



EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON IDENTIFICATION OF DANGER SIGNS IN PREGNANCY AMONG ASHA IN SELECTED AREAS OF KAMRUP, ASSAM: A QUASI-EXPERIMENTAL STUDY

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Abstract:

Background: Preventing danger signs in pregnancy at the community level is essential to reduce maternal and fetal complications. ASHA plays an important role to educate pregnant women about common danger signs. **Objectives:** To evaluate the effectiveness of Planned Teaching Programme on level of knowledge regarding identification of danger signs in pregnancy among ASHA in selected areas of Kamrup, Assam. **Methods & Materials:** A quantitative research approach was used. A total number of 60 ASHAs were selected using convenience sampling. The pre test has been conducted to assess the knowledge following that Planned Teaching Programme on danger signs in pregnancy has been administered and post test has been conducted on 7th day after administration of Planned Teaching Programme. **Results:** Planned Teaching Programme was effective on level of knowledge regarding identification of danger signs in pregnancy among ASHA with mean difference **4.30** between pre test and post test knowledge. **Conclusion:** Based on the analysis of the findings of the study, there was evident increase in Knowledge in the study after administration of Planned Teaching Programme regarding danger signs in pregnancy. Thus, it was proved that the Planned Teaching Programme was effective teaching method for creating awareness on danger signs in pregnancy.

Index Terms - Effectiveness, Planned Teaching Programme, ASHA, Danger signs

I. INTRODUCTION

Pregnancy is the physiological condition of a woman, starting from the moment of conception of the foetus, including the baby's growth, until birth. Complications in this period can affect both mother and the foetus and that may occur at any time of pregnancy by showing some danger signs. Preventing danger signs in pregnancy at the community level is essential to reduce maternal and fetal complications. Identification of danger signs is one of the major key to prevent the further complications and maternal and child death. An Accredited Social Health Activist (ASHA) is a trained female community health worker, considered to be a health care facilitator and health care provider at grass root level that is at village level. During pregnancy there may be different signs and symptoms for the pregnant women, as ASHA being a bridge between the population and the health care services she can disseminate the knowledge regarding the danger signs in pregnancy and how to identify which sign shows what complication.

II. METHODS

Study design:

A Quasi experimental (one group pre test post test) research design.

Settings and participants:

A total number of 60 ASHA from a selected Block PHC and sub-centers under the Block PHC were selected using convenience sampling technique. The inclusion criteria were following: a) ASHAs, who can read, write and understand Assamese language, b) ASHAs those are willing to participate and give consent, and c) ASHAs those are present on data collection. The data collected using a structured knowledge questionnaire. Pretest has been conducted to assess the knowledge among ASHA and following that Planned Teaching Programme has administered regarding Different danger signs and possible risk associated with danger signs in pregnancy. Post test has been conducted on 7th day after administration of Planned Teaching Programme. To conduct the study the investigator obtained the ethical clearance permission from the Institute of Neurological Sciences (INS) Trust's Ethics Committee (GNRC Complex), Dispur, Guwahati, Assam. Followed by permission was obtained from Office of the Joint Director of Health Service (DHS), Kamrup, Assam and respective Block PHC. Informed consent was obtained from the study samples before data

collection. Confidentiality and anonymity were ensured. Participants had the liberty to leave the study at any point of time as desired.

Questionnaire

Structured knowledge questionnaire has been used. It contains 20 questions which were validated by 7 experts. The reliability of structured knowledge questionnaire was $r=0.84$ which was calculated by Karl Pearson's correlation coefficient which was computed by using Spearman Brown formula.

Statistical Analysis

Frequency and percentage distribution has been used to distribute sample according to demographic variables. Mean, Median and standard deviation has been used to determine the level of knowledge among ASHA. Paired "t" test has been used to determine the effectiveness of Planned Teaching Programme. Fisher Exact test has been used to find the association between pre test level of knowledge among ASHA with their selected demographic variables.

III. RESULTS

Table 1: Frequency and percentage distribution of ASHA according to their demographic variables

n = 60

Demographic Variables	Frequency (f)	Percentage (%)
Age (in years)		
25 – 30	1	1.7
31 – 35	5	8.3
36 – 40	13	21.7
41 – 45	11	18.3
≥46	30	50.0
Education		
M.E school (VI – VIII)	9	15.0
High school (IX – X)	31	51.7
Higher secondary (XI – XII)	18	30.0
Graduation and above	2	3.3
Total years of work experience		
Less than a year	2	3.3
1 – 5 years	10	16.7
6 – 10 years	8	13.3
More than 10 years	40	66.7
Any in-service education attended regarding identification of danger signs in pregnancy		
Yes	60	100.0
No	-	-
Number of in-service education (in times) attended regarding identification of danger signs in pregnancy		
1 time	6	10.0
2 – 3 times	5	8.3
4 – 5 times	10	16.7
More than 5 times	39	65.0

The table 1 portrays that most of the samples in ASHA, 30(50%) were aged ≥46 years, 31(51.7%) had high school education (IX – X), 40(66.7%) had more than 10 years of work experience, 60(100%) had attended in-service education regarding identification of danger signs in pregnancy and 39(65%) had attended in-service education regarding identification of danger signs in pregnancy for more than 5 times.

Table 2: Frequency and percentage distribution of pretest and post test level of knowledge on danger signs in pregnancy among ASHA.

n = 60

Level of Knowledge	Pretest		Post Test	
	f	%	f	%
Inadequate (0 – 7)	15	25.0	6	10.0
Moderate (8 – 13)	40	66.7	23	38.3
Adequate (14 – 20)	5	8.3	31	51.7

The table 2 depicts the frequency and percentage distribution of pretest and post test level of knowledge on danger signs in pregnancy among the samples in ASHA. It denotes that in pretest, 40(66.7%) possessed moderate knowledge, 15(25.0%) had inadequate knowledge and 5(8.3%) had adequate knowledge on danger signs in pregnancy and after the intervention in the post test, 31(51.7%) acquired adequate knowledge, 23(38.3%) had moderate knowledge and 6(10%) had inadequate knowledge.

Table 3: Effectiveness of Planned Teaching Programme on knowledge on Identification of Danger Signs in Pregnancy among ASHA

Knowledge	Median	Mean	S.D	Mean Difference	Paired “t” test & p-value
Pretest	9.0	8.92	±2.89	4.30	t =11.044 p=0.0001, S*
Post-test	14.0	13.22	±3.42		

n = 60

p<0.05, S* – Significant

The table 3 depicts the effectiveness of Planned Teaching Programme on knowledge on Identification of Danger Signs in Pregnancy among ASHA. The table shows that the mean score of pretest knowledge was 8.92±2.89 and the mean score of post test knowledge was 13.22±3.42. The calculated paired “t” test value of t=11.044 was statistically significant at p<0.05 level which clearly indicates that Planned Teaching Programme on knowledge on Identification of Danger Signs in Pregnancy administered among ASHA was found to be effective in improving their level of knowledge in the post test which was evident from the mean difference score of 4.30.

Table 4: Association of pre test level of knowledge on Identification of Danger Signs in Pregnancy among ASHA with their selected demographic variables

Demographic Variables	Inadequate		Moderate		Adequate		Fisher Exact test & p-value
	f	%	f	%	f	%	
Age (in years)							p=0.324 (N.S)
25 – 30	0	0	1	1.7	0	0	
31 – 35	0	0	3	5.0	2	3.3	
36 – 40	4	6.7	9	15.0	0	0	
41 – 45	2	3.3	9	15.0	0	0	
≥46	9	15.0	18	30.0	3	5.0	
Education							p=0.506 (N.S)
M.E school (VI – VIII)	3	5.0	4	6.7	2	3.3	
High school (IX – X)	9	15.0	20	33.3	2	3.3	
Higher secondary (XI – XII)	3	5.0	14	23.3	1	1.7	
Graduation and above	0	0	2	3.3	0	0	
Total years of work experience							p=0.615 (N.S)
Less than a year	1	1.7	1	1.7	0	0	
1 – 5 years	2	3.3	6	10.0	2	3.3	
6 – 10 years	1	1.7	7	11.7	0	0	
More than 10 years	11	18.3	26	43.3	3	5.0	
Any in-service education attended regarding identification of danger signs in pregnancy							-
Yes	15	25.0	40	66.7	5	8.3	
No	-	-	-	-	-	-	
Number of in-service education (in times) attended regarding identification of danger signs in pregnancy							p=0.734 (N.S)
1 time	1	1.7	5	8.3	0	0	
2 – 3 times	2	3.3	2	3.3	1	1.7	
4 – 5 times	3	5.0	6	10.0	1	1.7	
More than 5 times	9	15.0	27	45.0	3	5.0	

N.S – Not Significant, p>0.05

The table 4 displayed the association of pretest level of knowledge on Identification of Danger Signs in Pregnancy among ASHA with their selected demographic variables using Fisher’s exact test .It was noted that the demographic variables did not show statistically significant association with pretest level of knowledge on Identification of Danger Signs in Pregnancy among ASHA with their selected demographic variables at p<0.05 level.

IV. DISCUSSION

The present study shows that in the pretest, 40(66.7%) had moderate knowledge, 15(25.0%) ASHA had inadequate knowledge and 5(8.3%) ASHA had adequate knowledge regarding danger signs in pregnancy. After the administration of Planned Teaching Programme, in the post-test majority i.e., 31(51.7%) had adequate knowledge, 23(38.3%) had moderate knowledge and 6(10.0%) had inadequate knowledge regarding danger signs in pregnancy. The similar study has done by Sharma S, Kumar A, Poonia A, et.al (2024) to assess the knowledge among 203 ASHA workers regarding antenatal & neonatal care in a block of Haryana and it stated that only 3% of ASHA workers had adequate knowledge about identification of danger signs during pregnancy.

The second objective was to evaluate the effectiveness of Planned Teaching Programme on level of knowledge regarding identification of danger signs in pregnancy among ASHA in selected areas of Kamrup, Assam. The calculated paired “t” test value of t=11.044 was statistically significant at p<0.05 level which clearly indicates that Structured Planned Teaching Programme on knowledge on Identification of Danger Signs in Pregnancy administered among ASHA was found to be effective in improving their level of knowledge in the post test which was evident from the mean difference score of **4.30**. This was supported by the interventional study which was done by Sindhu J, Chandini M, Kashyap GC (2025) on High – Risk pregnancies Among ASHA

workers in Magadi Taluk. The study revealed that the knowledge of the ASHA workers on high risk pregnancy after intervention was considerably high when compared to pre intervention phase. Improvement was observed in the indicators such as full term pregnancy duration 37-42 weeks (pre –intervention 87.3%, post intervention 90.0%), minimum number of antenatal care (ANC) visits (pre – intervention 64.5%, post – intervention -90.0%) and haemoglobin cut-off level for diagnosing anaemia (pre-intervention 38.2%, post intervention 81.8%). Intervention showed misconceptions regarding miscarriage decreased(pre intervention 91.8%, post intervention 24.5%). The analysis depicted that the demographic variables did not show statistically significant association with level of knowledge on Identification of Danger Signs in Pregnancy among ASHA with their selected demographic variables at $p < 0.05$ level.

The third objective was to determine the association between the level of knowledge regarding identification of danger signs in pregnancy with selected demographic variables among ASHA. The analysis depicted that the demographic variables did not show statistically significant association with level of knowledge on Identification of Danger Signs in Pregnancy among ASHA with their selected demographic variables at $p < 0.05$ level. In contrast Iqbal M M, Jha H K, Kumar H(2023) conducted a cross sectional study of knowledge and practices of ASHA towards maternal health care in rural field practice area of PHC, Kalyanpur, Bihar to evaluate ASHA knowledge and practices as well as the gaps between them regarding maternal health care during pregnancy and postpartum among 68 ASHA. The study revealed that there is significant association ($p < 0.05$) between the age, work experience and educational qualification and the knowledge of the ASHA towards maternal care.

V. CONCLUSION

The study assessed the knowledge regarding danger signs in pregnancy among ASHA before and after administration of Planned Teaching Programme. The study concluded that the Planned Teaching Programme was effective in improving the knowledge of ASHA workers regarding danger signs in pregnancy. The findings indicate that structured educational interventions can enhance the awareness and understanding of ASHA workers about early identification of pregnancy related danger signs, thereby promoting timely referral and better maternal health outcomes.

REFERENCES

1. Pregnancy[Internet], National Library of Medicine, [cited on 2025 March 30] available from <https://www.ncbi.nih.gov>
2. ASHA module 6[Internet], National Health Mission [cited on 2025 March 30] available from <https://nhm.gov.in>
3. Maternal mortality in India[Internet], Data for India [cited on 2025 March 30] available from <https://www.dataforindia.com>
4. Saeed M(2023), Knowledge of Obstetric Danger Signs in Pregnancy in prime gravid women, attending Ali Kamal Health Center, Sulaimaniyah, Iraq, Journal of Zankoy Sulaiani- Part A 25(2):9[Internet][cited on 2025 April 1] available from <https://doi:10.17656/jzs.10936>
5. Ghimire B, Pathak P and Ghimire p (2022), Knowledge regarding obstetric danger signs among pregnant women, Nepal Medical College Journal, [Internet] [cited on 2025 December], available from <https://doi.org/10.3126/nmcj.v24i2.46029>
6. Salve P, Myakal VV, Jamdhane V et.al (2026), Knowledge, Attitude And Practices Regarding Danger Signs Of Pregnancy Among Antenatal Mothers, European Journal of Cardiovascular Medicine [Internet] [Cited on 2025 December 10] available from <https://DOI.61336/ejcm/26-01-90>
7. Kumar AM, J Aravindan, Choudhury AK (2020), A community- based study on obstetric danger signs among pregnant women of Sivaganggai district, Global Journal of Medicine & Public Health [Internet] [Cited on 2025 December 10], available from www.gimedph.com
8. Sharma S, Kumar A, Poonia A, et.al(2024), Assessment of knowledge of accredited social health activists regarding antenatal & neonatal care in a block of Haryana, Indian Journal of Forensic and Community Medicine 11(1):15-18 [Internet] [cited on 2025 April 2] available from <https://DOI:10.18231/j.ijfcm.2024.004>
9. Iqbal M M, Jha H K, Kumar H(2023), A cross –Sectional Study of Knowledge and Practices of ASHA Towards Maternal Health Care in Rural Field Practice Area of PHC Kalyanpur, Bihar, International Journal of Pharmaceutical and Clinical Research 2023;15(6) ; 2149-2165 [Internet][cited on 2025 April 5] available from www.ijpr.com
10. Sharma K. Suresh, “Nursing Research and Statistics”, 4th edition 2023, Reed ELSEVIER India Pvt. Ltd.