# **Original Research Paper**





# To Evaluate the Knowledge About Health Hazards of Smoking and Attitude and Practice Towards Smoking **Among Multipurpose Workers in Tertiary Care Centre**

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The purpose of this cross sectional study was to assess the knowledge, attitude, practice towards smoking and its association with cancer, cardiovascular diseases and respiratory diseases among multipurpose workers working in tertiary care centre. A sample of 200 multipurpose workers (100 males and 100 females) was randomly selected and questionnaires were given to them. Of the 200 respondents, most were aware that smoking is injurious and it is associated with cardiovascular diseases, cancer and respiratory diseases. Radio (80.5%) forms the main source of knowledge about health hazards of smoking. Most of the respondents had a positive attitude against smoking. About 100% of the study population wanted to prohibit sales of cigarette packets to children. Nearly 97% of the study population thinks that warning signs should be present in cigarette packets. Over 79% of the people advised others to quit smoking. Prevalence of smoking was 15%. No female smokers were found. Over 13% of the smokers spend more than 1/4th of the family income for smoking. The main reason for starting smoking was friends (50%). The smokers who tried to guit smoking was 27(90%). The main reason for trying to quit smoking was that it is injurious to health (52%) but could not quit it.

## **KEYWORDS**

### INTRODUCTION:

Smoking harms nearly every organ of the body. A few important Health hazards of smoking include lung cancer, cardiovascular disease, stroke, COPD, bronchitis. etc. (1) Tobacco also affects other organs by contributing to the development of cancer of oral cavity, larynx, oesophagus, pancreas and bladder. Components of cigarette smoke particularly polycyclic aromatic hydrocarbons and nitrosamines are potent carcinogens. Smoking multiplies the risk of other carcinogenic influences. (2) In addition smoking adversely affects family members and nearby people by passive smoking and deprive their families of income & hinder economic development. According to WHO tobacco kills up to half of its users. Smoking leads to approximately six million deaths every year. In adults, second-hand smoke causes serious cardiovascular and respiratory diseases, including coronary heart disease and lung cancer. In infants, it causes sudden death. In pregnant women, it causes low birth weight. Second -smoke causes more than 60000 premature deaths per year. (3) In 2008, WHO introduced a practical, cost-effective way to scale up implementation of provisions of the WHO Framework Convention on tobacco control on the ground: MPOWER. The 6 MPOWER measures are:

- Monitor tobacco use and prevention policies
- Protect people from tobacco use 2.
- 3 Offer help to guit tobacco
- Warn about the dangers of tobacco
- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco. (3)

Smoking is static or declining in most of the developed countries due to intense public health measures, but it is increasing in the developing countries. (4) Nearly 80% of the more than one billion smokers worldwide live in low and middle income

countries, where the burden of tobacco-related illness and death is heaviest. (3) In the developing countries, 50% of men and 9% of women smoke. (5) The adverse effects of general health of tobacco smoking are well documented and on average cigarette smokers die ten years younger than non-smokers. (6,7) Significant differences in the prevalence of tobacco use have been demonstrated with varying levels of education, income and standard of living. (8) Information on smoking among people is essential to improve the focus of prevention and control measures and thereby succeed in the struggle against its use. (4) The main objective of this study is to evaluate the knowledge about health hazards of smoking and attitude and practice towards smoking among multipurpose workers(MP-Ws). Various studies were done among school students, college students and the rural people. (9-13) No studies were done among the multipurpose workers.

MATERIALS AND METHOD: A cross-sectional study with the help of pre-tested questionnaire was conducted among MPW workers of the tertiary care centre during the period of 2 months from May to June. A muster roll register was utilized to select a MPW worker at random to achieve the desired sample size of 200 from the total working MPWs. Those found to be absent; the immediate next number was selected from the list.

Questions regarding the demographic status and questions which assess the knowledge, attitude and practice of smoking were asked in the form of questionnaire. The details of the study were provided to them in writing and explained to them in their own language. A written consent was taken from them. The questionnaire was self administered with no identification information required (name and address) maintaining complete anonymity. Their participation in the study was voluntary and they were free to withdraw from the study at any time.

**OBSERVATION AND RESULTS:** Data was analyzed in Excel 2010 version and analysis was done using SPSS version 13.0. In this study 200 multipurpose workers (100 males and 100 females) were included. All were above 18 years of age. Out of 200 people, only 30(15%) were smokers and 170(85%) were non-smokers Out of 30 smokers in the surveyed population, 100% of the smokers were males and none of the females were smokers (0%). Majority of the study population completed their middle school education (53%) which was followed by high school education (21.5%) (Fig.1). Majority of the study population was greater than 30 years occupying 61%. Majority of the study population (73%) had monthly family income between Rs. 5000 and Rs. 10000. Of the total study population 28 (14%) were diabetics and 20(11.7%) and 8(26.6 %) were diabetics among non-smokers and smokers respectively. Of the study population 4(2%) had the past history of tuberculosis of which 2(1%) were among smokers. Total study population suffering from respiratory diseases was 14(7%) and 6 (3.5%) and 8(26.6%) are suffering from respiratory diseases among non-smokers and smokers respectively. (Fig 2)

FIGURE 1: Distribution of the study population according to educational qualification (n=200)

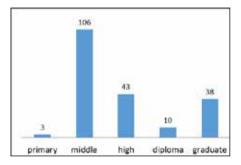
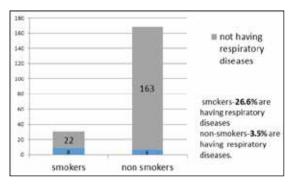


FIGURE 2: Comparison of the presence of respiratory diseases between smokers (30) and non-smokers(170)



Out of 200 respondents, 4(2%) were suffering from cardiovascular diseases of which 2 were smokers. All 100% of the study population knew that smoking is injurious to health. Of the total study population, 199(99.5%), 182(91%), 193(96.5%), 194(97%) had adequate knowledge that smoking causes cancer, cardiovascular diseases, respiratory diseases and asthma respectively (Fig 3). Of the study population 178(89%) knew that smokers die earlier than non-smokers. Females had more knowledge regarding smoking causing infertility (41.5%) than males (38.5%) and teratogenicity (48.5%) than males (46.5%). Of the surveyed population 186(93%) were aware of the warning signs depicted in cigarette packets. Of the study population 190 (95%) knew that smoking causes environmental pollution (Fig 6). Among the 30 smokers, 29(97%) knew that smoking causes pollution. Of the total study population, 188(94%) and of 30 smokers, 27(90%) had adequate knowledge that passive smoking is equally hazardous as active smoking (Fig 4). The main source of knowledge about health hazards of smoking among the study population was Radio and Television (80.5%) which was followed by schools (62.5%) (Fig 5). The majority of study populations (51.5%) got annoyed on seeing a smoking person and the second most response was advising to guit (42%) (Fig 6). Of 200, 194(97%) of the study population had positive attitude against smoking in public places. An attitude that smoking has a problem solving effect was noted in 70(35%). Out of total 200, 194(97%) of the study population thinks that warning signs should be present in cigarette packets. About 98.5% of total, thinks that adults should set a good example by not smoking and 158(79%) advised others to guit smoking (Fig.7). Total 6 smokers (20%) were smoking for more than 10 years and 24(80%) were smoking for less than or equal to 10 years. Out of 30 smokers, 17 smokers (56.6%) smoke regularly and 13 smokers (43.3%) smoke occasionally. Smokers smoking more than 5 cigarettes were 13 (43.3%) and less than or equal to 5 cigarettes per day were 17(56.6%). All smokers were smoking less than 10 cigarettes per day. Smokers smoking less than or equal to 5 pack years constitute 27(90%) and more than 5 pack years were 3(10%). Smokers spending less than 1/4th of the family income were 26(86.6%) and more than 1/4th were 4(13.3%) (Fig 8). About 100% of the study smokers don't smoke in presence of their children. Smokers can refrain from smoking in public places were 25(83.3%) and can't refrain from smoking in public places 5(17.6%). The major reason for starting smoking among smokers was friends (50%) which was followed by distress and anxiety (16.6%) (Fig 19). Smokers tried to guit smoking were 27(90%). The major reason for trying to quit smoking was that smoking is injurious to health (51.8%) which was followed by concern about family (40.7%) (Fig 10). Smokers feeling guilty for smoking were 20(66.6%). The main reason for restarting smoking after quitting it for a brief period was addiction (44.4%) and the second most reason was stress (37%) (Fig 11).

FIGURE 3: Knowledge about various health hazards of smoking(n=200)

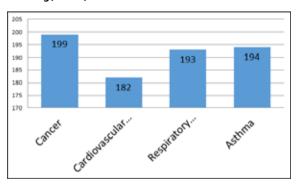
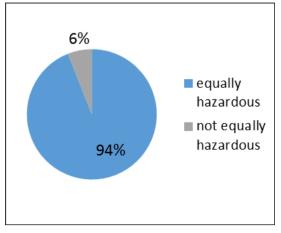


FIGURE 4: Knowledge that Passive smoking is equally hazardous as Active smoking (n=200)



<sup>\*</sup>Multiple responses possible

FIGURE 5: Source of knowledge about health hazards of smoking (n=200)

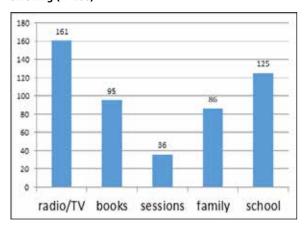


FIGURE 6: Attitude towards a smoking person(n=200)

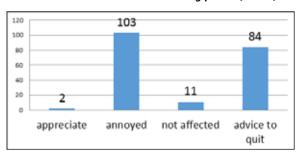


FIGURE 7: Distribution of the study group who advised others to quit smoking (n=200)

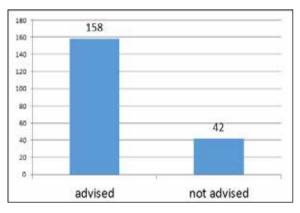


FIGURE 8: Distribution of the smokers (n=30) according to the monthly expenses on smoking

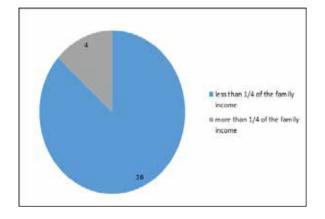


FIGURE 9: Reason for starting smoking among smokers(n=30)

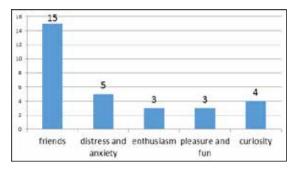


FIGURE 10: Reason for trying to quit smoking (n=27) among those who tried to quit smoking

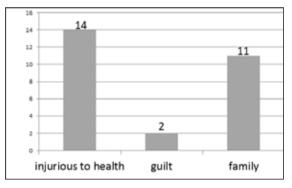
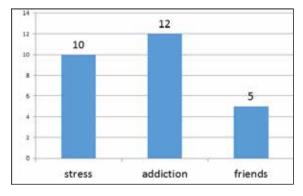


FIGURE 11: Reason for restarting smoking after quitting it for a brief period(n=27)



#### **DISCUSSION:**

This study was done to evaluate the knowledge, attitude and practice towards multipurpose workers in a tertiary care centre.

It was done among 200 multipurpose workers where 100 were males and 100 were females.

In most of the studies which were done among the students in various parts of the world regarding knowledge, attitude and practice it was shown that mostly they had poor knowledge, positive attitude towards smoking and high prevalence rates of smoking among both males and females.

In our study, 26.6% of the smokers were diabetics while 11.7% of the non-smokers were diabetics. Similarly, 26.6% of the smokers were suffering from respiratory diseases while 3.5% of the non-smokers were suffering from respiratory diseases. This shows that smokers are more prone to develop diabetes mellitus and respiratory diseases than non-smokers.

About 100% of the study population knew that smoking is

injurious to health. About 99.5% of the study population knew that smoking causes cancer. This knowledge about cancer is far better than the study done among adults in the rural area of Jharkhand (26.19%)<sup>(8)</sup> and in other studies.

About 91% of the study population knew that smoking causes cardiovascular diseases and 96.5% knew that it causes respiratory diseases. The knowledge of smoking causing cardiovascular and respiratory diseases was less as compared to the knowledge of smoking causing cancer. The reason could be awareness among people about smoking causes cancer through various sources like radio, television and books. About 97% of the study population knew that smoking causes asthma. About 89% of the study population believes that smokers die earlier than non-smokers. This result was consistent with the study done by Awaisu H where among newly diagnosed patients about 81.3% of the people told that smokers are more likely to die from heart diseases than non-smokers.<sup>(12)</sup>

About 80% of the study population knew that smoking causes infertility and 90% of the study population knew that smoking causes teratogenicity. This knowledge was better among females in our study. This knowledge in our study was better when compared to the study done among male students in Libya, where 44.7% and 51.3% knew that smoking causes infertility and congenital anomalies of a newborn respectively.<sup>(4)</sup>

About 99% of the study population told that smoking leads to addiction. About 93% were aware about the warning signs depicted in cigarette packets. This knowledge was better when compared to a study done by Kumar A et al in Jharkhand, where large number of subjects were unaware of warning signs depicted on ghutka. (8) This may be because our study was carried out in urban population.

About 95% of the study population knew that smoking causes environmental pollution. About 94% of the study population knew that passive smoking is equally harmful as active smoking. This knowledge about passive smoking is far better than the study done by Sinha DN(58%)<sup>(13)</sup>.

The main source of knowledge about health hazards of smoking for the MPWs was radio and TV(80.5%) which was followed by schools(62.5%), b0ooks(47.5%), family(43%) and sessions(18%). This result is more or less similar to the study done by Abou Faddan HH among male students in Libya.<sup>(4)</sup>

The MPWs working in the tertiary care centre had a vast knowledge regarding the adverse effects of smoking and its association with cancer, cardiovascular diseases and respiratory diseases. In other studies, they had poor knowledge about adverse effects of smoking. The reason for having a vast knowledge could be that the study was done in an urban area where the people are more aware about health hazards through various mass media like radio, TVs, books compared to the people in rural area and also the place of work (tertiary care centre).

When the study population were asked about their reaction on seeing a smoking person, 51.5% answered that they get annoyed, 42% answered that they advice to quit, 5.5% answered that don't get affected, 1% answered that they appreciate. This shows that most of them have a negative attitude towards a smoking person. Among the smokers, 7(23.3%) answered that they advice to quit, 15(50%) answered that they get annoyed, 6(20%) don't get affected, 2(6.6%) answered that they appreciate. This shows that smokers in spite of smoking get annoyed while they see other's smoking in front of them. This may be due to the offensive odour of the cigarette smoke that make them annoyed.

About 97% of the study population told that smoking in public places must be restricted. All the non-smokers involved in the study wanted to restrict smoking in public places and the

remaining 3% of people were all smokers. The study population involved in our study had a more positive attitude towards banning smoking in public places when compared to a study done by Sinha DN et al, among students in Bihar where 72.2% wanted to restrict smoking in public places. (13) This may be because the people in our study are more aware about the health hazards of passive smoking.

About 100% of the study population wanted to prohibit sales of cigarettes to children. This is similar to the study done by Awaisu A et al, where 95.1% wanted to prohibit the sales of cigarette to the children. (12)

About 97% of the people insisted on the presence of health warning signs in cigarette packets. Surprisingly, 100% of the smokers wanted to have health warning signs in cigarette packets. This shows that the presence of health warning signs in cigarette packets may possibly reduce the number of smokers.

About 70(35%) of the people thinks that, smoking has a "problem solving effect". This is similar to a study done by Abou-Faddan HH where 43% of the people thinks that smoking has a problem solving effect.<sup>(4)</sup>

About 158(79%) of the people advised others to quit smoking. Out of this 158 people, 80% were non-smokers and 20% were smokers. This shows that smokers even though they are smoking advise others to quit as they know about the health hazards of smoking and do not want others to get addicted to smoking. This also shows that in spite of advising others they are unable to quit as they are addicted to smoking.

Out of 200 people, 30 (15%) were smokers, all being males. No female smokers were found. This is totally different from other studies because in all other studies, female smokers were present. The reason for 0% female smokers in our study may be the cultural practices followed in this area. Also females have a positive attitude against smoking and females being more bound to their family know that smoking spoils the happiness of the family, causes various health hazards and causes socioeconomic burden of the family. This prevalence of smoking is similar to a study done by Abou-Faddan HH where the prevalence of smoking is 28.3%. (4) In many studies it is proved that males have a higher probability to smoke than females (Ferrante M et al). (11)

About 20% of smokers were found to have smoked for more than 10 years and 80% of smokers smoke less than or equal to 10 years. This is in contrary to the study done by Uprety S et al, where 79% of smokers found to have smoked for more than 10 years<sup>(5)</sup> The reason for this may be that majority of the our study population is younger(less than 40). So they might have smoked for less than 10 years.

About 43% of the smokers were smoking more than 5 cigarettes per day and 57% of the smokers were smoking less than equal to 5 cigarettes. This is less when compared to the study done by Uprety S et al, where about half of them smoked more than 5 cigarettes per day.<sup>(5)</sup>

The main reason for starting smoking among smokers was friends(50%) in our study. This is similar with the study done by Uprety S et al. $^{(5)}$ 

From the above discussion, it is clearly known that the MPWs have a better knowledge, negative attitude and low practice of smoking when compared to other similar studies.

### CONCLUSION:

The present study shows that there is an adequate level of knowledge and awareness about adverse effects of smoking and its association with cancer, cardiovascular diseases and respiratory diseases among the multipurpose workers (MPWs). They have a positive attitude against smoking. Even though

there is less number of smokers compared to other studies, 30% of smokers among males in our study alone is a big number. Most people in spite of having awareness and a positive attitude against smoking are still practicing it and cannot quit it. Continuous education is essential. In order to increase the cessation rates, the encouragement to guit smoking by rehabilitation centres and family support is needed. Smoking can be prevented by the role of the family, prohibition of tobacco advertisement by all means, encouraging advertisements against tobacco use and by increasing taxes on tobacco

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