

Medical Services Utilization: Experience of Members of Staff In a Tertiary Dental Clinic.

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Abstract

Early detection of diseases will be enhanced by routine preventive medical check-up and this will facilitate institution of early management, which may improve prognosis. Effectiveness of preventive medical check-up in turn may depend on the attitude of health care workers towards their own health. Self-administered questionnaires were distributed among members of staff of a tertiary dental clinic in Nigeria. The questionnaire sought to know among other things, the last time that the respondents had a comprehensive medical check-up and their reasons for doing so. One hundred and ten was filled and return giving a response rate of 73.3%. Data analysis was done using Statistical Package for Social Sciences (SPSS) version 14.0. Level of statistical significance was set at $p < 0.05$.

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The results shows that the majority of the respondents (58.1%) had a comprehensive medical check-up as a mandatory pre-employment requirement, while 27.6% had their last medical check-up as a result of personal concern for one's health. Measurement of body weight and blood pressure were the most utilized by the respondents. There was a statistically significant relationship between gender and the frequency of checking body weight ($p < .004$) and also between academic achievement and the frequency of checking blood pressure ($p < .000$). The study showed that the rate of utilization of medical services is low among the population studied, the fact that they work within a hospital notwithstanding. It is therefore recommended that health workers should change their attitude and embrace preventive utilization of medical services.

Keywords: Medical services; Utilization; Dental staff; Preventive

1. Introduction

The use of health services is defined as the process of seeking professional health care and submitting oneself to the application of regular health services, with the purpose of preventing or treating health problems [1]. Utilization of medical services is a measure of the population's use of the health care services available to them, and it includes the frequency of visits to medical doctors, dentists and other medical providers, nights spent in a hospital and the use of prescription medication. Health care utilization and health status are used to assess how efficiently a health care system produces health in a population [2]. However most often, the help of regular health services is only called upon after an escalation of the complaints of illness [3].

Health behavior is defined as any activity undertaken by a person who is believed to be healthy, for the purpose of preventing disease or detecting disease in an asymptomatic stage [4]. Health services are provided by the health care providers who may be an individual or an institution that provides preventive, curative, promotional, or rehabilitative health care services in a systematic way to individuals, families or communities [5]. An individual health care provider, also called a health worker, may be a health care professional within medicine, nursing or a field of allied health or may also be a public/community health professional [5].

Studies have shown that there are enabling factors that facilitates or impede service use. Some of the enabling factors are income, access to health insurance and the access to source of care [6, 7]. Access to health care services is a key determinant of health, the effect of which had been demonstrated on health status [7]. The fact that health care facility and the human resources in the system are within arm's length of the health care providers and that

quite a number of the respondents have access to health insurance scheme, should ordinarily translate into a better health care utilization in comparison with the general public. But this may remain an assumption, as the rate at which individual health care provider utilizes health care will vary from individual to individual and their overall rate of utilization may not be better than that of the general public. Utilization of health services and possible factors that can influence the use of health services have been documented amongst different groups. While some focused on demographic factors affecting health services [8-12], others have dwelt on other factors that affect use of health services like localization, ethnicity and accessibility to health facility [1, 13-15]. However, there's dearth of information on utilization of health services by health workers and there is therefore the need to look into how the providers make use of the services they provide. This informed why the present study was carried out among staff in the dental centre of University College Hospital, Nigeria. The authors hope that the result of this study will provide insight into the rate of medical service utilization by health workers with the view to enlighten concerned individuals as to the need to improving their rate of utilization if need be.

2. Material and methods

The study was a cross sectional survey of 110 members of staff within the dental centre of the University College Hospital, Ibadan, Nigeria. The dental centre consist of six departments, which are Oral & maxillofacial surgery, restorative dentistry, oral pathology, child oral health, general dental practice and Periodontology & Community dentistry. Self-administered questionnaire was distributed through the department with the intention of covering all members of staff. One hundred and fifty questionnaires were distributed, but 110 was filled and returned giving a response rate of 73.3%. The questionnaire sought to know among other things, the last time that respondents had a comprehensive medical check-up, the reason for having such a check-up and the frequency of carrying out some of the medical tests. The data were analyzed using SPSS version 14.0. Chi square test was used to determine the difference in the rate of utilization of medical services by the different age groups and among the male and female respondents. Level of statistical significance was set at $p < 0.05$.

3. Results

One hundred and ten of the respondents completed and returned the questionnaire (response rate of 73.3%). The age range of the respondents was between 22 and 80 years with a mean of 37.6 ± 10.1 years. Forty-seven (42.7%) were males while the remaining 63 (57.3%) were females. Five of the respondents had secondary school leaving certificate as the highest academic achievement, 30.0% had post secondary school diploma, 46.4% had first degree

and 19.1% had postgraduate qualification. Over 40% of the respondents did not bother about having any comprehensive medical check in the past years before the study (fig. 1) and the reason why majority did the medical examination was as a pre-employment requirement, which accounted for the reason why almost 60% of the respondents went for the medical check-up. Only 27.6% was personally concerned to have gone for comprehensive medical check-up among the respondents (fig. 2).

The most utilized of the medical services that was assessed in the study was the measurement of the body weight, as 65.5% of the respondents were checking their body weight regularly and 25.5% were checking it occasionally. This was followed by the checking of the blood pressure, in which 40.9% of the respondents were checking their blood pressure regularly and 42.7% were checking it occasionally. Over 17% have never checked their blood glucose level before, 14.5% have never screened for HIV before and about 9% have never done eye test before the study (Table 1). There was a statistically significant relationship between the gender of the respondents and the frequency of checking their body weight ($p = .004$) as more of the female respondents checked their body weight regularly, while one of the male respondent had never checked his body weight before (Table 2). There was also a statistically significant relationship between their level of academic achievement and the frequency of checking the blood pressure ($p = .000$) as most of those that have higher academic qualification tend to check their blood pressure more regularly than those with less education. Two of the respondents with the least academic achievement have never checked their blood pressure before (Table 3). There was also a statistically significant relationship between the level of education and their rate of checking their electrolytes and urea ($p = .009$). There was however no statistically significant relationship when the gender, age group and the level of their education was compared with their frequency of utilizing the various medical investigations.

4. Discussion

The present study revealed that the last time that majority (58.1%) of the respondents undergo a comprehensive medical checkup was as part of their pre-employment requirements, which should serve as a base line health status as they pick up their appointment with the hospital, without precluding their repeating the procedure afterwards. While just about 27.6% had medical checkup due to their personal concern apart from the pre-employment screening exercise. This suggest that majority of the respondents are not so concerned about the preventive aspect of their health despite the fact that they are working in a health care facility. This is more worrisome as many of them

were not even making use of the facility that is readily available to measure their body weight and one wonders what advice such workers will have to offer a patient concerning preventive health care, when they do not utilize it.

There was a statistically significant relationship between the gender of the respondents and their frequency of checking body weight. Female respondents were checking their body weight more frequently than their male counterparts. This could be related to the fact that females are more conscious of their look and weight as they have higher tendency to becoming obese and overweight than men [16], and have been reported to have significantly higher impairment of self-esteem with obesity, even when compared within racial groups [17]. Though females tend to report worsening quality of life as obesity increases [18], another study have reported that they are less likely to have a negative response to obesity than men [19], and they believe weight loss programs such as weight watchers help seriously overweight people lose weight or maintain weight loss [18]. Gender differences have been generally reported in relation to use of medical services with females making greater use of medical services than males [9-12, 20]. This has been attributed to the fact that women are more predisposed to report their health as poor [9] and the fact they also have a greater willingness and ability to take care of their health when they are sick and to seek preventive care [10].

High blood pressure and the complications could be avoided by regular checking of blood pressure and prompt intervention when any abnormality is noticed, to avoid any of the various associated complications [21, 22]. Less than half (40.9%) of the respondents were checking their blood pressure on regular basis despite the fact that they are close to the facilities. There was a statistically significant relationship between the academic achievement and blood pressure measurement and checking of electrolyte and urea (E&U). This may be due to the fact that the more learned people are better informed, and are aware of the fact that regular checking of the blood pressure afford them the opportunity to detect any abnormality early enough and appropriate treatment can be instituted in order to prevent complication(s) that might follow these conditions especially when not attended to [21, 22]. Greater positive correlation had been reported between blood pressure and higher socioeconomic status in individuals, while there is negative association in those with lesser education [23,24]. Also mean blood pressure was found to be highest in poor men with limited education, and in undeveloped or developing countries a direct association between socio economic status and Blood Pressure has often been found [23]. This can still be explained with the assumption that those in the higher socio-economic class are likely better informed than others. Those with the least education are likely to be the lower cadre among the health workers, which should not have been an excuse for their not using the

health care facilities that is available where they are working as there is usually no strict restriction to some of these facilities, for example, sphygmomanometer is easily accessible. However, when the cost of comprehensive medical check-up is considered, respondents in the lower cadre may have other competing expenditure, which they consider to be of greater priority than the regular medical checkup.

Knowledge of one's HIV status is a major step towards optimum care for someone living with HIV and doubles as a major preventive measure [25-28]. However, prevention and treatment efforts may be severely hampered by poor HIV testing coverage. On the basis of evidence of increased patient uptake and the opportunity to avoid missed HIV testing opportunities in health care facilities, the World Health Organization in 2007[29], recommended provider-initiated HIV testing as a standard part of medical care in settings with generalized HIV epidemics. A question thus arise, are the "providers" excluded from the screening? Some of the respondents in this study (14.5%) have never been screened for HIV before. Despite the practice of universal precaution, which assumes that all patients are potential carrier of the virus, there is need for regular HIV screening by the health providers as they are at increased risk of contracting the virus and may transmit it unknowingly to their patients.

While some tests are age related e.g. electro cardiogram (ECG), some are gender specific e.g. mammography, the present study has shown that most of the health workers studied do not regularly go through routine check for these tests. The majority of the respondents have never done some of these tests in their lifetime. Only one (3%) of the male respondents in age group 40 years and above does Prostrate Serum Assay (PSA) on a regular basis and this was statistically significant ($p= 0.01$), While 2 (3.6%) of the female respondents above 20 years of age does regular mammography. This result suggest that majority of the respondents have been neglecting their health and have not been making the best use of the services that they are part of the team providing it. A major factor that had been identified as potential barriers for poor use of health facilities is lack of provision for time to make use of the facility [1,30]. The health providers in their bid to meet their busy schedule may find it difficult to keep their own appointment or may not remember to fix one for their own routine checkup.

Use of health services by an emergency-affected population has been reported to differ substantially from that of a stable population [31], but there may be fewer emergency visitations if each of the health service providers adopt a more preventive approach of routinely utilizing medical services. The authors will therefore recommend that individual health service provider should adopt a more preventive approach towards their health and that managements in our health institutions should encourage routine comprehensive medical check-up as it was the pre-

employment screening, instituted by the employer, that made so many of the respondents undergo medical check-up. This may actually go a long way in prolonging the lives of some health service providers if they undergo annual medical check-ups.

TABLE 1: FREQUENCY OF UTILIZATION OF VARIOUS MEDICAL SERVICES BY RESPONDENTS

Investigation	Frequency of utilization				
	Regularly (%)	Occasionally (%)	Rarely (%)	Never (%)	*Missing (%)
Blood pressure	45 (40.9)	47 (42.7)	14 (12.7)	2 (1.8)	2 (1.8)
Blood glucose	5 (4.5)	48 (43.6)	34 (30.9)	19 (17.3)	4 (3.6)
HIV screening	16 (14.5)	49 (44.5)	22 (20.0)	16 (14.5)	7 (6.4)
Eye test	12 (10.9)	52 (47.3)	31 (28.2)	10 (9.1)	5 (4.5)
Body weight	72 (65.5)	28 (25.5)	6 (5.5)	1 (0.9)	3 (2.7)
PSA	1 (0.9)	5 (4.5)	10 (9.1)	91 (82.7)	3 (2.7)
Mammography	2 (1.8)	6 (5.5)	5 (4.5)	92 (83.6)	5 (4.5)
ECG	4 (3.6)	16 (14.5)	34 (30.9)	50 (45.5)	6 (5.5)
E & U	4 (3.6)	16 (14.5)	34 (30.9)	50 (45.5)	6 (5.5)
Urinalysis	9 (8.2)	42 (38.2)	41 (37.3)	13 (11.8)	5 (4.5)

TABLE 2: COMPARATIVE ANALYSIS OF THE GENDER OF THE RESPONDENTS WITH FREQUENCY OF CHECKING THEIR BODY WEIGHT.

Gender	Frequency of checking body weight				Total (%)
	Regularly (%)	Occasionally (%)	Rarely (%)	Never (%)	
Male	24 (22.43)	15 (14.02)	6 (5.61)	1 (0.93)	46 (42.99)
Female	48 (44.86)	13 (12.15)	0	0	61 (57.01)
Total (%)	72 (67.29)	28 (26.17)	6 (5.61)	1 (0.93)	107 (100)

P = .004, Likelihood ratio = 15.89, X² = 13.30

TABLE 3: COMPARATIVE ANALYSIS OF HIGHEST ACADEMIC ACHIEVEMENT AND THE FREQUENCY OF CHECKING BLOOD PRESSURE BY RESPONDENTS

		Frequency of checking blood pressure				Total
		Regularly	Occasionally	Rarely	Never	
Highest academic achievement	School certificate	2	0	0	2	4
	Post secondary diploma	16	12	4	0	32
	First degree	18	26	7	0	51
	Postgraduate	9	9	3	0	21
Total (%)		45	47	14	2	108

P = .000, Likelihood ratio = 19.75, X² = 56.34

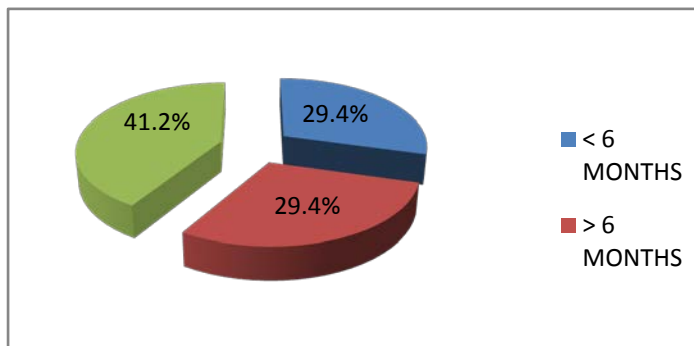


FIG 1: LAST COMPREHENSIVE MEDICAL CHECK UP BY RESPONDENTS

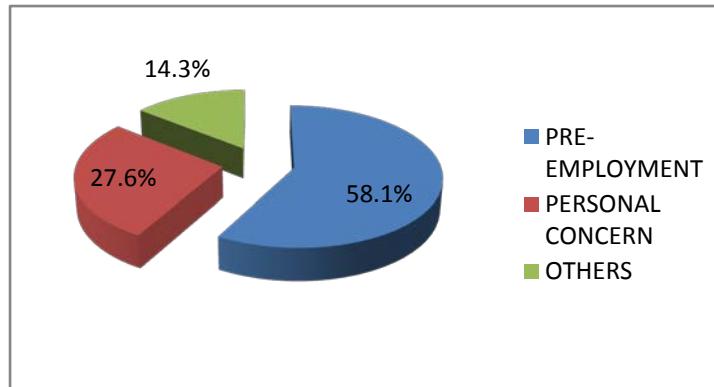


FIG 2: REASONS GIVEN BY RESPONDENTS FOR UNDERGOING THEIR LAST MEDICAL CHECK UP

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