

Routine Medical Check among Dental Health Workers in Edo State

***Harrison A. OMOKHUA, **Adebola O. EHIZELE**

*[*Department of Restorative Dentistry, ** Periodontics,
University of Benin, Benin City]*

Correspondence

Dr. H. A. Omokhua

*Department of Restorative Dentistry,
University of Benin*

Benin City, Edo state

Email: harrison.omokhua@uniben.edu

ABSTRACT

Objective To assess the knowledge and practice of routine medical check among dental health workers in public hospitals in Edo state.

Methods: This questionnaire based cross-sectional descriptive study was carried out in four public hospitals in Edo state. Data were collected using self-administered structured questionnaires. The questionnaires consisted of three sections. Information collected from the 103 respondents were entered and analyzed with Statistical Package for Social Sciences (SPSS) version 21.0 software. Descriptive statistics, frequencies, and charts were used to summarize variables of interest while association between different variables were tested using chi-square test with p-value set at 0.05.

Results: All the dental health workers were aware of routine medical check. There were more respondents (52.4%) in the age group 31-40. More male (50.5%) than female (49.5) took part in the study. Registrar cadre (23.3%) represented the highest proportion of professional respondents with 39.8% of the respondents having practiced for 6-10 years. The proportion of respondents who were slightly obese was 41.7% while one respondent each was under weight and morbidly obese. Majority, (97.1% and 97.1%) of the respondents claimed not to smoke cigarette and alcohol respectively. Most of the respondents knew what constituted routine medical check but only 25.2% of the respondents undergo regular medical check. Also, only a few of the female respondents had undergone cervical smear examination (28.8%) and breast examination (40.0%). Profession and marital status of the respondents were found to significantly affect the frequency of routine medical check ($p < 0.05$).

Conclusion: The level of awareness of routine medical check among dental health workers was high but the practice was poor. Therefore, measures should be put in place to increase practice while sustaining the high level of awareness.

Keywords: Routine medical check, dental health workers

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INTRODUCTION

There has been a steady increase in life expectancy and the standard of living in the past few years and it is likely to remain so in developed and developing countries.¹ It is hoped that in a few years' time the life expectancy in developing countries will exceed the 70

years mark.¹ There appears to be a steady rise in the life expectancy in Nigeria. According to a study carried out, it was observed that the average life expectancy at birth in Nigeria increased from 46 years in 1990 to 53 years in 2011, with more attention paid to prevention instead of curative medical

practice.² Carrying out intermittent check-up is a form of preventive medicine and it includes taking detailed history, general examination and investigation of individuals presenting without symptoms by medical doctors on a regular basis.³ In order to avoid illness, reduce morbidity and mortality and to enhance good health, routine medical check-up should be carried out.⁴

Several studies⁵⁻¹² have shown that medical checkups should begin even with the unborn child for early detection of certain childhood conditions in order to recognize and correct the conditions. Other studies have equally concluded that there should regular health check during childhood and adolescence. Conditions such as heart diseases, cancers, hypertension, diabetes and others can be detected early with regular check-ups.⁵⁻¹²

Routine medical check is important since some prolonged disease conditions can have a profound socioeconomic problem on people and these chronic diseases are responsible for over 60% of the total worldwide burden of diseases.¹³ The type of examination one needs is determined to a large extent by age and whether there is a family history of certain disease conditions. Similarly, certain risk factors like alcohol consumption, smoking, unhealthy diet and physical inactivity can also influence the rate of routine check-up.¹⁴

It has been shown by some studies that these risk factors are found more in people with poor standard of living and are more likely to come down with heart diseases and diabetes.¹⁵⁻²⁰ Some other studies have revealed that routine medical check lowers the hazard of invasive cancers and mortality.²⁰⁻²³

A periodic health checkup is important for health care workers, including dental health care providers, since it can lead to improved health and reduction in morbidity and mortality which can lead to reduction in man hours and economic drain caused by diseases. It is important to sustain health of healthcare providers to ensure continued efficient health care delivery. It is assumed that prolonged working hours can increase the danger of sudden death from stress associated occupation. [11]

Practice of routine examination has been shown to be almost non-existent in several under-industrialized countries and less than ideal in countries like the USA and Britain despite its importance and possible benefits [24]. The practice of periodic checkups has been widely considered in several countries in Europe and in the United States of America.^{26,27} In not so developed countries like Nigeria, there is paucity of studies on routine medical

check-ups among dental health workers. This is in spite of the steady rise in the burden of the non-communicable/chronic diseases. This study is aimed at assessing the knowledge and practice of routine medical examination among dental health workers in Edo state, South-South Nigeria.

MATERIALS AND METHODS

This questionnaire based cross-sectional descriptive study was carried out in four public hospitals in Edo state. The study population was the entire dental health workers in the hospitals. All data were collected after obtaining consent from the respondents.

Data were collected using self-administered structured questionnaires. The questionnaires comprised three sections. Section A elicited information on sociodemographic factors, cadre and years of practice. Section B consisted of questions about knowledge of routine medical checks and Section C, included questions regarding practice of routine medical check-ups and life style practices of physical exercises, alcohol consumption and smoking.

Data obtained from the respondents were entered and analyzed with Statistical Package for Social Sciences (SPSS) version 21.0 software. Descriptive statistics and frequencies, and charts were used to summarize variables of interest while association between different variables were tested using chi-square test with p-value set at 0.05.

RESULTS

A total of one hundred and twenty questionnaires were distributed with 103 filled and returned, representing a response rate of 85.83%. Majority (52.4%) of the respondents were in the age group 31-30 years followed by the age group 21-30 years representing 23.3% of the respondents (Table 1). There were slightly more male respondents (50.5%) than female respondents (49.5%). Majority of the respondents who participated in this study were Dentists in the Registrar cadre (23.3%), closely followed by Senior Registrar (20.4%) while Consultant cadre recorded the least number of dentists (6.8%) (Table1). The other dental health workers were dental nurses (10.7%), dental technologists (2.9%), dental therapists (5.8%) and laboratory attendants (4.9%). The highest proportion of respondents (39.8%) had practiced between 6 and 10 years followed by 30.1% who had

worked between 0-5 years. Those who had practiced for 16-20 years were the lowest (6.8%). More than half (67.0%) of the respondents were married (Table 1).

Figure 1 shows the Ethnic group of the respondents where Bini had the highest percentage (40.8), Esan (16.5%), Etsako (4.9%), Akoko Edo (2.9%) and others (35.0%).

More than two-third (41.7%) of the respondents had a BMI score of between 25-29.9 (slightly obsessed) the proportion of the respondents who were morbidly obese was 1.9%. Only one respondent 1.0% was underweight while 35.0% recorded normal weight.

Table 2 shows respondents' knowledge of routine medical checkup. All the respondents knew what routine medical checkup is. When asked what constituted routine medical check, the response showed that 94.1% of the respondents agreed that blood pressure check is part of routine medical check. Similarly, majority believed that the following were part of routine check; sugar check (89.3%), cholesterol (93.2%), dental check (94.1%), eye check (91.3%) and body weight (86.4%) (Table 2). On how often routine medical check should be done, majority (44.7%) of the respondents felt routine medical check should be done once in 6 months while a few (10.7%) believed it should be done once a month. A few of respondents claimed to have gone for routine medical check 7 times in the last 5 years while 23.3% of the respondents went for routine medical check only once in the last 5 years (Table 2).

On how many sticks of cigar respondents smoked daily, majority (97.1%) claimed they did not smoke cigarette. Only 1.9% of the respondents smoked 6 sticks per day while 1.0% smoked 3 sticks per day (Table 3). Respondents who claimed not consume alcohol were 91.3% while 5.8% consume average of 2 bottles a day (Table 3). On how often respondents exercised, 25.2% said they exercised once a week, while 17.5% claimed to exercise more than three times a week. A large number of respondents, 25.2% do not exercise at all (Table 3).

Regarding the practice of routine medical checkup and if the respondents have had routine medical checkup in the last 6 months, 28.8% of female respondents claimed to have had cervical smear

examination in the last 6 months while 40.4% of the female respondents had breast examination done in the last 6 months (Table 4). Concerning prostate specific antigen (PSA) test, which is an investigation carried out only in males, more than two-thirds, of the male respondents had not carried out PSA test in the last 6 months. Only 6(5.8%) males claimed they had PSA test performed in the last 6 months. Generally, visual check, blood sugar check and cholesterol check recorded the worst response in the practice of routine medical checkup by the respondents with 35.0%, 36.6% and 17.5% respectively. Over 75% of the respondents claimed they had Dental check, BP and Body Weight checks in the last 6 months (Table 4).

Table 5 reports the association between socio-demographics of the respondents and frequency of practice of routine checkup. There was statistically significant association between cadre of the work force, marital status and frequency of checkups, implying that cadre and marital status affected frequency of checkups ($P=0.040$). Majority of the respondents belonged to the age group 31-40 years out of which 60.9% believed routine medical checkup should be done once in 6 months.

There were more males (63.9%) than females (37.0%) who believed medical checkup should be carried out once in 6 months. More than two-thirds of those who had practiced for between 6-10 years also believed checkup should be done once in 6 months (Table 6).

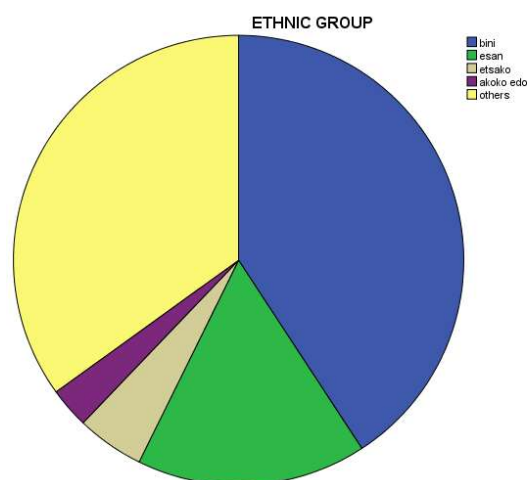


Figure 1: Ethnic Group of the Respondents

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Table 1: Socio-Demographic Characteristics of Respondents

Characteristics	Frequency	Percentage
Age Group		
<20yrs	1	1.0
21-30	24	23.3
31-40	54	52.4
41-40	20	19.4
51-60	2	1.9
>60	2	1.9
Gender		
Male	52	50.5
Female	51	49.5
Years of practice		
0-5yrs	31	30.1
6-10	41	39.8
11-15	15	14.6
16-20	7	6.8
>20	9	8.7
Profession		
Consultants	7	6.8
Senior registrar	21	20.4
Registrar	24	23.3
Dental officer	11	10.7
House officer	15	14.6
Dental nurse	11	10.7
Dental technologist	3	2.9
Dental therapist	6	5.8
Dental lab attendant	5	4.9
Marital status		
Single	34	33.0
Married	69	67.0
Total	103	100.0

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Table 2: Respondents Knowledge of Routine Medical Check

Questions	Response		
	Yes n (%)	No n (%)	Total n (%)
What constitute routine medical check?			
Blood pressure	97(94.1)	6(5.9)	103(100.0)
Sugar check	92(89.3)	11(10.7)	103(100.0)
Cholesterol check	96(93.2)	7(6.8)	103(100.0)
Dental check	97(94.1)	6(5.9)	103(100.0)
Eye check	94(91.3)	9(8.7)	103(100.0)
Body weight	89(86.4)	14(13.6)	103(100.0)
How often should routine medical checkup be done?			
Once a month	11(10.7)	92(89.3)	103(100.0)
Once in 3 months	15(14.6)	88(85.4)	103(100.0)
Once in 6 months	46(44.7)	57(55.3)	103(100.0)
Once in a year	23(22.3)	80(77.7)	103(100.0)
How many times have you had routine medical check in 5 years?			
Once	24(23.3)	79(76.7)	103(100.0)
Twice	15(14.6)	88(85.4)	103(100.0)
3 times	4(3.9)	99(96.1)	103(100.0)
4 times	11(10.7)	92(89.3)	103(100.0)
5 times	9(8.7)	94(91.3)	103(100.0)
6 times	14(13.6)	89(86.4)	103(100.0)
7 times	26(25.2)	77(74.8)	103(100.0)

Table 3: Health Modifying lifestyle among respondents

Lifestyle	Frequency	Percentage
Cigarette smoking		
3 sticks/day	1	1.0
6 sticks day	2	1.9
None	100	97.1
Alcohol consumption		
1 bottle/day	1	1.0
2 bottles/day	6	5.8
>2 bottles/day	2	1.9
None	94	91.3
Exercise		
Once a week	26	25.2
Twice a week	16	15.5
Thrice a week	18	17.5
>Thrice a week	17	16.5
I don't exercise	26	25.2
Total	103	100.0

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Table 4: Practice of routine medical checkup in the last 6 months by respondents

Type of checkup	YES n(%)	No n(%)	TOTAL
Cervical smear (female only)	15(28.8)	37(71.2)	52(100.0)
Breast (female only)	21(40.4)	31(59.6)	52(100.0)
PSA (male only)	6(5.8)	46(44.7)	51(100.0)
Dental check	76(73.8)	27(26.2)	103(100.0)
Visual check	36(35.0)	67(65.0)	103(100.0)
BP check	77(74.8)	26(25.2)	103(100.0)
Blood sugar	38(36.9)	65(63.1)	103(100.0)
Cholesterol check	18(17.5)	85(82.5)	103(100.0)
Body weight	90(87.4)	13(12.6)	103(100.0)

Table 5: Association between sociodemographic and frequency of routine medical checkup

Socio-demographic characteristics	Once a month n (%)	Once in 3 months n (%)	Once in 6 months n (%)	Once in a year n (%)	P value
Age group (years)					
<20	0(0.0)	1(6.7)	0(0.0)	0(0.0)	0.194
21-30	2(18.2)	2(13.3)	14(30.4)	5(21.7)	
31-40	5(33.3)	5(33.3)	28(60.9)	12(52.2)	
41-50	4(26.7)	6(40.0)	3(6.5)	5(21.7)	
51-60	0(0.0)	1(6.7)	1(2.2)	0(0.0)	
>60	0(0.0)	0(0.0)	0(0.0)	1(4.3)	
Gender					
Male	3(27.3)	7(46.7)	29(63.0)	12(52.2)	0.180
Female	8(72.7)	8(53.3)	17(37.0)	11(47.8)	
Cadre					
Consultant	1(8.3)	0(0.0)	2(4.3)	2(8.7)	0.040
Senior registrar	1(8.3)	6(40.0)	3(6.5)	9(39.1)	
Registrar	1(8.3)	1(6.7)	17(37.0)	3(13.0)	
Dental officer	0(0.0)	2(13.3)	7(15.2)	1(4.3)	
House officer	3(27.3)	1(6.7)	6(13.0)	5(21.7)	
Dental nurse	4(36.4)	0(0.0)	5(10.9)	2(8.7)	
Dental technologist	0(0.0)	1(6.7)	1(2.2)	1(4.3)	
Dental therapist	1(8.3)	2(13.3)	1(2.2)	0(0.0)	
Lab attendant	1(8.3)	2(13.3)	2(4.3)	0(0.0)	
Years of practice (years)					
0-5	3(27.3)	3(20.0)	16(34.8)	7(30.4)	0.052
6-10	2(18.2)	5(33.3)	24(52.2)	8(34.8)	
11-15	3(27.3)	2(13.3)	4(8.7)	5(21.7)	
16-20	0(0.0)	3(20.0)	2(4.3)	2(8.7)	
>20	3(27.3)	2(13.3)	0(0.0)	1(4.3)	
Marital status					
Single	4(36.4)	1(6.7)	20(43.5)	7(30.4)	0.040
Married	7(63.6)	14(93.3)	26(56.5)	16(69.6)	
Total	11(100.0)	15(100.0)	46(100.0)	23(100.0)	

DISCUSSION

Regular medical check is an important aspect of preventive medical practice which results in reduced morbidity and mortality and when well-practiced it

can assist in early diagnosis of illness and save cost of healthcare services.²⁸ The present study evaluated the respondents' knowledge and practice of routine

medical checkup among dental health workers in Edo state.

There appears to be a paucity of isolated studies assessing dental health workers knowledge and practice of routine medical checkup. However, available studies have assessed the knowledge and practice of periodic checkup by the general population in a particular public hospital. Such studies also included dental health workers in the general population.²⁸⁻³⁰

All the respondents in this study knew what routine medical check was. This is similar to other studies²⁹⁻³¹ which also recorded 100% awareness of routine medical checkup. The reason for this in the present study could be attributed to the fact that all the respondents had attained tertiary level of education and also could be due to the fact that the study was carried out among health workers who are supposed to be more informed about healthcare issues.

All the respondents in the present study have had routine medical checkup in the past with majority claiming to have done so more than two times in the last 5 years. The reason for this may also be due to the fact that the study population are health workers who are more knowledgeable in healthcare. This is consistent with another study by Oguntoye and co-worker, perception and practice of routine medical check-up by health workers at a tertiary health facility in South-West Nigeria.³⁰ Akande et al.²⁹ in a study in 2004 at the University of Ilorin Teaching Hospital, Ilorin, Nigeria on 274 hospital workers on the practice of periodic medical examination, reported that 82.8% of them had had a medical examination done since being employed in the hospital. This is in agreement with the present study. In another study³² in 2014 at the University College Hospital, Ibadan, Nigeria on 110 members of staff in the dental clinic on the practice of comprehensive medical check-ups, 58.1% of the respondents had their medical check-up done as part of a mandatory pre-employment requirement while 27.6% had it done as a result of personal concern for their health. There was high level of awareness of what constituted routine medical checkup with blood pressure and dental checkups recording the highest among the respondents. This is in agreement with a study by Oguntoye and co-workers.³⁰ The reason for the high level of awareness of what constituted routine checkup can be associated with the fact that the respondents worked in the hospital environment and are knowledgeable. In the present study, more than two-thirds of the respondents claimed they neither smoked nor took alcohol. This might be due

to the fact that as health workers they are more aware of the health risks associated with the above-mentioned habits. The number of respondents in the present study who took part in regular exercise was poor compared to those who either did not exercise or were not regular in exercising. This is poor considering the important role regular exercise plays in maintaining optimal health. Furthermore, one would have expected that as healthcare providers who are better informed of the implications of not having regular exercise, there should have been more people having regular exercise. Regular exercise reduces the risk of dying.³³ A study found that men who engaged in moderately vigorous sports had a 23 percent lower risk of death than men who were less active.³⁴ Other benefits of regular exercise include lowering the risk of death in men with coronary artery disease.³⁵

Practice of routine medical checkup in the present study was poor among the respondents. Apart from dental check-up, blood pressure and body weight check, other aspects of routine medical checkup recorded abysmally low figures especially PSA, cervical smear and breast examination. This is probably because there are no policies by the hospital on routine medical checkup for its workers. Also there seems to be a lot of apathy generally among people in the developing countries towards subjecting themselves to routine medical checkup. Healthcare providers are expected to display better practice of routine medical check when compared to the general populace who do not have adequate knowledge of the benefits of undergoing routine medical examination. This result is consistent with other studies which reported similar findings.³²

Many workplaces in the country have no routine medical checkup policies in place with the attendant risks of not detecting diseases early enough to institute appropriate management. The result is increased morbidity and mortality.

On the association between socio-demographics and frequency of routine check, there was no significant difference between age group and the frequency of routine medical check-up in the present study. However, the highest proportion of workers who attended routine medical check-ups was observed to be in the age range 31-40 years. Gender was found not to significantly affect the frequency of routine medical check-up despite the fact that in the present study more males than females attended more regular check-up. These findings were found to be in agreement with another study on the awareness and attitudes of hospital employees towards routine

medical check-ups in a public hospital in Port Harcourt, Nigeria.³¹ Similarly, years of practice was also not found to significantly affect the frequency of routine medical check-ups in this study though the highest proportion of respondents who attended routine check-ups had practiced for between 6-10 years.

Category of professionals and marital status of the workers were found to significantly affect the frequency of routine medical check-ups in the presents study. With those in the registrar cadre and married respondents recording the highest proportion of respondents who frequently attend routine medical check-ups. The probable reason for this significant association may have been due to the different levels of knowledge and experience among the professional cadres. The specialists occupy the top position among health workers and tend to be more knowledgeable about health matters. In another study,³⁰ Oguntoye et al found a statistically significant association between professional cadre/designation and frequency of routine medical check-up.

In this study there was high level of awareness of routine medical check-ups among the dental healthcare providers. Same could not be said about respondents' practice of periodic medical check-ups as the overall practice of routine medical check-ups was poor among the health workers. This poor practice cuts across all the sociodemographic strata of the study population.

CONCLUSION

The importance of routine medical check-ups cannot be over stressed considering the enormous benefits associated with its practice. The high level of awareness of routine medical check among the respondents did not translate to increased practice. There is a need for early detection of different disease entities which can be achieved through routine medical check. This is capable of preventing possible mortality and morbidity that may be associated with delayed diagnosis and treatment of some disease conditions. Policies that will encourage or make it mandatory for routine medical checks to be carried out should be put in place not just in our public health institutions but other establishments as well. Practice of routine medical check-ups will help promote, maintain and restore good health of workers in our health facilities.

RECOMMENDATION

Awareness about the importance of routine medical check-up amongst oral healthcare providers was found to be very high in this study but this may not be the same with the general population, there is therefore the need to carry out studies involving larger communities to assess the awareness and practice of medical check-ups by the general population. Measures should be put in place to ensure that there is increased practice of routine medical check-ups by everyone. Finally, facilities for routine medical check should be made available at every level of healthcare delivery.

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