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A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge of Antenatal Mothers Regarding Prevention of Parent to Child Transmission of Hiv in A Selected Hospital at Mangalore

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ABSTRACT

Aim: To assessthe effectiveness of structured teaching programme on knowledge of antenatal mothers regarding Prevention of Parent to Child Transmission of HIV and to find out the associationTo find out the association of the pre test knowledge score of antenatal mothers with a selected demographic variable.Materials and methods:A study was conducted to assessthe effectiveness of structured teaching programme on knowledge of antenatal mothers. Total 60 Primi those who are in first registration selected by using purposive sampling technique. The study was conducted in PPTCT center during the OPD visiting timings. After introducing the purpose of the study, written consent was obtained. Pretest was conducted 20 minutes to assess the knowledge of Primi mothers regarding Prevention of Parent to Child Transmission of HIV by using structured knowledge questionnaire. The Structured Teaching Programme was conducted on the same day of pretesting for 30 minutes using charts, flash cards, Pamphlets and slides. The posttest to assess the effectiveness of Structured Teaching Programme was conducted on the respective department by using the same tool on 8thday

Results:Findings showed that The knowledge level of antenatal mothers regarding Prevention of Parent To Child Transmission of HIV was in pretest (2, 3.3%) of subjects had good knowledge, (12, 20%) subjects had average knowledge, (45, 75%) subjects had poor knowledge, and (1, 1.7%) had very poor knowledge. In the posttest, (19, 32%) of subjects scored excellent knowledge, (40, 66%) scored good knowledge, (1, 2%) of subjects scored average knowledge regarding the Prevention of Parent to Child Transmission of HIV.The mean posttest knowledge score ($\chi 2=17.10$) with standard deviation of (1.50) was higher than mean pretest knowledge score ($\chi 1=8.72$) with standard deviation of (1.25). The calculated 't' value of 43.06 was greater than tabled value$t59=1.67$, $P<0.05$. It shows that the structured teaching programme was effective.

KEYWORDS Antenatal mothers, Knowledge, Prevention of Parent to Child Transmission of HIV

Introduction

Most of the women living with HIV are in the prime of their productive lives. The spread of HIV from an HIV infected woman to her child is called mother-to-child transmission of HIV. (It's also called perinatal transmission of HIV). A woman with HIV can pass HIV to her child during pregnancy, during childbirth (also called labor and delivery), through breastfeeding (HIV can be transmitted in breast milk). In the absence of any interventions transmission rates range from 15-45%. This rate can be reduced to levels below 5% with effective interventions. The PPTCT services cover about 10 per cent pregnancies in the country. In the year 2006, 2.1 million pregnant women accessed this service. Of these, more than 16,500 pregnant women were HIV positive. In order to provide universal access to these services further scale up is planned up to the level of Community Health Centre and the Primary Health Centre, as well as private sector by forging public-private partnerships. Through these measures NACO hopes to achieve the UNGASS target of reducing the proportion of infants infected with HIV/AIDS by 50 % by 2010 .Prevention of Parent to Child Transmission Programs, access to antiretroviral therapy, safe delivery practices, and the widespread availability and safe use of breast-milk substitutes

Objectives

1. To assess the level of knowledge of antenatal mothers regarding the Prevention of Parent to Child Transmission of HIV by using a structured knowledge questionnaire.
2. To assess the effectiveness of Structured Teaching Program (STP) on Prevention of Parent to Child Transmission (PPTCT) of HIV.
3. To find out the association of the pre test knowledge score of antenatal mothers with a selected demographic variable.

Hypothesis

The hypothesis will be tested at 0.05 level of significance

H_1: The post test knowledge scores of subjects will be significantly higher than their pretest knowledge score.

H_2: There will be an association of pretest knowledge of antenatal mothers with selected demographic variables.

Materials and methods

Evaluative research approach is adopted for the study. The study was approved by Institution ethics committee. The study was conducted in the PPTCT Centre of Father Muller Medical College Hospital at Mangalore. The Pre-experimental one-group pretest-post-test design was selected for the study.The **s**tudy was conducted after obtaining permission from the authorities, 60 Primi those who are in first registration selected by using purposive sampling technique. The study was conducted in PPTCT center during the OPD visiting timings. After introducing the purpose of the study, written consent was obtained. Pretest was conducted 20 minutes to assess the knowledge of Primi mothers regarding Prevention of Parent to Child Transmission of HIV by using structured knowledge questionnaire. The Structured Teaching Programme was conducted on the same day of pretesting for 30 minutes using charts, flash cards, Pamphlets and slides. The posttest to assess the effectiveness of Structured Teaching Programme was conducted on the respective department by using the same tool on 8thday.The data was analysed using both descriptive and inferential statistics with the help of Microsoft Excel and Statistical Package for Social Science (SPSS) Program.

Results

As depicted in table 1revealed that **(**46, 76.7%) of subjects

were between the age group of 20-25 years, (12, 20.0%) of subjects were between the age group of 26-30 years and only (2, 3.3%) of subjects were between the age group of 31-35 years.(19, 31.7%) of subjects were having primary education, (26, 43.3%) of subjects were having high school education, (8, 13.3%) of subjects were having PUC education, 6 (10.0%) of subjects were having graduate and only (1, 1.7%) of subjects were having Post graduation.The majority of the subjects (38, 63.3%) were Muslim and the number of Christians and Hindus were equal (11, 18.3%) . (48, 80%) of the subjects were unskilled, (4, 6.7%) subjects were semiskilled, (8, 13.3%) of the subjects were skilled**.**The most (33, 55%) of the subjects had previous exposure to information regarding Prevention of Parent to Child Transmission of HIV. (27, 45%) of subjects had no previous exposure to information regarding Prevention of Parent to Child Transmission of HIV**.**(5, 15.2%) of the subjects had information from family members, (14, 42.4%) of the subjects had information from friends,neighbours,teachers, (8, 24.2%) of the subjects had information from mass media, (6, 18.2%) of the subjects had information from health personnel

Table 1: Frequency and percentage distribution of subjects according to their baseline characteristics

N=60

Variables	F	%
1.Age		
a.20-25	46	76.7
b.26-30	12	20.0
c.31-35	2	3.3
2.Education		
a.Primary	19	31.7
b.High school	26	43.3
c.PUC	8	13.3
d.Graduate	6	10.0
e.Postgraduate	1	1.7
3.Religion		
a.Christian	11	18.3
b.Hindu	11	18.3
c.Muslim	38	63.3
4.Occupation		
a.Skilled	8	13.3
b.Semiskilled	4	6.7
c.Unskilled	48	80.0
5.Have you heard about Prevention of Parent to Child Transmission of HIV		
a.Yes	33	55.0
b.No	27	45.0
6. If yes, source of information		
a.Family members	5	15.2
b.Friends/Neighbours/ Teachers	14	42.4
c.Mass media	8	24.2
d.Health Personnel	6	18.2

Table2: Frequency and percentage distribution and grading of knowledge of subjects according to their pretest and posttest knowledge score.
N=60

Range of knowledge score	Percentage %	Pre-test		Posttest		Category
		f	%	f	%	
18-21	81-100	0	0	19	32	Excellent
14-17	61-80	2	3.3	40	66	Good
10-13	41-60	12	20	1	2	Average
5-9	21-40	45	75	0	0	Poor
0-4	0-20	1	1.7	0	0	Very poor

Maximum score: 21
Data presented in table 2 represents that in pretest (2, 3.3%) of subjects had good knowledge, (12, 20%) subjects had average knowledge, (45, 75%) subjects had poor knowledge, and (1, 1.7%) had very poor knowledge. In the post test, (19, 32%) of subjects scored excellent knowledge, (40, 66%) scored good knowledge, (1, 2%) of subjects scored average knowledge regarding the Prevention of Parent to Child Transmission of HIV.

Table 3:Mean,Mean Difference, Standard Deviation and Paired' t' test value between pre and post-test knowledge score
N=60

Group	Mean ±SD		Mean Difference	t value
Antenatal mothers	Pretest	8.72±1.25	8.38	
	Posttest	17.10±1.50		43.06*

t_{59}=1.67,P<0.05

*significant

The data in table 4 depicts that the mean posttest knowledge score ($_{2=}$17.10) with standard deviation of (1.50) was higher than mean pretest knowledge score ($_{1}$=8.72) with standard deviation of (1.25). The calculated 't' value of 43.06was greater than tabled valuet_{59}=1.67, P<0.05. Hence the researcher hypothesis is accepted, null hypothesis is rejected.

Chi-square test was used to find out the association between knowledge and selected demographic variables of antenatal mothers."P' value computed between knowledge and educational status P=0.001 is <0.5,at 0.05 level of significance. So there is a significant association between the pretest knowledge score of antenatal mothers and educational status.

Discussion
In the present study**,**Out of 60 subjects (46, 76.7%) of subjects were between the age of 20-25 years. 43-3% of subjects are having high school education, 63.3% were belongs to Muslim religion, 80% of the subjects were unskilled, 45% of subjects had no previous knowledge, 42.4% of the subjects had information from friends, neighbours, teachers.

In pretest (2, 3.3%) of subjects had good knowledge, (12, 20%) subjects had average knowledge, (45, 75%) subjects had poor knowledge, and (1, 1.7%) had very poor knowledge. In the posttest, (19, 32%) of subjects scored excellent knowledge, (40, 66%) scored good knowledge, (1, 2%) of subjects scored average knowledge regarding the Prevention of Parent to Child Transmission of HIVThe mean posttest knowledge score ($_{2=}$17.10) with standard deviation of (1.50) was higher than mean pretest knowledge score (χ_{1}=8.72) with standard deviation of (1.25). The calculated 't' value of 43.06 was greater than tabled valuet_{59}=1.67, P<0.05. It shows that

the structured teaching programme was effective.Chi square test was used to find the association between the pretest knowledge score and selected demographic variables. The findings of the present study highlights the significant association between the pretest knowledge and selected variable like education (p=0.001).

Conclusion

The structured teaching programme was effective in increasing the knowledge of antenatal mothers regarding Prevention of Parent to Child Transmission of HIV.

REFERENCES

1. HIV and Pregnancy [online]. 2011 [cited2014Jan13]; Available from; URL:http: //www.womenshealth.gov/about-us/index.html. | 2. HIV in Pregnancy [online]. 2012 [cited2014Aug16];Availablefrom:URL:emedicine.medscape.com/article/1385488-overview. | 3. HIV among Pregnant Women, Infants, and Children [online].2014 [cited 2014 Aug 16]; Available from: URL:http://www.cdc.gov/hiv/risk/gender/pregnantwomen/facts. | 4. Mother to Child Transmission of HIV [online] 2012 [cited 2014 aug12]; Available from: URL: http: //www.avert.org/preventing-mother-child-transmission-hiv.htm. | 5. HIV/AIDS during pregnancy [online] 2007 [cited 2014 July 12; Available from: URLhttp: //American pregnancy. org/pregnancy complications/hiv aids.