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A CASE CONTROL STUDY OF KNOWLEDGE REGARDING CONTRACEPTION,SPECIALLY BARRIER METHOD AMONG SEROPOSITIVE PREGNANT WOMEN ATTENDING A TERTIARY LEVEL RURAL HOSPITAL IN SUB HIMALAYAN WEST BENGAL.

Gynaecology

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ABSTRACT

Background: Correct knowledge regarding HIV transmission goes along way in prevention and eradication of HIV/AIDS.Objectives To compare the knowledge reading contraception ,specially barrier contraception among seropositive and seronegative pregnant patients.

Methods: 108 cases and 216 controls were selected from the Antenatal clinic and Obstetric ward in North Bengal Medical College ,Darjeeling West Bengal for a period of one year from May 2016 to April 2017 and evaluation was done regarding knowledge about contraceptives methods specially condoms.

Results: Cases had heard,seen and used condoms more than controls.Knowledge regarding correct use of condoms was more among cases than controls. Hospitals and Family Planning centers were the commonest place for procuring condoms both among cases and controls.Both cases and controls wrongly stated that permanent sterilisation and IUCD insertion were methods of eradicating HIV/AIDS.

Conclusion: It is desirable that everyone have a complete understanding about HIV/AIDS and how to prevent transmission and protect themselves

KEYWORDS

INTRODUCTION

Over the past decade the global burden of AIDS pandemic has shifted to women in terms of new infections,total cases and deaths.Unfortunately research on HIV AIDS in women has not kept pace and critical questions regarding HIV AIDS in women remain unanswered.Until these questions are not addressed we are limited in our ability to design effective prevention and treatment strategies

The Millenium Development Goals[1] emphasize on reversal of the epidemic of HIV AIDS worldwide by 2015.It further targets the young people (15-24 years)and women to achieve this objective.Stress is laid not only on proper management and preventive measures of the disease but also spread of correct knowledge regarding prevention and transmission to the vulnerable population namely young people,women particularly pregnant women.Not only the healthy but those affected should be given advice on behavioural adjustments to prevent further spread of disease.

In 2003 Women's Research Initiative(WRI)on HIV AIDS was launched to respond to this shift to help to overcome a critical obstacle to progress in AIDS pandemic namely the research on women which is inadequate,inefficient and uncoordinated.The WRI has worked to encourage,enable and coordinate efforts across disciplines and organizations to improve research related to HIV in women.

The Women's Research Initiative[2] held in 2009 among many different actors suggested that research should be directed at studies that:

- Identify psychosocial dynamics operating in interpersonal relationships that promote or impede engaging in protective practices and behaviour particularly(important by race religion,cultural affilation and socioeconomic status)and develop prevention modalities for women in various contexts.
- Incorporate behavioural interventions among other modalities of prevention and treatment.Research has also been promoted in lines to indentify cultural and social factors operating in a community that promote or inhibit HIV infection, treatment or care.

OBJECTIVES

T o compare the knowledge between cases (seropositive pregnant women)with their age matched pregnant controls (sero negative) by the following parameters-

PARAMETERS TO ASSESS KNOWLEDGE

- Knowledge and about awareness,access,use and availability of condoms
- Knowledge about other methods of contraception namely IUCD and permanent serilisation

MATERIALS AND METHODS

STUDY AREA

Antenatal clinic and Obstetric ward of Department of Gynaecology and Obstetrics in a tertiary health care level hospital in Kolkata.

STUDY POPULATION

1. HIV positive pregnant women attending the Antenatal clinic and those admitted in the Obstetric ward during the study period.
2. Age matched controls from the same clinic and ward ,for the same duration of study.

STUDY PERIOD

Study was conducted for a period of 1(one)year from May2016 to April 2017.

SAMPLE SIZE

All the HIV positive pregnant women attending the Antenatal clinic and Obstetric ward during the period of study for one year.Available information from North Bengal Medical College(NBMC) Darjeeling records show that a total number of 98 HIV positive pregnant women visited the Department of Gynaecology and Obstetrics OPD of NBMC in 2015.Similar figures for 2014 and 2013 was 69 and 59 rspectively.From this information it is expected that there will be more than 100 HIV positive mothers in the hospital in the forthcoming year. On completion of the year ,the total number of seropositive women was 112.Of this it was possible to include108 in this study.

STUDY DESIGN

Epidemiological analytical case control studies where the cases areHIV positive pregnant ladies and controls are age matched other pregnant women,who are sero negative.

Ethical issues were discussed and Commitee of Ethical clearance of NBMC for the year 2016 and the body granted permission to conduct the study.

STUDY TOOLS

- 1.Hospital Antenatal Visit card and report of HIV TESTING
- 2.Predesigned,pretested semi structured questionnaire in English and Bengali was prepared to assess the various aforementioned parameters of the two objectives.

STUDY TECHNIQUE

- Examination of antenatal visit card and report to establish validity of cases and controls
- In depth interview.

DATA COLLECTION

A schedule corresponding to the objectives and their parameters was constructed first in English. It was then translated to Bengali and back translated to check the translation. It was pretested on 22 subjects to check out for reliability, comprehension and feasibility.Following pretesting necessary correction was made and the final schedule was translated in Bengali to be used in the study population.

- All the women attending the Antenatal OPD were first counselled about HIV testing following which the women consenting to testing are tested for HIV.The sensitivity and specificity for the testing is high.
- Those who test positive for HIV were considered eligible as cases.
- Following the case ,an aged matched control was selected from the same clinic or ward as the case .In depth interview was conducted in closed quarters by the interviewer and recorded in the pretested questionnaire maintaining the anonymity of both the cases and the controls.
- Inclusion criteria : all the women who consented to the interview process and those who were physically capable at the time of interview were considered.

ANALYSIS AND INTERPRETATION

- Data collected and analysed in MS excel and Stat cal software. Statistical tests included were percentage,chi square,Z test of significance.
- While analyzing for knowledge on transmission and prevention, all the questions were scored and points were awarded on the basis of correct response. The mean score was determined and compared accordingly.

Table 1 Distribution of cases and controls according to knowledge about contraception

Baseline knowledge about condoms	Cases n=108			Controls n=216		
	Yes	No	DNK	Yes	No	DNK
Heard about	100 (92.5%)	8 (6.4%)	0	168 (78%)	46 (21.2%)	2 (.9%)
Seen about	88 (81.4%)	20 (18.4%)	0	142 (66%)	74 (43.2%)	0
Used it	84 (77.7%)	24 (21.8%)	0	138 (64%)	87 (36.1%)	0
Available easily	84 (77.7%)	20 (18.5%)	4 (3.7%)	126 (58%)	75 (34.7%)	15 (6.9%)
Using condom always (correct response)	94 (96%)			84 (63.6%)		Z=5.51

Table 2 Information about place of availability of condom (Multiple responses

Available in	Cases n=108	Control n=216
Shop	62(57.4%)	93(43%)
Pharmacy	41(15.8%)	13(60.6%)
Hospital/Clinic	92(85.1%)	126(58.3%)
Family planning center	89(82.4%)	112(51.8%)
Bar/Hotels	23(21.2%)	31(14.3)
Others	41(37.9%)	24(11.1%)

Table3 Knowledge aboutabout family planning practices tobe adopted for AIDS prevention(multiple responses)

AIDS can be prevented by	Cases	Control	P
Permanent sterilization	48(44%)	107(49.5%)	Z=0.05 0.95
IUCD	24(22.2%)	42(19.4%)	Z=0.49 0.62
Barrier contraception	94(94.7%)	84(38.8%)	Z=7 0.00

92.5% cases and 78%controls had heard about condoms.81.45%and 66.5%controls have seen it.77.7% cases and 64%controls used it.3.7%of cases and 6.95% controls did not know that condoms were easily procurable and available within walking distance. Knowledge and usage of barrier contraceptives were significantly higher among cases than controls.DNK meant do not know. Use of condoms always reduced the chances of transmission was correctly known by 94 (96%) and 84(63.8%) of the cases and controls respectively.

Cases were more aware of the health sector settings from where condoms are available,85.1% from hospitals and 82.45%from family planning centres respectively.Among controls 60.6%thought it was available from medicine shops or pharmacy.44.4%cases vs49.5%controls thought wrongly that permanent sterilization can prevent the disease.22.2% and 19.4% controls thought wrongly that an IUCD can be protective.

CONFLICT OF INTEREST None

DISCUSSION

In Table 1 which deals with knowledge regarding prevention about HIV AIDS it is seen that 96%cases and significantly less 63.3%among the controls were aware of the preventive role of condoms in diseases.The 2008 Global epidemic reported that70% young men know that condoms can protect against HIV exposure ,whereas only 55%of young women cited condom use as an effective prevention strategy.According to BSS (Behavior Surveillance Study))awareness about condoms increased from 77% in 2001 to 82% in2008.This was following an increase in interpersonal communication increase in rate from 10% to 19%.92.5% cases and 78% controls were aware of condoms with81.4% and 66%of cases and controls having used it respectively.77.7%of cases versus 58% controls said it was available within a walking distance.The propotion of respondents reporting taking less than 30 minutes to obtain a condom increased significantly from46% BSS(1) to 81% in 2006. Table 2 shows cases were more aware of the health sector settings from where condoms are available,85.1% from hospitals and 82.45%from family planning centres respectively.Among controls 60.6%thought it was available from medicine shops or pharmacy In Table 3 44.4%vs 49.5% of cases and controls respectively thought that sterilization (with no significant difference between them)could protect them from HIV(p =0.95).Again 22%cases and 19.4%controls thought that IUCD can protect them from the disease(p value0.65).Knowledge about use of barrier contraceptives was significantly more among cases than controls(94.8%/38.4%) (p =0.00))Jeffey Lazarus et al[3] in Denmark stated that men had a more negative attitude towards condom but a greater knowledge.1/3 of women reported never having seen or heard about a condom and almost half had never received any information about it.The population first report on ARSH[4] found that 66 out of 222 respondents knew about a method that would prevent pregnancy as well as STD/HIV/AIDS.Only 6 mentioned condoms.Oral pills were mentioned by 1.The poor response is indicative of ignorance as well as hesitancy to talk about contraceptive methods.

LIMITATIONS

- Being conducted in a hospital the entire cross section of the community was not available
- A large number of respondents were from the nearby catchment area of an urban slum causing homogenesity of the cases and controls
- 80% of the study population was from a low socioeconomic group rendering the result inapplicable to general population
- Cases received counseling at each visit and this resulted in an inequality in the knowledge quotient depending on the duration of pregnancy and number of visits

CONCLUSION

Thus it can be concluded from the study that the primarily affected age particularly for women are 17 to 26 years.Also this is the age most women conceive and awareness generation programmes should be best targeted for this population.This indicates the need for woman empowerment and employment of safe sexual practice.Awareness was distinctly more among the caes with significantly more knowledge regarding outward symptoms and fatality of HIV AIDS.There was a significant difference in correct knowledge regarding transmission between cases and controls in all aspects except mother to child transmission where despite counseling cases were not aware of the possibility of their child being affected.The study shows lacunae of the counseling of cases and controls which require greater emphasis particularly in view of the fact it is desired that the entire population be aware correctly about the disease.Improvement of awareness programs will bring us closer to realizing the Millenium Development Goal of halting and reversing the HIV AIDS epidemic.

REFERENCES

1. http://www.un.org/millenium/declaration/ares552e.pdf
2. Women's Research Initiative on HIV/AIDS Meetings summary of 2009
3. Jeffery V.Lazarus :Mohammad Himedan;Lise Rosenthal Ostergaard ;Jerker Liljestrand HIV/AIDS Knowledge and condom use among Somali anf Sudanese immigrants in Denmark Scandinivian Journal of Public Health,Vol 34 ; 1,Feb 2006 92-99 HIV/AIDS.
4. Population First's Report on Knowledge ,Attitude and Practice(KAP)s Study of Adolescent Reproductive an Sexual Health(ARSH)) issues among youth of 15 villages in Sahapur block-Thane.