Original Article

Frequency, Knowledge and Practice of Tobacco Smoking in Pregnant Women at out Patient Department of a Tertiary Care Hospital

Chandra Madhu Das, Ambreen Ghori, Farkhunda Khursheed, Zakia Zaheen, Madhu Sharma

ABSTRACT

OBJECTIVE: To determine frequency, knowledge, and practice of tobacco smoking in pregnant women visiting outpatient department of Liaquat University Hospital Hyderabad.
STUDY DESIGN: Descriptive observational study.
SUBJECTS AND METHODS: Study carried out at Liaquat University Hospital Hyderabad from 1st Dec 2009 to 31st Jan 2010. All pregnant ladies visited the outpatient department of Obstetric and Gynecology for antenatal care with an age range 18-46 years were enrolled for study. Semi structured questionnaire consisting various items used to explore the range of knowledge and practice of pregnant women as far as tobacco smoking is concerned. Data was analyzed using SPSS version 16.0.
RESULTS: A total of 350 pregnant women were included in this study. Frequency of tobacco smoking was 60.57% (212). 179(51.14%) women were also using smokeless tobacco along with smoking. Only 42 (12%) knew hazards of tobacco consumption .Knowledge was high in 27 (7.71%) patients. Peer pressure was the reason for commencement of smoking in 234(66.85%) of women and depression in 60(17.14%).
CONCLUSION: Tobacco consumption is a major health problem in pregnant woman. Obstetrician should promote smoking cessation during pregnancy using evidence based methods.

KEY WORDS: Smoking in pregnancy, Smokeless tobacco, Smoking hazards.

INTRODUCTION

Tobacco consumption is major preventable cause of disease and death worldwide. In 2002 tobacco killed 483 million peoples, of which fifty percent from developing countries. Unless necessary steps will be taken for prevention, it is calculated that number of deaths will be twice in next two decades, and 70% of this will be in developing countries.[1] Tobacco is used in smoke and smokeless form. It is used in smoke form as a cigar, cigarette, hukka and biri and obviously there is always a risk of environmental tobacco smoke or passive cigarette smoking in high prevalence countries. Tobacco chewing is smokeless use of tobacco consumption. The tobacco chewing includes pan (piper betel leaf filled with sliced areca nut, lime, catechu and other spices chewed with or without tobacco) and gutkha (a chewable tobacco containing areca nut and mishri).[2] Pakistan is among fifteen countries with high tobacco consumption in the world.[3] Pregnant woman are an important population for tobacco prevention efforts because its use causes serious risk to fetal and maternal health. Tobacco consumption can affect maternal health in the form of respiratory tract infection, heart attack[4] and malignancy of aero digestive tract[5], while it can also cause preterm deliveries, intra uterine growth retardation, low birth weight, placental abruption, placental praevia, premature rupture of fetal membrane, still birth and ectopic pregnancies.[6] Various national studies had focused smoking habits of different population groups including woman,[7,8] but the studies regarding tobacco consumption in pregnancy are scanty. Keeping in view this background current study was carried out in antenatal OPD of tertiary care hospital, with the objective to describe the knowledge and practice of tobacco smoking in pregnant women.

PATIENTS AND METHODS

This descriptive observational study was conducted in outpatient department of Liaquat University Hospital Hyderabad from 1st December 2009 to 31st January 2010. All the pregnant ladies visited the Gynecology OPD for antenatal care with age range 18-46 years were enrolled for study. The content of questionnaire explained, and than written informed consent obtained from participant.

Questionnaire had 03 parts; first part contains demographic data and remaining 02 parts concerned with knowledge and practice of tobacco smoking. After completing the questionnaires, the variable such as

age, educational status, profession, and number of pregnancies, knowledge, and practice of smoking was determined. The questions regarding knowledge includes, relationship of smoking to cancer, effects on intrauterine baby, nature of smoking including passive smoking and were scored as good (>13 scores), average (7-12 scores), and poor scores (0-6 scores).

Variable studied for practice were duration of smoking, type of smoking, number of times smoked per day or use of smokeless tobacco and exposure to second hand smoke. Subject was defined as smoker if she has smoked more than 100 cigarettes/berries in her life time. Non smokers were taken those who do not smoke or smoke less than100 cigarettes/ berries in her life time. The students of final year, house officers, and postgraduates helped us to fill the proforma. The exclusion criteria were the non cooperative subjects or who refused to participate in the study and the women believed to be mentally or physically incapable of participating in the study or already on antipsychotic therapy. The collected data was analyzed in SPSS version 16.00. Simple frequencies for the qualitative data were calculated and presented as n(%). No statistical test was applied.

RESULTS

During one month study period total 350 subjects were recruited. Regarding their demographical distribution 30 (8.57%) were ≤ 20 years, 233(66.57%) were between 21 – 40 years and 87 (24.85%) were 41- 46 years. The mean age recorded was 38.34 ± 5.732. Primgravida were 40 (11.42%), 188 (53.71%) were multigravida and 122(34.85%) were grand multipara. So for job status 298 (85.14%) were housewives and 52 (14.85%) were employee**.** Illiterate were 178(50%), 142(40.57%) had primary, 26 (7.42%) had secondary, 04 (1.14%)had higher secondary and zero (0%) had bachelor and masters. Gestational age were less than12 weeks in 80(22.85%), 13-28 weeks in100 (28.57%), 29-37 weeks in 138(39.42%) and 38-42 weeks in 30(8.57%) patients. The frequency of smoking observed in pregnant ladies was 212 (60.57%), the characteristics of pregnant smokers shown in **Table I**, whereas the knowledge and practice of smoking as far as pregnancy is concerned is shown in **Table II & III**. So far reason for commencement of smoking 234 (66.85%) started due to peer pressure 60 (17.14%) due to depression and (%) were smoking since child hood. 315(90%) pregnant ladies said that no health care provider ever had advised to give up this habit.

TABLE I: BASE LINE CHARACTERISTICS OF PARTICIPANTS (n=350)

Demographic Parameters	n = 350	%
Smoking		
Smoker	212	61
Nonsmoker	138	39
Age (in groups)		
≤20	30	8.57
21-40	233	66.57
>40	87	24.87
Parity		
Primigravida	40	11.42
Multigravida	188	53.17
Grandmultigravida	122	34.85
Occupation		
Housewife	298	85.14
Employee	52	14.85
Education		
No education	178	50.85
Primary education	142	40.57
Secondary education	26	7.42
Higher education	04	1.14
Gestational age		
Up to 12 weeks	80	22.85
13-28	100	28.57
29-37	138	39.42
38-42	30	8.57
Reason for initiation		
Peer pressure	234	66.85
Stress	60	17.14
Since child hood	56	16
How they will feel if their kids start to smoke	293	83.71
Will not feel good	43	12.28
Unconcern	14	04
Already smoking		

TABLE II: KNOWLEDGE OF SMOKING HAZARDS DURING REGNANCY

Knowledge	n = 350	%
High	27	7.71
Average	125	35.71
Low	198	56.57
Total	**350**	**100**

TABLE III:
PRACTICE AND PATTERN OF TOBACCO CONSUMPTION AMONG PREGNANT WOMEN

Practice	n = 350	%
Duration		
>10years	229	65.42
<10 years	121	34.57
Type of smoke		
Cigarette	72	20.57
Hukka	99	28.28
Biri	179	51.14
Cigar	00	00
No: of Cigarette / Hukka / Biri per day she smoke	79	22.57
>than 10	180	51.42
Between 5-10	91	26%
< than 5		
Use of smokeless tobacco		
Yes	179	51.14
No	171	48.85
Exposure to second hand smoke	196	56
Yes	154	34
No		

DISCUSSION

The results of present study give evidence that cigarette smoking in pregnancy is an emerging problem of our country. We found prevalence tobacco smoking in pregnant woman of 60.57%. This is higher than that found in India[2], America[9], Germany[10], Sweden [11] and Canada [12] but is comparable with United Kingdom.[1] Local literature on tobacco smoking is available in adult male[14], students[15] and national health survey[3]giving prevalence of tobacco consumption from 20-55%. Literature is also available on prevalence of smoking in women reporting frequency from 6.5-32%[3, 7]. But literature on smoking or tobacco consumption in pregnancy is lacking. There is reason behind this; historically the prevalence of tobacco consumption in pregnancy in the developing world is low because of cultural constraints against tobacco use by women. Bloch M et all in 2008 studied smoking habits in 9 developing countries, reported that 10% of Pakistani woman smoke while 50% of are exposed to secondhand smoke,[16]secondhand smoke were higher in other countries as well, but in Pakistan it was higher even from India. We found prevalence of second hand smoking about 56% higher than previously reported[16]. Second hand smoke is important as it has been shown that there is a relationship between exposure to second hand smoking due to smoking habits at home and frequency of smoking.[7, 17] The main cause to bear the secondhand smoke was lack of knowledge as proved by current study. All respondents showed very limited awareness about hazards of smoking. They did not know about chemical nature of secondhand smoke. Only few women mentioned that there is nicotine and tar in tobacco smoke. The interviewees had some knowledge about the negative health impacts of active smoking, but they had almost no understanding about secondhand smoking, health consequences in general and particularly on pregnant women and fetus. Although a majority said that they have heard that passive smoking could be dangerous for them but they could not describe even one consequence of it. Only 10 women define some conditions, but it seems they did not know exactly and just tried to connect smoke and respiratory function and growth of the fetus.

Peer pressure has important influence which effects behavior of young peoples. In current study 67.39% started smoking due to peer pressure and 15.21% reported that they were smoking from child hood. 88.27% did not know about hazard of tobacco consumption either on their health or their intrauterine or extra uterine babies. This is similar with study by Omair.[18] but in contrast to study by Nisar[7] and Imam[15]This difference is because of different study population, most of our study population belongs to rural areas similar to that study by Omar's,[18] while study by Nisar and Imam studied urban population. In current study 90% of patients continued smoking after confirmation of pregnancy.[16] but the studies from France, Spain, and Sweden[10]shows that more than 40% woman quit this habit as soon as they know they are pregnant. This could be because apart from illiteracy, there is lake of priority to look in indirect causes of maternal and fetal morbidity and mortality. It means that public health officials in Pakistan should take immediate steps to reduce tobacco use and secondhand smoke exposure.

A survey in USA showed that 96.4 % of respondents think smoking must be banned at households and half of them reported no restrictions in their households[19], a similar scenario was also found in present study.

It is widely known that health education is a primary goal to induce behavioral change. The present study limited to one hospital, therefore in future multidisciplinary studies should be conducted in a similar as well as in a advance manner to survey about the knowledge, attitude and practice as far as pregnancy is concerned.

CONCLUSION

Our study concluded that high proportion of pregnant women either were smoker or were exposed to the

second hand smoke. The main factor is a deficiency in information that leads to poor knowledge and which in turn forms worst behavior towards smoking. Therefore, health care providers should focus on the health education programs to combat smoking during pregnancy.

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AUTHOR AFFILIATION:

Dr. Chandra Madhu Das *(Corresponding Author)*
Assistant Professor, Department of Gynaecology & Obstetric
Liaquat University of Medical & Health Sciences
(LUMHS), Jamshoro, Sindh-Pakistan.
Email: drchandramadhudas@hotmail.com

Dr. Ambreen Ghori
FCPS-II Trainee, Department of Gynaecology & Obstetric
LUMHS, Jamshoro, Sindh-Pakistan.

Dr. Farkhunda Khursheed
Assistant Professor, Department of Gynaecology & Obstetric
LUMHS, Jamshoro, Sindh-Pakistan.

Dr. Zakia Zaheen
Senior Registrar, Department of Gynaecology & Obstetric
LUMHS, Jamshoro, Sindh-Pakistan.

Dr. Madhu Sharma
Post Graduate Student
LUMHS, Jamshoro, Sindh-Pakistan.