

Prevention of parent to child transmission of HIV (PPTCT) and early Infant diagnosis (EID) among antenatal Mothers

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Abstract

The present study aimed at development of an intervention (Health education programme) for assessing the knowledge of 150 antenatal mothers at selected rural areas of Udaipur, Rajasthan. The method adopted for the present study was evaluative approach, this would help the investigator to evaluate the effect of specific intervention that is "Health education programme" on the variable that is „knowledge“ of antenatal mothers regarding at selected rural areas of Udaipur Rajasthan. In this study samples were drawn by using purposive sampling method. Data was collected by using structured knowledge questionnaire. From the findings of the study it was found that the pretest mean knowledge score was 11.26, posttest mean knowledge score was 26.09. The significance of the findings was obtained by using paired „t“ test, the value of pretest and posttest of knowledge and practice was 35.30 ($P < 0.05$), emphasizing the significance of the findings. Hence the research hypothesis (H_1) is accepted that there is a significant difference between pre test & post test knowledge score. There is an association between pre test knowledge score with selected demographic variables; hence the research hypothesis (H_2) is accepted. Association between pre test knowledge scores with selected demographic variables of antenatal mothers which is Age in years ($\chi^2 = 12.27^*$), Types of Family ($\chi^2 = 5.98^*$) and Educational status ($\chi^2 = 13.51^*$) were found to be significantly associated with post test knowledge at 0.5 level and the rest of the demographic variables such as Religion ($\chi^2 = 1.72$), Occupation ($\chi^2 = 1.72$), Personal habit ($\chi^2 = 0$) and Source of information ($\chi^2 = 1.17$) were not significant. Hence research hypotheses H_2 is proved and accepted. This study concludes that there is improvement in the level of knowledge of antenatal mothers, which indicates that the health education programme is effective. The demographic variables of antenatal mothers significantly associated with the pre test knowledge score. This will help the antenatal mothers to enhance the knowledge.

Keywords: Assess, Effectiveness, Health education programme, Antenatal mothers, PPTCT and EID.

Introduction

HIV/AIDS is one of the threats to physical, intellectual and social development that is faced by children. Most of the children who are affected were infected by HIV as a result of virus transmission during pregnancy, childbirth or through breast milk. However, as well as the consequences of the infection itself, children whose fathers and/or mothers live with the HIV virus suffer the effects of their families being stigmatised and discriminated against, as well as the effects of economic deterioration. And even worse, they suffer the effects of the death of their parents.

The transmission of HIV from an HIV-positive mother to her child during pregnancy, labour, delivery or breastfeeding is called mother-to-child transmission. In the absence of any interventions transmission rates range from 15-45%. This rate can be reduced to levels below 5% with effective interventions. Vertical transmission of HIV can occur in-uterus through placental transmission, intrapartum through contact with infected birth canal secretions or postpartum through breast feeding. It is estimated that 30% of babies who get infected vertically, 2% get infected in early gestation, 3% get infected in late gestation, 15% get infected intrapartum and 10% get infected via breast feeding. Transmission of HIV infection is predominantly through sexual intercourse, blood-borne and vertical transmission to the foetus. In advanced disease there may be miscarriage, preterm delivery and intra uterine growth retardation.

Objectives of the Study

1. To assess the pre-test knowledge score of antenatal mothers regarding PPTCT & EID at rural areas of Udaipur Rajasthan.
2. To administer health education on PPTCT & EID among antenatal mothers at rural areas of Udaipur Rajasthan.
3. To assess the post-test knowledge score of antenatal mothers regarding PPTCT & EID at rural areas of Udaipur Rajasthan.
4. To determine the effectiveness of health education on knowledge regarding PPTCT & EID among antenatal mothers at rural areas of Udaipur Rajasthan.
5. To find out association between pre-test knowledge score with selected Socio demographic variables.

Hypothesis

H1: There will be a significant difference between pre test and post test knowledge scores on knowledge regarding PPTCT & EID among antenatal mothers.

H2: There will be a significant association between the pre test knowledge score of antenatal mother regarding PPTCT & EID with selected demographic variables.

Materials and Methods

Research Approach

The research approach adopted for the present study was evaluative approach

Research Design

In the present study, one group pre test and post test design was selected for the study.

Research Setting

The present study has been conducted at anganwadi center at Kodyad, Neemach khedi, Gorilla & Sisarma Udaipur.

Population

In the present study the population consists of 150 antenatal mothers of rural areas of Udaipur, Rajasthan.

Sampling Technique

In the present study, purposive sampling technique was taken to select the samples and 150 antenatal mothers were selected.

Sample and Sample Size

The Sample size for the present study consists of 150 antenatal mothers of rural areas of, Udaipur.

Sampling Criteria

Antenatal mothers who are in the age group between 18-45 years are included in the study

Statistical Methods

1. Mean, median, SD and mean %age are used to describe the area wise pre-test and post –test knowledge score of the respondents on PPTCT & EID.
2. Paired ‘t’ test is used to find the effectiveness of health education by comparing pre and post-test knowledge score of the respondents.
3. Chi –square is used to find the association between the knowledge score of the respondents and certain demographic variables.

Results

Table 1: Pre-test knowledge score of respondents on PPTCT & EID. N=150

Area	Max score	Mean	Mean %	S.D.
Introduction of HIV & PPTCT	6	63	42%	11.04
PPTCT policies & principles	8	62.25	45.50%	15.21
PPTCT services under NACP	1	59	39.33%	0
Care & assessment of antenatal mother	8	42.87	28.58%	13.20
EID & DBS sampling under PPTCT	9	45.77	30.51%	7.11
Total	32	11.26	35.18%	3.80

Post-test knowledge score of respondents on pptct and EID.

Area	Max score	Mean	Mean %	S.D.
Introduction of HIV & PPTCT	6	116.16	77.44%	19.90
PPTCT policies & principles	8	119.62	79.74%	17.58
PPTCT services under NACP	1	90	60%	0
Care & assessment of antenatal mother	8	118.75	79.16%	24.11
EID & DBS sampling under PPTCT	9	135.55	90.37%	7.73
Total	32	26.09	81.53%	3.59

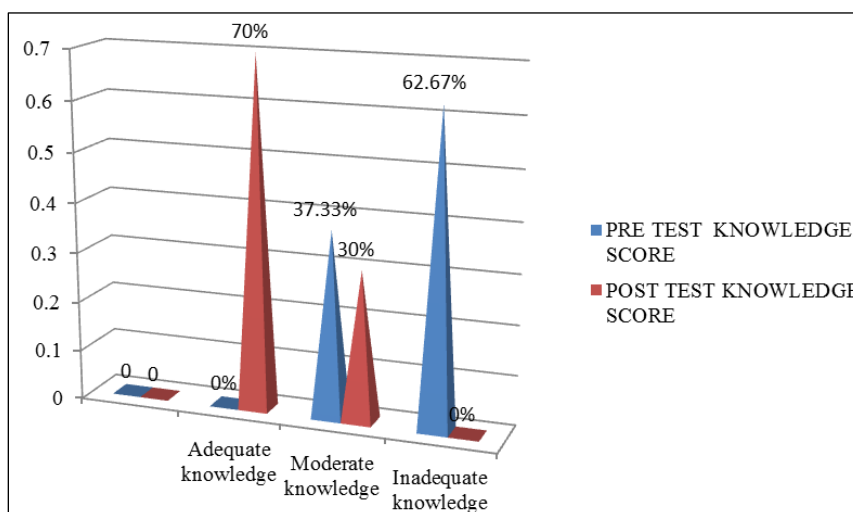


Fig. 1: Pre-test Post-test knowledge score

Findings related to Effectiveness of health education on PPTCT & EID

Table 1: Effectiveness of health Education

	Mean	Mean % (%)	SD	Enhancement	Enhancement%	df	T	Inference
Pre test	11.26	35.18	3.80	14.83	56.84%	149	35.30	8
Post test	26.09	81.53	3.59					

S=SIGNIFICANCE

Discussion

The level of knowledge among antenatal mothers regarding PPTCT & EID was assessed in pre-test. Out of 150 respondents 0% had no adequate knowledge on PPTCT & EID, 37.33% respondents had moderate knowledge & 62.67% respondents had inadequate knowledge on PPTCT & EID. The level of knowledge among antenatal mother regarding PPTCT & EID in post-test, out of 150 70% respondent had adequate knowledge on PPTCT & EID whereas, 30% respondents had moderate knowledge in PPTCT & EID & 0% respondents had inadequate knowledge on PPTCT & EID. The overall mean of pre-test knowledge score among antenatal mothers regarding PPTCT & EID was 11.26 with standard deviation of 3.80 and mean of post-test was 26.09 with standard deviation of 3.59. The mean score of post test knowledge 26.09 was apparently higher than the mean score of pre-test knowledge 11.26, reveals that the health education was effective as it in increasing the knowledge of the antenatal mothers regarding PPTCT & EID. The mean difference 14.83 between pre-test and post-test knowledge score of the antenatal mothers was found to be significant. So research hypothesis (H₁) is accepted. variables of antenatal mothers which is Age in years ($\chi^2 = 12.27^*$), Types of family ($\chi^2 = 5.98^*$) and Education ($\chi^2 = 13.51^*$) were found to be significantly associated with post test knowledge at 0.5 level and the rest of the demographic variables such as Religion ($\chi^2 = 1.72$), Occupation ($\chi^2 = 1.72$), Personal habit ($\chi^2 = 0$) and Source of information ($\chi^2 = 1.17$) were not significant. Hence research hypotheses H₂ is accepted

Conflict of Interest: None.

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How to cite this article: Joshi K, Sharath S, Sharma SK, Prevention of parent to child transmission of HIV (PPTCT) & Early Infant Diagnosis (EID) Among antenatal mothers. *J Paediatr Nurs Sci*, 2019;2(2):54-6.