

Oral Health Seeking Behaviour among Pregnant Women - A cross sectional survey

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ABSTRACT

Aim: To determine the oral health seeking behaviour among pregnant females visiting in Lady Willingdon Hospital Lahore.

Methods: A self-structured questionnaires was filled by the principal investigator in outpatient department of Lady Wallingdon Hospital, Lahore. A total 121 pregnant women were taken as sample in the survey. All pregnant women, regardless of age, financial status, social class or ethnic group were included in this survey. Those who were uncooperative didn't respond or those who were not willing to participate were excluded from study. Each question has two responses yes, no. After data collection it was analysed using SPSS 21.

Results: Mean age of the pregnant women was 25.90, SD± 3.218. Out of 121, around 62.8% pregnant ladies do not visit dentist during pregnancy while 71.9% ladies didn't even consider it important to visit dentist during pregnancy. A number of reasons attributed for such behaviour of the pregnant women not visiting dentist during pregnancy were found such as following lack of time 56.2%, cost 51.2%, distance 13.2% and lack of transport 14%. Chi square association between access to dentist, and other variables such as working status, education and residence were statistically significant with p value (0.001), (0.000), and (0.004) respectively.

Conclusion: Oral health seeking behaviour among pregnant ladies needs to enhance to reduce burden of diseases among the pregnant ladies.

Keywords: oral health seeking behaviour, dental visit, access to dentist, pregnant women

INTRODUCTION

Behavior of an individual towards seeking his own health through provided health services is known as health seeking behavior¹. It consists of selection of healthy food, healthy lifestyle, regular physical activity, seeking of health education programs and access to health services. Health seeking behaviour reduces the risk of life style diseases². Women experience hormonal changes at many stages in their life such as during puberty, pregnancy and menopause; such changes also affect the oral cavity. During pregnancy hormonal as well as dietary changes occur, causing increase of pathogenic bacteria in oral flora³. All these changes put pregnant lady at greater risk of developing gingivitis and periodontitis, pregnancy granuloma and tooth erosion⁴. Periodontal diseases and dental caries are major public health issues; burden of disease in pregnancy is high throughout the world⁵. However these issues can be control by educating and motivating pregnant women to maintain their oral hygiene by proper cleaning⁶. Oral Health seeking behaviour during pregnancy depends upon factors such as knowledge about oral health⁷, oral hygiene practices, and oral health seeking behaviour which depend upon time⁸, cost^{9,10}, family influence¹¹, distance and lack of transport⁷, and cultural values. The purpose of this survey was to determine oral health seeking behaviour among pregnant women visiting in Lady Willingdon hospital Lahore.

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MATERIALS AND METHODS

This cross sectional study was performed after the approval of IRB in de'Montmorency College of Dentistry. After taking consent, a self-structured questionnaire was filled by the principal investigator in outpatient department of Lady Wallingdon Hospital, Lahore after taking permission from the concerned authorities. A total 120 pregnant women were taken as sample in the survey. All pregnant women, regardless of age, financial status, social class or ethnic group were included in this survey. Those who were uncooperative didn't respond or those who were not willing to participate were excluded from study. Each question has two responses yes, no. After data collection it was analyzed using SPSS 21. Percentage and frequency was calculated. A Chi square test was also applied between the sociodemographic variables and health seeking behaviour. Cross tabulation between sociodemographic variables such as gender, residency, education, income and oral health seeking behaviour was measured. P-value < 0.05 was taken as significant. Health seeking behaviour was computed by computing different variables with the same theme and direction. Similarly access to dentist was also computed.

RESULTS

Table 1 shows that 19.8% ladies were totally illiterate and remaining had some education such as 24.8% were having education less than 8 years, 37.2% had education between 8-12 years, 14.9% had greater than 13-14 years and 3.3% had greater than 14 years. Regarding financial status, 36.4% had earning less than 1500PKR and 55.4% had earning between 15,000 to 50,000 PKR, 5.8% had earning between 50,000 to 80,000 and only 2.8% had earning greater than 80,000PKR. As far as working status is concerned 75.2% are housewives and 24.8% are working women. Almost 19.8% women were in first trimester, 36.7%

were in second trimester and 44.2% were in third trimester of the pregnancy. In relation to residence, 63.6% belong to urban class and 36.4 belong to rural areas and no one have any health cards to facilitate them to avail any private set up service.

Table 2 shows health seeking behaviour of pregnant ladies, indicating that 62.8% haven't visited dentist during pregnancy and only 37.2% have visited dentist during pregnancy. When questions were asked regarding importance of dental visits 71.9% ladies response was that they do not think it's important to visit dentist during pregnancy and 28.1% considered it important to visit dentist during pregnancy. In case of social influence 82.6% said that no one had ever told them to visit dentist during pregnancy and 17.4% answer positive to it. When asked about the role of family members in referring for routine dental check-up, 78.5% said that their family members do not refer to dentist for routine check-up during pregnancy while 21.5% said yes to it. In order to look for the hurdles 56.2% considered time as a hurdle and 43.8% responded no. Regarding cost 51.2 % thought cost is a hurdle for routine check-up and 58.8% said no. When distance was asked as a hurdle only 13.2% said yes to it and remaining 86.8% didn't consider distance a hurdle for dental check-up.

Table 1: Sociodemographic characteristics of pregnant women in Lady Wallingdon Hospital Lahore (n=121)

Demographic characteristics	Frequency	%age
Education		
No education	24	19.8
Less than 8 years education	30	24.8
8-12 Years education	45	37.2
13-14 years education	18	14.9
Greater than 14 year education	4	3.3
Financial Status		
less than 15000	44	36.4
15000-50000	67	55.4
50001-80000	7	5.8
greater than 80000	3	2.4
Working status		
House wife	91	75.2
Working women	30	24.8
Trimester of pregnancy		
First trimester	24	19.8
Second trimester	44	36.7
Third trimester	53	43.80
Residency		
Urban	77	63.6
Rural	44	36.4
Health insurance card		
No	121	100.

Mean age (continuous) mean (25.90) SD± (3.218)

Table 3 is depicting the cross tabulation between the demographic variables and access to dentist or dental care settings. Working status, education and residency of pregnant ladies with access to dentist is statistically significant p value (0.001), (0.000), (0.004) respectively. Family income and access to dentist is statistically non-significant p value (0.124) Working status of pregnant women with health seeking behaviour is statistically significant (0.002), similarly education is also statistically significant their p value is 0.028. However family income

and residence were statistically not significant with p value (0.067) and (0.146) respectively.

Table 4 depicts Cross tabulation between Barriers in health seeking behaviour and sociodemographic variables and no variable was found significant.

Table 2: Knowledge attitude and practices of pregnant women in Lady Wallingdon Hospital Lahore (n=121)

Question	Frequency	%age
Visited dentist during pregnancy?		
No	76	62.8
Yes	45	37.2
Perceived importance of visit dentist during pregnancy?		
No	87	71.9
Yes	34	28.1
Ever someone told pregnant lady about routine check up?		
No	100	82.6
Yes	21	17.4
Do respondent's family member advised to visit dentist?		
No	95	78.5
Yes	26	21.5
Ever Gynaecologists advised dental check-up?		
No	111	91.7
Yes	10	8.3
Is time a hurdle for your routine dental check-up?		
No	53	43.8
Yes	68	56.2
Is cost a hurdle for your routine dental check-up?		
No	59	48.8
Yes	62	51.2
Is Distance a hurdle for your routine dental check-up?		
No	105	86.8
Yes	16	13.2
Is lack of transport a hurdle for your routine check-up?		
No	104	86.0
Yes	17	14.0
Dependency on male is a hurdle for routine check-up?		
No	83	68.6
Yes	38	31.4
Is time consuming procedure a problem during a dental check-up?		
No	54	44.6
Yes	67	55.4
Is expensive procedure a problem during a dental check-up?		
Yes	55	45.5
No	66	54.5
Is distance is a problem for a check-up?		
No	106	87.6
Yes	15	12.4
Is compulsory accompanying a male a problem during check-up		
No	91	75.2
Yes	30	24.8
Others problems		
No	115	95.0
Yes	6	5.0

When questions were asked regarding lack of transport as a hurdle, 14% answered yes while 86% said not. Regarding dependency on male for routine check-up, almost 31.4% were dependent on males for routine check-up, while 68.6% were not dependent. When questions were asked regarding problems during dental check-up, time consuming procedure was a problem for 55.4% and was not for 44.6% ladies. Regarding expense 45.5% ladies consider expense as a problem and 54.5% didn't consider

it a problem during a dental check-up. During routine check-up 12.4% ladies considered distance a problem during dental check-up and 87.6% said distance wasn't a problem during dental check-ups. While 24.8% said they must be accompany by male was a problem during dental visits and 75.2% didn't consider it a problem. Only 6% responded positive to other problems which were not specific.

Table 3: Cross tabulation between health seeking behaviour and sociodemographic variables pregnant women in Lady Wallingdon Hospital Lahore (n=121)

Variables	Access to Dentist		P value
	No	Yes	
Working status			
House wife	46(90.2%)	45(64.3%)	.001
Working women	5 (9.8%)	25(35.7%)	
Education			
uneducated	20(39.2%)	4 (5.7%)	0.000
Educated	31(60.8%)	66(94.3%)	
Family income			
Less than 50000	49(96.1%)	62(88.6%)	0.124
More than 50000	2 (3.9%)	8 (11.4%)	
Residency			
Urban	25 (49%)	52 (74.3%)	0.004
Rural	26 (51%)	18(25.7%)	
Health seeking behaviour/ Role of family and community			
House wife	75 (82.4%)	16 (53.3%)	.002
Working women	16 (17.6%)	14(46.7%)	
Education			
uneducated	22 (24.2%)	2 (6.7%)	0.028
Educated	69 (75.8%)	28(93.3%)	
Family income			
Less than 50000	86 (94.5%)	25(83.3%)	0.067
More than 50000	5 (5.5%)	5 (16.7%)	
Residency			
Urban	55 (60.4%)	22(73.3%)	0.146
Rural	36 (39.6%)	8 (26.7%)	

Table 4: Cross tabulation between Barriers in health seeking behaviour and sociodemographic variables pregnant women in Lady Wallingdon Hospital Lahore (n=121)

Variables	Different Barriers in oral health seeking behaviours		P value
	No	Yes	
Working status			
House wife	4 (100%)	87 (74.4%)	0.315
Working women	0 (0%)	30 (25.6%)	
Education			
uneducated	0 (0%)	24 (20.5%)	0.408
Educated	4 (100%)	93(79.50%)	
Family income			
Less than 50000	3 (75%)	108(92.3%)	0.295
More than 50000	1 (25%)	9 (7.7%)	
Residency			
Urban	2 (50%)	75(64.1%)	0.462
Rural	2(50%)	42(35.9%)	

DISCUSSION

Our study determined the health seeking behaviour among pregnant ladies, only 37% pregnant women visited dentist during pregnancy majority (63%) didn't visit to dentist for routine check-up. Similar results were found by Thomas et al., (2008) in Australia which also stated that more than 50% pregnant ladies had not visited dentist in past 12 months⁴. In another survey done by Payal et al., (2017) reported that 72.81% pregnant females did not visit a dentist during pregnancy⁶. Shabbir et al., (2015) also

reported the immense need of regular dental check-up during pregnancy in Pakistan to prevent different oral problems during pregnancy¹².

In present study 82.6% ladies respond that no one like friends family or any other person in their social circle had ever explain them to visit dentist during pregnancy and these results are supported by research done by George et al., and he reported that 90% of respondent were not told to visit dentist during pregnancy⁷. These findings were also in line in a research done by Boggess et al., (2010) where only 7% respondent said that no one had never told them to visit dentist¹⁰. In our study 91% pregnant females respond that their gynaecologist did not refer the pregnant lady for routine oral check-up these results are higher than the results (76%) found in a research by Rajesh et al., (2018) in India¹³.

In our study it was also accessed that whether respondent consider dental visit during pregnancy important and 71.9% didn't consider going to dentist during pregnancy as an important. In a study Rjesh et al., (2017) reported that 75% participants didn't know the importance of visiting dentist during pregnancy¹³. In present studies only 25 % respondent said that they are influenced by family members to go for routine dental check-up while on contrary in study done by Nogueira et al., (2016) 84.35 % pregnant ladies have family influence regarding their oral hygiene habits¹¹. Findings of another study revealed that majority of the respondents were not instructed to visit dentist during pregnancy¹³.

In our study assessment of different hurdles for routine dental check-up was also included, 51% respondent said that the dental cost is a hurdle for routine check-up for their routine visit to dentist these findings are similar to the findings of Keirse & Plutzer, (2010) in South Australia who did a cross sectional research on 649 pregnant women and found that 59.3 % women delay their dental visit or routine check-up due to the cost factor⁹. Inability to pay for dental care as a hurdle for routine dental check-up was also reported by Boggess et al.,(2010)¹⁰. George et al., (2013) reported association of dental cost as barrier in visiting dental health care centre during pregnancy for routine check-up⁷. Time is a major hurdle in oral health seeking behaviour⁷. In present study 56.2% respondent consider time a hurdle for dental check-up and 55.4% ladies consider time consuming procedure a problem during dental visits. George et al. (2013) reported that 29.2% ladies consider time a hurdle factor in oral health seeking.⁽⁷⁾ In a survey done in Malaysia by Saddki et al. (2010) time was considered as barrier to seek dental health care which was attributed to work, unable to get leave from job and other household work⁸.

Sometimes distance is also a hurdle for respondent to visit dental clinic in present study 13.2% participants consider distance a hurdle for them and in a study done by Saddki et al. (2010) 13.6% ladies consider a long distance as a hurdle for routine dental check-up⁸. In present study 14% ladies consider lack of transport as a hurdle for routine dental check-up while Saddki et al. reported 6.8% respondent said they couldn't visit a dentist due to lack of transport. In present study 31.4% respondents said that they should be accompanying by male to access dentist. In our study the significant association was found between health seeking behaviour, working status (0.02) and

education (0.0) of respondent however Saddki could not find association between these variables⁸.

Silk et al., reported that pregnancy is the time when women may be motivated for better oral health and they are ready to change their oral health behaviour¹⁵. Dental care during pregnancy is beneficial for pregnant women's and child's quality of life^{16,17}. Oral health seeking behaviour during pregnancy is utmost important in order to prevent oral diseases¹⁸. Rigo et al., (2016) reported reasons of taking pregnant women as target population for oral health care priority such as: "(1) pregnant women may have altered oral health due to pregnancy (2) they have accumulated needs that can compromise health of the mother and child; (3) they should be targets of health education programs (4) they comprise an easy access group, since they systematically go to the healthcare facilities during this period, which is an important facilitator; also, with this, women can be included in programmed periodic programs, and to not focus on them would be to lose a precious opportunity¹⁹". Primary prevention, health promotion, and secondary prevention (screening) for early detection and management of oral diseases during pregnancy are frequently recommended^{20,21}. General dental practitioner, auxiliary staff and other health workers should therefore, strengthen dental screening, emphasizing active family and community participation as part of regular prenatal care.⁽²²⁾ A nationwide study with large sample size is recommended in order to know burden of oral diseases in reproductive age group (pregnancy) and need assessment for oral diseases.

CONCLUSION

On the basis of result it can be concluded that majority pregnant ladies do not visit dentist for routine check-up, due to many factors such as cost, family income, lack of transport and time problems and lack of referral from the gynaecologist. Health education to pregnant women regarding the prevention of oral diseases and promotion of health through regular visit to dentist can reduce the burden of diseases among pregnant women.

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