) female health workers obtained average posttest mean knowledge score whereas in experimental group, maximum (46.7%) obtained good posttest mean knowledge score after implementation of structured teaching programme. Similar findings were reported by **P Gawade et al** [9] who also revealed that the ANM and other paramedical staff's knowledge regarding emergency contraception improved after training session.

In present study, the difference between pretest and posttest mean knowledge score of control group was non significant but the difference between pretest and posttest mean knowledge score of experimental group was significant. These findings were supported by Abraham Leena [8] who found significant difference between the pretest and posttest mean knowledge score of the experimental group regarding environmental health among anganwadi teachers.

5. Conclusion

The present study demonstrates the effectiveness in improving the knowledge regarding puerperal sepsis among female health workers. Hence, it is recommended that such teaching interventions should be regularly planned and implemented for puerperal sepsis among health workers in enhancing their knowledge, so that they become able to identify and manage puerperal sepsis cases at earliest stage.

6. Recommendations

The following recommendations are made on the basis of the study:
1. The study can be replicated on a large sample to validate and generalize the findings.
2. A co-relational study can be conducted to assess the relationship between knowledge and practices of female health workers regarding puerperal sepsis.
3. A study can be conducted to develop an appropriate tool for prevention and management of puerperal sepsis.

7. Acknowledgement

References

[1] Kaur A, Kumar R. Reproductive health behavior of rural women. J.Med. 1995 April; 93(4):129-135.
[2] F Smaill, Hofmeyr GJ. Antibiotic prophylaxis for caesarean section (Cochrane Review). In: The Cochrane Library.1999; Issue 3.
[3] Stone Water, M.S, Bowley and C. Wolfe. Incidence and prevention of severs obstetric morbidity case control study. Biomedical Journal. 2001; 322:1089-93.
[4] Mavalankar. State of Maternal Health India. Journal of Obstetrical and Gynecological. 2004; 22(6):77-83.
[5] Syamala T.S. Do health worker female and traditional birth attendant equipped to provide primary health care

in tribal areas, institute for social and economic. Bangalore, tribals.2004; 2(2): 119-124.

[6] Daftary Shirish N, Sudip Chakravarti. Manual of obstetrics.2nd edition. New Delhi .2005;433-36.

[7] Fatusi A.O, O.N. Makinde b, A.B. Adeyemi b, E.O. Orji b, U. Onwudiegwu b. Evaluation of health workers' training in use of the partogram. International Journal of Gynecology and Obstetrics. 2007July; xx: xxx–xxx.

[8] Abraham Leena. Planned teaching on environmental health. 2009 June VOL. C No. 6.

[9] P Gawade, Salvi V, Mathur K, Nutalik N, Shinde A. Training auxiliary nurse midwives and other paramedival staff in dispensing emergency contraception pills. Nursing journal of India .2009 June; 6(6):128-9.

[10] Dhar Aarti. New guidelines aimed at reducing maternal mortality. New Delhi: 2010 June23.