Original Research Article

A cross sectional study to assess the operationalization of national tobacco control program in a tertiary level hospital of central India

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ABSTRACT

Background: To implement the Anti-Tobacco laws and to sensitize all stakeholders, The National Tobacco Control Programme (NTCP) was launched by the Ministry of Health and Family Welfare (MoHFW), Government of India in 2007-08, during the 11th five year plan. This study aims to identify the level of the awareness of ill health effects of tobacco, the basic tenets of NTCP and COTPA among the hospital staff of the tertiary level medical college hospital (M.Y Hospital Indore) involved in the process.

Methods: An analytical study. Was carried out in tertiary level medical college hospital among service providers involved in anti-tobacco cell using inter-personal interview of the service providers (Medical Officers, Staff Nurses, Health Care Personnel) using pre-designed pretested semi structured questionnaire based on the salient features of NTCP and provisions of COTPA- cigarettes and other tobacco products act, 2003.

Results: Regarding the ill health effects of tobacco doctors had slightly better knowledge awareness than nurses. However, it was ironical that nurses had a slightly better awareness when it comes to NTCP. Doctors were better aware of new COTPA guidelines as compared to nurses. Thus, nurses had less knowledge about ill effects of tobacco consumption and new COTPA guidelines as compared to doctors.

Conclusions: Although most of the health care personnel involved in operationalization of NTCP are aware of the basic tenets of NTCP, COTPA and ill health effects of tobacco there is a dire need of the refresher training of both the doctors and the nurses. Also this type of the present study should be contemplated on multi-centric basis on a larger scale for better data results.

Keywords: Tobacco, Smoking, COTPA, NTCP

INTRODUCTION

Studies have shown that smoking and tobacco consumption causes more deaths each year than the following causes combined human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries and fire arm related incidents.¹ The medical community has a key role in combating the tobacco epidemic and as advocates for tobacco control. Health professionals can also use their influence in society to encourage governments to put in place tobacco control measures.²

To implement the anti-tobacco laws and to sensitize all stakeholders, The National Tobacco Control Programme (NTCP) was launched by the Ministry of Health and Family Welfare (MoHFW), Government of India in 2007-08, during the 11th five year plan, with the following objectives:
METHODS

Type of study: Analytical study.

Study site: M.Y (Maharaja Yashwantrao) Hospital Indore

Study subjects: Service providers involved in NTCP

Study technique: Inter-personal Interview of the Service Providers (Medical Officers, Staff Nurses, Health Care Personnel)

Sample size: All the service providers (medical officers, staff nurses, and health care personnel) will be interviewed.

Data collection: Primary data collection from the service providers. Secondary data collection– relevant data pertaining to the study.

Study tools: Pre-designed pretested semi-structured questionnaire based on the salient features of National Tobacco Control Program and provisions of Tobacco Control Act 2003.

Ethical issues: Written informed consent will be obtained from the study subjects.

Inclusion criteria: Those study subjects giving written informed consent.

Exclusion criteria: Those study subjects not giving written informed consent.

Study design

An observational, questionnaire-based cross-sectional study was conducted of all service providers. A predesigned semi structured questionnaire was distributed among the health care service personnel after written informed consent was obtained from them. The Service providers were asked the questions on the awareness of ill health hazards of tobacco, NTCP and COTPA. An arbitrary time limit of 30 minutes was set for the study subjects to completely fill the questionnaire.

Data analysis

Data was entered in Microsoft Excel and analyzed using the open source Epi-data software. Descriptive statistical analysis was performed and percentages, means and standard deviations were calculated for all relevant variables. P value was based on significance of 0.05 levels.

RESULTS

As far as HCPs (Health Care Professionals) are concerned, there were 5 doctors and 45 nurses. All the doctors interviewed were males and all the nurses were females. Thus there were 45 females and 5 males in the study group. All the females study participants (100%) were in the age group of <40 years. On the other hand among the males 2 out of 5 (40%) were in the age group of 40-60 years and rest 60% were in the age group of <40 years. Most of the health care personnel claimed that they have attended any recent anti-tobacco training but none were able to produce any certificate regarding the same. Regarding the knowledge about ill health effects of Tobacco, 90% nurses and 100% doctors were aware. As far as awareness regarding NTCP is concerned, 100% nurses were aware of NTCP and its guidelines however only 80% doctors were aware of NTCP.

Table 1: Total number of study participants based on their occupation.

| Study participants | Number | Percentage (%) |
|--------------------|--------|----------------|
| Doctor             | 5      | 10             |
| Nurses             | 45     | 90             |
| Total              | 90     | 100            |

Table 2: Total number of study participants based on their gender.

| Gender | Number | Percentage (%) |
|--------|--------|----------------|
| Male   | 5      | 10             |
| Female | 45     | 90             |
| Total  | 90     | 100            |
ironical that nurses had a slightly better awareness when it comes to NTCP. Doctors were better aware of new COTPA guidelines as compared to nurses. Thus, nurses had less knowledge about ill effects of tobacco consumption and new COTPA guidelines as compared to doctors. As far as second hand smoking (SHS) is concerned, almost two third (66%) of the staff accepted of being frequently exposed to second hand smoking (SHS) at some point of their life. 100% study participants welcomed the move of complete tobacco ban in the public places but only 25% admitted that this ban is strictly followed in the public places.

**Table 3: Total number of study participants based on their age group.**

| Age (years) | Number | Percentage (%) |
|------------|--------|----------------|
| <40        | 45     | 90             |
| 40-60      | 2      | 4              |
| >60        | 3      | 6              |
| Total      | 90     | 100            |

Chi Square with Yates correction $\chi^2$ =0.2716, p value=0.05, not statistically significant.

**Table 4: Knowledge regarding the ill health effects of tobacco.**

| Study participants | Aware (out of total) | Unaware (out of total) | Percentage (%) |
|--------------------|----------------------|------------------------|----------------|
| Nurses             | 41 (45)              | 4 (45)                 | 90             |
| Doctors            | 5 (5)                | 0 (0)                  | 100            |

Chi Square with Yates correction $\chi^2$=0.44, p=0.05, not statistically significant.

**Table 5: Knowledge regarding the NTCP.**

| Study participants | Aware (out of total) | Unaware (out of total) | Percentage (%) |
|--------------------|----------------------|------------------------|----------------|
| Nurses             | 45 (45)              | 0 (0)                  | 100            |
| Doctors            | 4 (5)                | 0 (0)                  | 80             |

Chi Square with Yates correction $\chi^2$=0.44, p=0.05, not statistically significant.

**Table 6: Knowledge regarding the new COTPA guidelines.**

| Study participants | Aware (Out of total) | Unaware (Out of total) | Percentage (%) |
|--------------------|----------------------|------------------------|----------------|
| Nurses             | 34 (45)              | 11 (45)                | 75             |
| Doctors            | 4 (5)                | 1 (5)                  | 80             |

Chi Square with Yates correction $\chi^2$=1.54, p=0.05, not statistically significant.

**DISCUSSION**

Tobacco is a substance whose consumption involves all the systems of the body, and doctors and nurses working in all disciplines of medicine are involved in its management. Tobacco cessation forms one of the critical key activities under NTCP. Health professionals have received little training, very few thus carry out proper assessments and interventions among tobacco users. With the formation of anti-tobacco cell in a tertiary government medical college hospital like MYH Nurses and doctors are usually responsible for carrying out diagnosis, counselling, routine investigations, treatment management and discharge of patients affected by tobacco consumption.

The present study was aimed to identify the level of the awareness of ill health effects of tobacco, the basic tenets of NTCP and COTPA among the hospital staff involved in the process. Most of the health care providers were aware of the basic principles of the NTCP, ill effects of tobacco consumption and features of the COTPA act. Regarding the ill health effects of tobacco doctors had slightly better knowledge awareness than nurses. However, it was ironical that nurses had a slightly better awareness when it comes to NTCP. Doctors were better aware of new COTPA guidelines as compared to nurses. Thus, nurses had less knowledge about ill effects of tobacco consumption and new COTPA guidelines as compared to doctors.

Our study suggests that there is a dire need of refresher training regarding tobacco control, NTCP and COTPA awareness of all the health care personnel. Also, the present study recommends more comprehensive tobacco awareness drive. Many studies have stressed on the need of more comprehensive awareness drive regarding tobacco control. Some authors have recommended the adoption of stringent legal measures to curb the menace of tobacco. Some participants in the present study have recommended tailored-made interventions rather than one size fits for all approach which is backed by many studies. The awareness of ill health hazards of tobacco, NTCP and new COTPA rules should be an essential component of undergraduate curricula in all medical, paramedical and nursing schools.

**CONCLUSION**

Although most of the health care personnel involved in operationalization of NTCP are aware of the basic tenets of NTCP, COTPA and ill health effects of tobacco there is a dire need of the refresher training of both the doctors and the nurses. Also this type of the present study should be contemplated on multi-centric basis on a larger scale for better data results.

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**Conflict of interest:** None declared

**Ethical approval:** The study was approved by the Institutional Ethics Committee

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