

## ORIGINAL ARTICLE

## TOBACCO CESSATION COUNSELLING FOR WOMEN IN RURAL SINDH: IS IT BEING OFFERED?

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**Background:** Tobacco is the single leading and most preventable cause of death in today's worlds and responsible for six of the eight leading mortality causes in the world. Diseases related to tobacco use are known to cause about 5.4 million deaths every year, 80% of which are contributed by the developing world, and this toll is estimated to increase up to 8 million deaths per year by 2030. This study was conducted to determine the number of women who were offered counselling regarding cessation of tobacco use by all health care providers (medical and alternate), in rural Sindh, Pakistan. **Methods:** This cross-sectional survey was conducted during January to March, 2008 in District Khairpur, Sindh, Pakistan. A validated, pre-tested, translated questionnaire was used to collect the data from 502, adult women (aged between 18–60 years). These women were asked about the type of health provider they visited in the past 12 months and practices of provider regarding tobacco control including cessation and advice. **Results:** A large majority of women (nearly 71%) were illiterate, and 44% of women were in the age group 18–24 years. High prevalence (10%) of adult women were smokers. Only 12% of the total women who visited physicians during this time period were asked about their smoking status as compared to 7% who visited hakims and 13% who were approached by lady health visitors. **Conclusion:** A very small segment of the women users of health care system is enquired and counselled about tobacco use in any form by the health providers in Rural Sindh. Revisiting practices for health care professionals is urgently needed to address inevitable tobacco use in the region.

**Keywords:** Tobacco, Women, Pakistan, Health Care Provider, Smoking, Control, Rural Sindh

## INTRODUCTION

Tobacco is the single leading and most preventable cause of death in today's worlds and responsible for six of the eight leading mortality causes in the world.<sup>1</sup> Diseases related to tobacco use are known to cause about 5.4 million deaths every year, 80% of which are contributed by the developing world, and this toll is estimated to rise up to 8 million deaths per year by 2030.<sup>2</sup>

Pakistan is the sixth most populous country of the world and ranks 136 out of 178 countries rated on the Human Development Index (HDI).<sup>3</sup> The country is divided in four provinces and more than 50% of its population live in rural areas.<sup>4</sup> Limited data exists for the prevalence of tobacco use and its risk factors in Pakistan. Prevalence of smoking cigarette among men in the province of Sindh had been reported as 44%<sup>5</sup>, while the corresponding figures for women in a recent survey reported to around 10%.<sup>6</sup> As compared to males, there is a higher proportion of females who smoke *huqqa/chillam* in the rural areas of Pakistan.<sup>7</sup> A high prevalence of smokeless tobacco (SLT) is also reported in literature for Pakistan.<sup>8,9</sup> A great amount of research has been reported in developed countries to assess the role of health care providers in tobacco control and necessary strategies by them to address to this growing epidemic of tobacco use.<sup>10</sup> Health care providers including both traditional and allopathic can play a greater role in this regard. As tobacco use is a chronic addiction so repeated small interventions in terms of

counselling can provide better results in terms of cessation.<sup>11</sup> Health care providers including both traditional and allopathic can play a pivotal role in this regard. Numerous studies have demonstrated a strong relationship, especially when the physicians are following guideline methods, like the 5 A's (Ask, Assess, Advise, Assist, Arrange), the quit rate amongst smokers has been shown to increase.<sup>12,13</sup>

Literature has supported the evidence that proper counselling helps in increasing the quit attempt rate by smokers to an increasing rate.<sup>14</sup> The data from developing countries is very limited at present in this regard.<sup>15,16</sup> As morbidity and mortality with respect to tobacco use is already an established fact, the key is to identify the missing gaps in literature according to local scenario.

The primary objective of this study was to estimate the prevalence of women smokers in a rural district of Sindh. The secondary objective pertains to the frequency of counselling session offered with regard to smoking and its effects to the women clients who availed health care services.

## SUBJECTS AND METHODS

This cross-sectional study was conducted in Khairpur district. The area is fairly homogenous in terms of socioeconomic status, language and culture and comprises of eight administrative areas.<sup>17</sup> A two stage cluster sampling was done to collect the required data from five hundred and two respondents. A pre-tested

structured translated questionnaire was used to collect the data from respondent.

Eligible subjects were adult female aged 18–60 years and residents of the study area for at least one year. One adult woman who came first in contact with the survey team from selected household and who was willing to participate was enrolled for the study. On the other hand, those who refused to participate were excluded from our survey. The study was approved by the Ethical Board of the Aga Khan University, Karachi. The interviews were conducted after obtaining an informed consent in local language.

The field staff gathered information with the help of structured questionnaire. It elicited information regarding the type of health practitioners visited by a respondent in the past twelve months. The questionnaire also inquired if the practitioner visited asked the respondent about her tobacco use status and if he offered her any counselling regarding cessation of smoking. There were questions on other variables including age, education, occupation, marital status, household income and her perception of her own health status. Marital status and occupation were also recorded.

Descriptive analysis was performed to describe the overall population and the socio-demographic character of the participants. We used the Chi-square test to see the distribution of categorical variables if they were statistically significant from each other.

## RESULTS

A total of 502 women, aged between 18–60 years were interviewed. A very high illiteracy rate (over 70%) was found in the area (Table-1). Nearly 37% of women were in the age group of 24–35 years of age. A high prevalence of adult women smokers were found in this study of nearly (10%). A large Majority of smokers (42%) started smoking in age group between 18–24 years and about (49%) of current smoker attempted to quit smoking by their own.

A large majority of women (68%) went to allopathic physician for seeking health care (Table-2). Out of those only a small number (15.7%) of patients were enquired about smoking cigarettes habits of passive smoking or any other information on health adverse effects. The corresponding figures for smokeless tobacco were also quite low (12.8%). About 30% of the women also visited *hakims* (traditional health care provider), for seeking health care. The figures for smoking cigarette and smokeless tobacco were 7.3% and 6.7% respectively. Another important health care provider in rural areas was lady health worker (LHW) and nearly 20% of the study sample was visited by them. Their numbers were 15.7% and 13.7% respectively about their practice regarding inquiring about use of smoked and smokeless tobacco.

Of the total 344 women, those who were asked about their smoking status by their physicians, the majority belonged to the age group of 26–35, and so was the case for those who weren't asked about their physicians. (Results were not significant).

Among respondent we found a significant difference for questions regarding doctors discussed about dangers of tobacco products ( $p=0.001$ ) and did the doctor asked about smokeless tobacco to your health ( $p=0.001$ ). Interestingly, no significant difference was found for age categories among respondents (Table-3).

**Table-1: Socio-demographic characteristics of women (n=502)**

Variable	n	%
<b>Age (Years)</b>		
18–24	71	14
25–34	188	37
35–44	145	29
> 44	98	20
<b>Education</b>		
Illiterate	357	71
1–5 years of schooling	70	14
6–10 years of schooling	47	9
11–12 years of schooling	14	3
>12 years of schooling	14	3
<b>Occupation</b>		
Housewife	446	89
Farmer	30	6
Service	26	5
<b>Marital Status</b>		
Married	357	87
Never married	42	8
Widow/divorced/separated	23	5
<b>Household income (Pak Rupees)</b>		
0–5000	285	57
5001–10,000	172	34
>10,000	45	9

**Table-2: Distribution of individuals from whom health provider asked about tobacco product**

	n	%	n	%
<b>Visited Any doctor in last 12 months</b>				
Visited a doctor in the last year	344	68.5	158	31.5
Doctor asked about your smoking status	54	15.7	290	84.3
Doctor discussed hazards of smoking cigarette	47	13.66	297	86.33
Doctor asked about use of SLT products	44	12.8	300	87.2
Doctor discussed about hazards of SLT products	46	13.4	298	86.6
<b>Traditional health care provider in (THP)</b>				
Visited a THP in the last year	150	29.9	352	70.1
THP asked about your smoking status	13	8.7	137	91.3
THP discussed about hazards of smoking cigarette	11	7.3	139	92.7
THP asked about use of smokeless tobacco product	10	6.7	140	93.3
THP discussed hazards of use SLT product	10	6.7	140	93.3
<b>Lady health worker's role in the last 12 months</b>				
LHW visited you in the last year	102	20.3	400	79.7
LHW asked about your smoking status	16	15.7	86	84.3
LHW discussed about danger of smoking cigarette	14	13.7	88	86.3
LHW asked about use of SLT product	14	13.7	88	86.3

**Table-3: Univariate analysis of doctor has asked about smoking status last 12 months**

Variable	Doctor has asked about smoking status				Chi-Square	p-value
	YES		NO			
	n	%	n	%		
<b>Age(year)</b>						
18-25	9	16.7	59	20.4	1.9	0.586*
26-35	29	53.7	126	43.6		
36-45	9	16.7	62	21.5		
46+	7	13	42	14.5		
<b>Subjective Health</b>						
Good	27	50.0	164	56.9	0.97	0.61*
Fair	14	25.9	68	23.6		
Poor	13	24.1	56	19.4		
<b>Smoking Status</b>						
Yes	12	22.2	26	9	8.07	0.004
No	42	77.8	263	91		
<b>Doctor discussed about danger of smoking products</b>						
Yes	44	81.5	2	0.7	254.9	<0.001
No	10	18.5	268	99.3		
<b>Doctor asked about smokeless tobacco</b>						
Yes	41	75.9	2	0.7	234.8	<0.001
No	13	24.1	287	99.3		
<b>Doctor discussed about danger of using smokeless products</b>						
Yes	42	77.8	3	1	234.3	<0.001
No	12	22.2	285	99		

\*Not Significant

**DISCUSSION**

We believe that is the most recent findings on practices of health care provider in context to tobacco control from a user’s perspective in rural Pakistan. A recent study also highlights the importance of tobacco control and its prevalence in rural areas.<sup>18</sup> A very high participation rate coupled with strong epidemiological design adds to the strength of the study. According to the centre for disease control (CDC), more women died of lung cancer than breast cancer, making it the leading cause of cancer deaths amongst women in the year 2000.<sup>19</sup> This reflects on how rapidly the tobacco epidemic is affecting the females, as studies have shown that in some parts of the world tobacco consumption is even greater in girls as compared to boys.<sup>20</sup> Apart from causing lung disease, tobacco use has been proved to be associated with increased risk of cervical cancers<sup>21</sup>, and it may even decrease the amount of breast milk production in smoker women, as compared to non smokers.<sup>22</sup>

It is widely reported in literature that physicians can play a key role in tobacco control, at three levels, i.e., at individual patient’s level through education and counselling, at the community level by initiating and supporting policies against tobacco cessation, and also at the society level by working with the government in formulating and promoting anti- tobacco programs and campaigns.<sup>23</sup> Numerous

studies have shown the association between physician’s counselling and quitting tobacco use amongst smokers, and they show a strong positive relation between the two variables, especially when the physicians are following guideline methods, like the 5 A’s (Ask, Assess, Advise, Assist, Arrange), the quit-rate amongst smokers has been shown to increase.<sup>12,14,16</sup> The low rate of offering inquiring about tobacco use and assistance has been attributed to a few reasons, one of which is that the physicians feel that a few minutes of counselling may not have major effects on the patients smoking behaviour, and thus they don’t give much importance to counseling.<sup>24</sup> The limited data available from Pakistan clearly established the need of involving the health care practitioners in tobacco control.<sup>25</sup>

Our study was the first study of its kind which explored tobacco cessation practices of health providers in rural Sindh and it just does not focus on physicians but also alternate medicine practitioners as well as Lady Health Workers who are important stakeholders in our health system. This study found that the practice of asking about the smoking status, from women was low amongst doctors and lady health visitors but it was even lower amongst hakims. This clearly shows a need developing strategies in involving these groups of health care providers towards a broader goal of tobacco control.

As our study is a cross sectional study, it has a few limitations: it is not possible for us to show a cause and affect relationship over time. Although we did not directly find out the practice of tobacco counselling and hazards by health practitioners, we actually found out how often their messages were actually remembered by the patients; in this study the possibility of recall bias cannot be ruled out, and that a patient’s own desire to quit smoking can influence this.

Moreover, our study only covers a specific section of women and health practitioners, i.e., rural women and health providers, so the results cannot be generalised to all women and health providers of Pakistan

**CONCLUSION**

This study attempts to identify gaps in the tobacco control efforts from the user perspectives in a rural area of Pakistan. The importance of health care providers in tobacco control is of no dispute. Lady health workers can play a crucial role especially in rural settings for tobacco control among women. Every effort to increase the involvement of health care providers towards tobacco awareness and counselling among patients will be of enormous benefit in the years to come.

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