Original Article

KAP Gap in Use of Condoms for Prevention of Sexually Transmitted Infections

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Abstract
Background: Sexually transmitted infections (STI) previously known as sexually transmitted diseases are a major public health problem.
Objective: To determine the public's knowledge, attitude and practice of use age of condoms in prevention of STI.
Material and Methods: Survey was conducted randomly on 1000 persons attending outdoor department of our Medical College, on a preformed questionnaire.
Results: Knowledge, attitude and practice was present in 34.4%. Knowledge and attitude was present with practice lacking in 31.6%. Attitude was lacking in 19.6%. Knowledge was lacking in 14.4%. In a good number of females practice was found lacking. Knowledge and attitude were found lacking more in rural people. Literacy was found to be directly related with knowledge and attitude. No relationship of literacy was found with practice. In second and third decade a good proportion of patients had knowledge and attitude but a few lacked practices. Knowledge and attitude was lacking in majority in the fifth decade.
Conclusion: A democratic approach to make both males and females act responsibly is needed. Sex education needs to be imparted to people lacking knowledge.
Key Words: STI, HIV, condoms, literacy, rural, urban.

Introduction
Sexually transmitted infection (STI) remains a public health problem of major significance in most parts of the world and India is no exception.¹ According to (National AIDS Control Organization) NACO, 2006 disease prevalence is estimated to be 6% in India.² According to the World Health Organization (WHO) global incidence of curable sexually transmitted infections is 499 million each year, of which 80% are seen in developing countries and in India 79 million case are reported each year.³ Knowledge
about STI and their spread and putting this into action can decrease global burden of STI remarkably. The gap between knowledge/attitudes and practices/behaviour is well-documented, and frequently referred to as the KAP-Gap (i.e., Knowledge-Attitudes-Practices--Gap).

The present study was, therefore, initiated in our medical college to determine the public’s knowledge, attitude and the practice of usage of condoms in prevention of STI.

**Material and Methods**

A survey was conducted which included 1000 randomly selected patients visiting dermatology outdoor department at our Medical College, over a six month period.

Preformed questionnaires in both Hindi and English were given to these patients to be filled by them. Anonymity was assured to the subjects. Most of the questions were framed to assess the KAP criteria- knowledge, attitude and practice. Information was obtained on the following matters: Sociodemographic matters: Age, gender, literacy, and place of residence. Knowledge about STI and modes of transmission, Practices regarding the use of condoms. Patients were divided into 4 groups Group A (Knowledge, attitude and practice all present), Group B (Knowledge and attitude only present), Group C (Only Knowledge present0, Group D (neither of the three entities present). The data collected by these were further analyzed.

**Results**

There were 568 males and 432 females in age group between 15 years to 60 years who were included in the study. Mean age was 42.6± 14. 2 years. Maximum patients were between 30-40 year (38.4 %)

In 34.4% patient knowledge with attitude and practice was present (Group A). Practice was found lacking in 31.6% patients having knowledge and attitude (Group B). Inspite of knowledge; attitude and practice was lacking in 19.6% (Group C). Remaining 14.4% had knowledge also lacking (Group D).

![Fig.1](image-url) showing distribution of patients having knowledge, attitude and practice for use of condoms

Males and females in each category were analysed and it was found maximum percentage of females lacked practice. (Fig.2)
Patients were analyzed as urban and rural and higher percentage of urban people had knowledge. (Table 1). There were 39.2% urban residents and 60.8% rural.

**Table 1** Difference in urban and rural population of KAP categories

| GROUP | URBAN (392) | RURAL (608) |
|-------|-------------|-------------|
| A     | 41.8% (164) | 29.6% (180) |
| B     | 39.8% (156) | 26.3% (160) |
| C     | 14.3% (56)  | 23% (140)   |
| D     | 4.1% (16)   | 21.1% (128) |

We had total of 8% illiterates, 14.4% with primary education, 22% were high school pass, 20% higher secondary, 24.4% were graduates and 11.2% were postgraduates. Educational status was these patients were recorded and was found to correlate with knowledge about STI’s. (Figure 3)

**Fig.3** KAP in various educational groups

We further classified the kap on the basis of their age group, we found that younger generation had more knowledge. (Table 2)
Table 2 Age Group wise distribution of patients in various KAPGAP categories

| GROUP | 20 – 30 years (332) | 30 – 40 years (384) | 40 – 50 years (220) | >50 years (64) |
|-------|---------------------|---------------------|---------------------|--------------|
| A     | 39.7% (132)         | 30.3% (116)         | 40% (88)            | 12.5% (8)    |
| B     | 36.1% (120)         | 33.3% (128)         | 18.2% (40)          | 43.8% (28)   |
| C     | 12.1% (40)          | 20.8% (80)          | 27.3% (60)          | 25% (16)     |
| D     | 12.1% (40)          | 15.6% (60)          | 14.5% (32)          | 18.7% (12)   |

Discussion

Sexually transmitted infection (STIs) is diseases with tremendous health and economic consequences. The emergence of HIV as a global pandemic has focused greater attention on the control of these diseases as they play an important role in the acquisition and transmission of HIV.\(^4\)

STI contributes to a major fraction of infertility and may have systemic manifestations such as liver, kidney, central nervous system involvement, etc.

Knowledge is information that provides guidance for action, and is made up of data, information, experience and expertise. Attitude is defined as a relatively enduring organization of beliefs around an object, subject or concept which predisposes one to respond in some preferential manner. Misconceptions and apprehensions reflect the negative attitude of people. Human behaviour is complex. We may have knowledge but we have a weak intention to do it and putting our knowledge and intention into practice is the biggest hurdle. This is not only for the use of condoms but also multiple other day to day activities like cessation of smoking, performing regular exercise, using seat belts, etc.\(^5\)

Condoms were introduced as family planning method in India in 1960 and social marketing was started in 1968. In 2004 there was a campaign “Ek Duje Ke Liye” was launched targeting the married couple encouraging the use of condoms to prevent sexual health diseases in their partners.\(^6\) There is a need of developing condom habit as using condom at first sexual experience is a strong predictor of future condom use.\(^7\)

In the study it was found 34% patients had knowledge with attitude and practice. A similar number of patients had practice missing (32%), which shows the missing gap between knowledge, attitude and practice. This section needs to be further evaluated for cause of gap to help them bridge this gap. There were 20% patients who did not have intention to use condoms and 14% did not have the knowledge that condoms help in prevention of STI. Missing knowledge shows that a significant part of our society is still not having knowledge about sexually transmitted diseases. Education of this section of society is important to overcome the dragon of STI and HIV/AIDS. In previous studies female inmates of a prison 98.7% had knowledge of STI and 61.3% had intention to use condoms but only 20% were practicing use of condoms.\(^8\)

Maximum males belonged to group A (38%) while females were most common in group B. Practice was lacking more in females than males even in presence of right attitude. This is because male condoms are usually used and females are unable to convince male partners. This is because various misconceptions are there among males that use of condoms leads to loss of sexual pleasure and adds to discomfort. Percentage of males and females without knowledge were slightly more in females than males (14.8% vs 14.1%). Similar observation was made in a previous study where 61.3% females inspite of having attitude to use condoms only 20% were practicing it.\(^8\)

It was observed in our study that 81.6% of people had knowledge and intention to use condoms in urban areas while it was seen in 45.9% only in rural areas. Knowledge was more lacking in rural people than in urban (21.1% vs 4.1%), showing the need to educate people of rural India regarding STI. Maximum population of India stay in rural area so educating them can only reduce burden of STIs and AIDS in India. While educating rural people care must be taken to not harm their...
religious belief and tradition. Language used should be vernacular and their peer leaders should be encouraged to participate in spreading the message.

When educational status of various groups was analysed it was found that postgraduates had knowledge, attitude and practice in 60.7 %. Knowledge was lacking in 65 % illiterate people. A study done in university students showed that 71 % had knowledge and attitude and 65.6 % % were practicing condom usage as well.9 In our study graduates showed 42.6 % people who had the knowledge and intention but were not practicing use of condom. Thus no correlation can be found between literacy level and practice but attitude and knowledge were found to have positive correlation with literacy level of an individual.

In our study it was observed that people in their twenties and forties were in group A; 39.7% and 40% respectively. This equivalent percentage does not signify that there was no age difference between the two age groups but is because in younger age group less number of people were having sex. The lesser KAP gap in younger age group has also been seen in a study in higher secondary students where the common age group is between 20-30 years. They observed that 71.2% practice their knowledge.10 But in another study in same age group practice was seen in only 54.4 % students.11 The difference in various studies can be due to the gap in the time when they were conducted. In our study knowledge was found lacking most in persons having sixth decade age group.

Innovative and effective approach reduces the stigmata and discrimination associated with STI and people can discuss the issue with their families and communities openly and also develop a platform for young generation to overcome the misconceptions related to STI and motive them to use condoms enough to ensure protection from diseases.

**Conclusion**

It is of major concern that despite adequate knowledge of STI, people reported risky behaviour. STI awareness needs to be integrated with various public programmes involving both males and females where sexuality, gender relationships are openly discussed along with reproductive health matters and responsible safe behaviour. Democratic and responsible decision making by both, males and females can be enabled by participatory approaches like workshops for information dissemination through peer leaders representing both genders. Lack of knowledge about safe practices can be improved by improving educational level of society along with sex education. Knowledge combined with positive attitude and practice is very much essential to prevent STI.

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