

Knowledge, Attitude and Barriers of Practice Towards Integrated Counseling and Testing Centre among Antenatal Mothers Attending Antenatal Clinic at Selected Hospitals of Gangtok, Sikkim

Shadap A*, Pangambam S, Jayaswal S, Nath S, Pradhan M, Misao N, Subba M, Sharma A, Chettri P, Subba P, Rai K, Chettri R, Bhattarai Z, Poudyal R and Prasad R

Sikkim Manipal University, India

Research Article

Volume 2 Issue 6

Received Date: November 16, 2018

Published Date: November 30, 2018

DOI: 10.23880/nhij-16000163

***Corresponding author:** Arkierupaia Shadap, Sikkim Manipal University, 5th Mile Tadong, Gangtok, Sikkim, India, Tel: 8436149397; Email: shadaparkierupaia@gmail.com

Abstract

Introduction: Prevention of mother to child transmission aims at reducing the risk of the mother infecting her child with HIV. Comprehensive prevention of mother to child transmission programmes has nearly eliminated MTCT in developed countries. However, in settings with limited resource only 9% of all HIV positive pregnant women benefits from such services. ICTC plays an important role in Prevention of Mother Transmission to Child Transmission.

Aims of the Study: The aim of the study is to assess knowledge, attitude and determine the perceptible barriers of practices towards Integrated Counseling and Testing Centre among antenatal mother.

Materials and Methods: The study adopted quantitative approach and descriptive research design. The study sample included 100 antenatal mothers who attended antenatal clinic at Central Referral Hospital, Sikkim. A validated structured knowledge questionnaire, an attitude likert scale and semi structured barrier questionnaire was used for data collection. The sample selection was done using the non probability purposive sampling.

Results: The result of the study revealed that 65% participant were having good knowledge, 28% were having average knowledge and 7% were having poor knowledge. 78% of participants were having favourable attitude and 22% were unfavourable attitude towards ICTC. There was also a positively moderate correlation between knowledge and attitude towards ICTC. 8% of the participants have refused to attend ICTC and 4% said that ICTC should be removed from routine antenatal check up.

Conclusion: The study shows that majority of the participant were having good knowledge with favourable attitude towards ICTC. But still there is a need to increase the knowledge and attitude of the antenatal mothers through informational booklet.

Keywords: Knowledge; Attitude; Barriers; Practice; Integrated Counseling and Testing Centre; HIV/AIDS

Abbreviations: HIV: Human Immunodeficiency Virus; AIDS: Acquired Immunodeficiency Syndrome; UNAIDS: United Nation Program on HIV/AIDS; NACO: National Aids Control Organization; ICTC: Integrated Counselling and Testing Centre's; VCT: Voluntary Counselling and Testing.

Introduction

Human immunodeficiency virus (HIV) is a retro virus that causes HIV infection and over time Acquired Immunodeficiency Syndrome (AIDS). HIV infects vital cells in the human immune system such as T cells. It gradually attacks the immune system which is our body natural defense against illness. The virus destroys a type of WBC called a T helper cell and make copies of itself inside them. AIDS is the final stage of HIV infection and not everyone who has HIV advances to this stage. Aids are the stage of infection that occurs when immune system is badly damaged. AIDS is defined in terms of either a CD⁴⁺ T cells count below 200 cells or the occurrence of specific disease in association with HIV infection. HIV envelops AIDS within 10 years. The most common initial conditions that alert to the presence of AIDS are pneumocystis pneumonia, cachexia in the form of HIV wasting syndrome and esophageal candidiasis; other common signs include recurring respiratory tract infection [1].

Approximately 80% of HIV cases are transmitted sexually and further 10% perinatally or during breast feeding. Hence the health sector has looked to sexual and reproductive health programme for leadership and guidance in providing information and counselling to prevent transmission [2]. According to UNAIDS (United Nation Program on HIV/AIDS), approximately 36.9 million people worldwide are living with HIV/AIDS at the end of 2014. Of these 2.6 million are children less than 15 years old, 1.5 million pregnant women living with HIV were assessing antiretroviral therapy to avoid transmission of HIV to the children and new HIV infections among children were reduced by 58% from 2000 to 2014 [3].

According to UNAIDS Gap report 2016 India has the third largest epidemic in the world. About 2.1 million people living with HIV and 0.3 are among adults with 43% are on antiretroviral treatment. 86000 new HIV infections have found. In 2013, 35000 pregnant women were living with HIV and only 18% received PMTCT (Prevention of Mother to Child Transmission) treatment. As a result 13000 children were born with HIV [4].

According to the National Aids Control Organization (NACO), Ministry of health and family welfare, Government of India, the Northeast States, though less populated as compared to other Indian states, still have some 100,000 people who live with HIV/AIDS in eight North-eastern states. Among Adult HIV and AIDS prevalence rates in Manipur and Nagaland are 1.57 and 1.2 respectively [5].

According to Sikkim State AIDS Control Society (SSACS) in Sikkim 361 people living with HIV/AIDS out of which 143 are males and 218 are females in the year 2015 [6].

Acquired immunodeficiency syndrome (AIDS) has emerged as one of the most serious public health problem in the country. Integrated counseling and testing centre's (ICTC) are key points for a wide range of interventions in HIV prevention and care. Voluntary counseling and testing (VCT) for HIV is the process by which an individual undergoes counseling to enable him or her to make an informed choice about being tested for HIV. According to the Joint United Nations program on HIV/AIDS (UNAIDS), VCT has a support and should be encouraged. VCT has thus become integral part of HIV prevention and care programs in many countries. Services have evolved to reflect developments in the treatment and care for HIV-related illness and with this, the recognition of VCT as important in reducing HIV transmission [7].

Sagili H, et al. conducted a study on "Knowledge of HIV/AIDS and attitude towards voluntary counseling and testing among antenatal clinical attendees" reveals that the lack of adequate knowledge regarding HIV and preventive practices against mother to child transmission may be one of the reason for HIV transmission from mother to fetus [8].

Materials and Methods

Research Approach

Quantitative survey approach.

Research Design

Non- experimental descriptive survey design.

Setting of the Study

Antenatal clinic of Central Referral Hospital (CRH) Gangtok, East Sikkim.

Sample and Sampling Techniques

- **Sample size:** 100 antenatal mothers attending antenatal clinic
- **Sampling technique:** Non probability Purposive sampling technique
- Sampling criteria
- **Inclusion criteria:** Antenatal mothers attended antenatal clinic of CRH and antenatal mother who were willing to participate in the study.
- The study was conducted after getting clearance from the Institutional Ethical Committee, Sikkim Manipal University and written consent from participants.

Results and Discussion

Analysis and interpretation of data were done in accordance to the objectives of the study using appropriate statistics. The collected data was organized and interpreted using descriptive and inferential statistics, coded and analyzed as per the objectives of the study under the following headings:

Section I: Table1 Frequency and percentage distribution of demographic variables.

Demographic variables	Frequency	Percentage
Age in years		
18-22	18	18%
23-27	26	26%
≥28	56	56%
Residence		
Rural	44	44%
Urban	56	56%
Marital status		
Married	100	100%
Unmarried	0	-
Religion		
Hindu	66	66%
Buddhist	23	23%
Christian	10	10%
Others	1	1%
Occupation		
Private	21	21%
Govt. Employee	13	13%
Housewife	66	66%
Level of education		
Illiterate	2	2%
Can read only	-	-
Can read and write	2	2%
Primary school	6	6%
Middle school	14	14%
High school	48	48%
Graduate	23	23%
Post graduated	5	5%
Family monthly income		
Less than 5000	8	8%
5001-10000	36	36%
10001-15000	31	31%
>15000	26	26%
Gravida		
Primi	49	49%

Multi	51	51%
Heard about HIV/AIDS		
a) Yes	96	96%
b) No	4	4%
If yes , What was Source of information?		
i) Friends	44	44%
ii) Health care professionals	20	20%
iii) Family members and relatives	6	6%
iv) Mass media	24	24%
Have you heard about ICTC		
(Integrated Counselling and Testing Centre)		
a) Yes	88	88%
b) No	12	12%
If yes, What was the source of information?		
i) Health professionals	73	83%
ii) Family members/ relatives	6	6%
iii) Friends	5	5%
iv) Mass media	4	4%

Table 1: Frequency and percentage of distribution of demographic variables [N=100].

Section II: Table 2 Frequency and percentage distribution of knowledge score towards ICTC.

Knowledge score	Frequency	Percentage
Good Knowledge	65	65%
Average Knowledge	28	28%
Poor Knowledge	7	7%

Table 2: Frequency and percentage distribution of knowledge score towards ICTC [N=100].

Section III: Table 3 Frequency and percentage of distribution of attitude towards ICTC.

Attitude score	Frequency	Percentage
Favourable attitude	78	78%
Unfavourable attitude	22	22%

Table 3: Frequency and percentage distribution of attitude towards ICTC and HIV/AIDS [N=100].

Section IV: Table 4 Correlation between knowledge and attitude towards ICTC.

Karl Pearson's Correlation Coefficient
$r = \frac{\sum(x-x)(Y-Y)}{\sqrt{\sum(x-x)^2 \sum(Y-Y)^2}}$
$r = 0.63$

The finding in the Table 4 shows that there is a positively moderate correlation between knowledge and attitude towards ICTC.

Section V: Tables 5 & 6 Association between knowledge and attitude with selected demographic variables.

Demographic variables	Median		df	X ²	Table value	Remarks
	<23	≥23				
Age in years						
18-22	8	9	2	0.29	5.99	Non-significant
23-27	14	12				
≥28	24	33				
Residence						
Rural	20	24	1	0.0095	3.84	Non-significant
Urban	26	30				
Marital status						
Married	46	54	-	-	-	Not- applicable
Unmarried	0	0				
Religion						
Hindu	28	39	3	31.01	7.82	Significant
Buddhist	8	14				
Christian	8	2				
Others	1	0				
Occupation						
Private	10	11	2	3.45	5.99	Non-significant
Govt. Employee	2	11				
Housewife	33	33				
Level of education						
Illiterate	2	0	-	-	-	Not- applicable
Can read and write	2	0				
Primary school	4	2				
Middle school	8	6				
High school	21	27				
Graduate	8	15				
Post graduated	1	4				
Family monthly income						
Less than 5000	4	4	3	2.57	7.82	Non-significant
5001-10000	17	18				
10001-15000	18	14				
>15000	7	18				
Gravida						
Primi	23	26	1	0.145	3.84	Non-significant
Multi	24	27				

Table 5: Association between knowledge with selected demographic variables [N=100].

Demographic variables	Median		df	X ²	Table value	Remarks
	<50	≥50				
Age in years						
18-22	5	13	2	6.26	5.99	Significant
23-27	7	19				
≥28	11	45				
Residence						
Rural	10	34	1	0.024	3.84	Non-significant
Urban	12	44				
Marital status						
Married	22	78	-	-	-	Not- applicable
Unmarried	0	0	-	-	-	
Religion						
Hindu	12	54	-	-	-	Not- applicable
Buddhist	6	18				
Christian	4	5				
Others	0	1				
Occupation						
Private	10	11	2	14.51	5.99	Significant
Govt. Employee	2	11				
Housewife	33	33				
Level of education						
Illiterate	2	0	-	-	-	Not- applicable
Can read and write	2	0				
Primary school	4	2				
Middle school	8	6				
High school	21	27				
Graduate	8	15				
Post graduated	1	4				
Family monthly income						
Less than 5000	1	7	3	10.35	7.82	Significant
5001-10000	7	29				
10001-15000	12	19				
>15000	2	23				
Gravida						
Primi	12	36	1	0.15	3.84	Non-significant
Multi	10	42				

Table 6: Association between attitude with selected demographic variables [N=100].

Discussion

The findings of the present study reveals that 65% participant were having good knowledge, 28% were having average knowledge and 7% were having poor knowledge which is supported by a study conducted by Priyanka Kapoor, et al. among attendees of Integrated Counseling and Testing Centre at SMS Medical College, Jaipur which shows that out of 177participants, 77.9% had good knowledge about HIV/AIDS [9]. 78% have favourable attitude towards ICTC which is supported by the study findings of VN Addo which shows out of 334, 90% has positive attitude towards attending VCT [10]. Present study also shows that 8% of participants wanted to refuse attending ICTC giving the reasons that it is unnecessary, unwillingness, fear of negligence, fear of being at risk and time consuming, whereas, Haily DT, et al. in their study reveals that 25% people want to attend VCT and others have a stigmatization towards it [11].

Conclusion

There is a need to improve knowledge about HIV/AIDS and importance of attending ICTC as well as the attitude towards attending ICTC. The health care professionals have to take initiatives and improve the knowledge through various methods. It is known that prevention of an infection is more important, therefore awareness of the various aspects of this disease deserves the ultimate importance from the strategic point of view.

Acknowledgement

The investigators would like to thank Principal, Sikkim Manipal College of Nursing and the participants for which without them the study would not have been a successful one.

References

1. HIV/AIDS.
2. Askew J, Berer M (2011) Contribution to sexual and reproductive health. International journal of gynaecology and obstetrics.
3. Global HIV/AIDS statistic.
4. National HIV/AIDS Statistics.
5. Northeast HIV/AIDS statistics.
6. Sikkim State AIDS Control Society (SSACS) (2015).
7. (2008) Joint United Nations Programme on HIV/AIDS (UNAIDS) Reports on the global Aids epidemic.
8. Sagili H, Kumar S, Lakshminarayanan S, Papa D, Abi C (2015) Knowledge of HIV/AIDS and attitude towards voluntary counseling and testing. Among Antenatal Clinic Attendees at a Tertiary Care Hospital in India. The journal of Obstetrics and Gynaecology 65(2): 104-110.
9. Priyanka K, Manoj VK (2015) A cross sectional study of knowledge assessment regarding HIV/AIDS. International journal of prevention, curative and community medicine Medical and Social Health 1(3).
10. Addo VN (2005) Pregnant women's knowledge of and attitudes to HIV testing. Ghana Medical Journal 39(2): 50-54.
11. Teklehaimanot HD, Teklehaimanot A, Yohannes M, Biratu D (2016) Factor influencing the uptake of voluntary HIV counselling and testing. BMC Public Health 16: 239.

