A Cross Sectional Study to find out the Awareness about Pictorial and Text Warning and Change in Behaviour after Enactment of New COTPA among Tobacco Consumers in Indore City

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Abstract
Background: Indian government introduced pictorial warnings that occupy an important position among different tobacco control initiatives. A study was done to evaluate the opinion of tobacco consumers on the implementation of pictorial warnings on tobacco packs and to compare the effectiveness of these warnings among individuals of Indore city.

Objective: 1) To assess the impact of pictorial and text warning on consumption pattern of tobacco after the enactment of COTPA act 2014
2) To co-relate the impact with the age of the study population
3) To suggest appropriate recommendation on the basis of study.

Methodology: The present study is a cross sectional study, conducted in the randomly selected 150 person Pan shops around MGM Medical College, Indore for 3 months. All age groups and of varying socioeconomic status coming to pan shops near MGM medical college, Indore. The study tool of the study is Pre Tested semi structured Questionnaire, Data was entered in excel sheet and analyzed using SPSS Software, appropriate statistical test was applied wherever necessary.

Results: In this study population, 60% of the people have decreased their tobacco consumption after the introduction of the health warning, 34.7% of the study population have considered quitting and have reduced its consumption, and 78.7% of the study population believes that the warning is beneficial. The average age group of the study subjects was 20-28 years i.e. young age group. (76.7%) of respondents were males.

Conclusion: Tobacco awareness programs and tobacco cessation services must be planned and implemented. There is a need for social movement with all the stakeholders including states participating in it for controlling the use of tobacco.

Keywords: COTPA, Tobacco Products, Public Health.

Introduction
India is second largest consumer and third largest producer of tobacco. The increasing use of tobacco products is proving to be a major public health problem in our country.
The government of India has taken several measures including legislation to control tobacco intake. Display of pictorial warnings on tobacco products was one of the legislative measures taken under The Cigarettes and Other Tobacco Products Amendment 2014, which came into effect from 1st April 2016.\(^1\)

Display of pictorial health warnings on 85% of the principle display area of tobacco product pack on both sides. The enactment and implementation practices help raise public awareness by serving as a presage of the hazards associated with tobacco. The picture on 60% and the text on 25%, also no distractions on pack.\(^2\)

Around 5 million deaths are caused by cigarette smoking. Nearly 6 million people every year die due to passive smoking. This highlights the need for prompt and dynamic interventional strategies.\(^3\)

**Aims & Objectives**

1) To assess the impact of pictorial and text warning on consumption pattern of tobacco after the enactment of COTPA act 2014.

2) To co-relate the impact with the age of the study population.

3) To suggest appropriate recommendation on the basis of study.

**Methodology**

The present study is a cross sectional study, this study was conducted in the 150 persons in Pan Shops around MGM Medical College, Indore for 3 months. Sampling technique of study was simple randomized selection criteria as per availability. In our study all age groups and of varying socioeconomic status coming to pan shops near MGM medical college, Indore who give consent are included, and who have not given consent and persons buying tobacco on behalf of others are excluded. The study tool of the study is Pre tested semi structured Questionnaire. Data was entered in excel sheet and analyzed using SPSS Software, appropriate statistical test was applied wherever necessary.

**Result**

**Table 1: Age and Sex Distribution of Study Population**

| Age (years) | Frequency | Percent |
|-------------|-----------|---------|
| 20-28       | 54        | 36.0    |
| 29-37       | 46        | 30.7    |
| 38-47       | 31        | 20.7    |
| 48-56       | 19        | 12.7    |
| Total       | 150       | 100.0   |

| Sex         | Frequency | Percent |
|-------------|-----------|---------|
| Male        | 115       | 76.7    |
| Female      | 33        | 22.0    |
| Total       | 150       | 100.0   |

Among 150 study population, majority (36%) of respondents are of age 20-28 years i.e. young age group, & were males.

**Table 2: Occupation of Study Population**

| Occupation  | Frequency | Percent |
|-------------|-----------|---------|
| Student     | 39        | 26.0    |
| Job         | 85        | 56.7    |
| Business    | 22        | 14.7    |
| Unemployed  | 4         | 2.7     |
| Total       | 150       | 100.0   |

Among the study population, majority (56.75%) were engaged in job.

**Table 3: Educational Status of Study Population**

| Education               | Frequency | Percent |
|-------------------------|-----------|---------|
| Illiterate              | 29        | 19.3    |
| Primary School          | 19        | 12.7    |
| High & Middle School    | 26        | 17.3    |
| Graduate & Post Graduate| 74        | 49.3    |
| Professional            | 2         | 1.3     |
| Total                   | 150       | 100.0   |

Approximately 49.3% of the study population are graduates & post graduates.

**Table 4: Awareness Regarding Warnings on Tobacco Packets**

| Response | Frequency | Percentage |
|----------|-----------|------------|
| Yes      | 128       | 85.3       |
| No       | 21        | 14.0       |
| Total    | 149       | 99.3       |
| Non Responders | 1   | .7         |
| Total    | 150       | 100.0      |

85.3% of the studied population was aware about the warnings on the tobacco packets but was still using them.
Table 5: Type of Warning Noticed

| Type Of Warning | Frequency | Percentage |
|-----------------|-----------|------------|
| Pictorial Warning | 30        | 20.0       |
| Text Warning    | 9         | 6.0        |
| Both            | 93        | 62.0       |
| None            | 17        | 11.3       |
| Total           | 149       | 99.3       |
| Non Responders  | 1         | .7         |
| Total           | 150       | 100.0      |

62% of the studied population noticed both the types of warnings but the pictorial warning was found to be more noticeable.

Table 6: Changes in Consumption of Tobacco after introduction of warning

| Change         | Frequency | Percent |
|----------------|-----------|---------|
| Increased      | 1         | .7      |
| Decreased      | 90        | 60.0    |
| No Change      | 54        | 36.0    |
| No Response    | 5         | 3.3     |
| Total          | 150       | 100.0   |

Among the study population, 60% of the people have decreased their tobacco consumption after the introduction of the health warning.

Table 7: Effect of Warning

| Effect                               | Frequency | Percent |
|--------------------------------------|-----------|---------|
| You Ignore It                        | 30        | 20.0    |
| Tried Quitting                       | 31        | 20.7    |
| Considered Quitting But Have Not Reduced Consumption | 31 | 20.7 |
| Considered Quitting & Have Reduced Its Consumption | 52 | 34.7 |
| No Response                          | 6         | 4.0     |
| Total                                | 150       | 100.0   |

Approximately, 34.7% of the study population have considered quitting and have reduced its consumption.

Discussion

In our study among 150 study population, majority (36%) of respondents are of age 20-28 years i.e. young age group, (76.7%) of respondents were males our study finding are in similar with a study done by Corsi DJ1, Subramanian SV2 et al, Andhra Pradesh, 2014. Majority of the studied population (49.3) was educated up to graduate and post graduate. Awareness about the warnings on the tobacco packets present in 85.3% of the studied population but was still using them.

Both the types of warnings are noticed by 62% of the studied population but the text warning was found to be more noticeable our finding are in similar with a study done by Karinagannanavar A1, et al, Bellary, India, 2011. Among the study population, 60% of the people have decreased their tobacco consumption after the introduction of the health warning. The prevalence of tobacco use among the young population has reduced from 18.4% in GATS-1 to 12.4% in GATS-2, which is 33% relative reduction. Approximately, 34.7% of the study population have considered quitting and have reduced its consumption similar to the study done by Corsi DJ1, Subramanian SV2, et al, Andhra Pradesh, 2014.

Conclusion

Based on our study we concluded that, majority of respondents are of age 20-28 years i.e. young age group. Maximum of the studied population were aware about the warnings on the tobacco packets but was still using them, and most of them noticed both the types of warnings but the pictorial warning was found to be more noticeable. After the introduction of the health warning 60% of the people have decreased their tobacco consumption whereas 34.7% of the populations have considered quitting with reduction in its consumption. The present study revealed that most of study participants have noticed the warning on tobacco product, and most of them believe that they could understand warning labels .This study also showed that most of study participants believed that pictorial health warning create awareness about probable health hazards of tobacco use and that these pictorial presentations on tobacco packs positively assist in reducing or quitting tobacco smoking up to some extent.

Recommendations

1) Increase in taxation of tobacco product and bringing it at par with the global scenario.
2) Govt. should put in more efforts in NTPC (National Tobacco Control Programme)
3) Ban on tobacco product.
4) Support for high visibility public awareness campaigns should be increase to consistently reach different target audiences.\(^6\)
5) Tobacco dependence treatment should be mainstreamed into the existing health care delivery system.
6) Increase in awareness regarding tobacco de-addiction.
7) Public relations efforts should be proactive and engage the media whenever there are developments in tobacco control.\(^7\)
8) De-glamorization of nicotine.
9) Implementation of COTPA restrictions around Educational Institutes.
10) Ban tobacco advertising, promotion & sponsorships.

The study recommends the need to have a Comprehensive tobacco control policy with health –in –all policies approach .This would ensure a whole of –a-government approach for tobacco control, there by aligning the policies of the other departments for public health.\(^6\)

**Limitations**

- The findings are based entirely upon the study conducted in Indore.
- Time duration of study was limited.
- The sample size taken in study was small (150).
- The results are entirely based on answers given to the questionnaire, so there is possibility that some questions may be misinterpreted or intentionally wrongly answered.

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