# Experience and satisfaction with institutionalised medical check-up: case study of the staff of the College of Medicine, University of Ibadan, Nigeria

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# Abstract

*Background*: Institutionalised Medical Check-up (IMC) is to ensure optimal health. While the efforts are in the right direction, the uneven demand and perceptions of poor health service delivery that plague the general public may influence the uptake of this service. The study investigated the experience and satisfaction of the staff of College of Medicine, University of Ibadan with IMC.

Method: Self-developed validated semi-structured questionnaire was administered on a cross-section of 301 staff of College of Medicine, University of Ibadan. Result: Respondents' age was 43.9±15.7 years, 36.5% were from the service departments, 32% were senior non-teaching staff and only 11% teaching staff. Majority (69.4%) participated to know their health status while 38.9% did it to satisfy the establishment. Majority (89.7%) completed the IMC, 84% collected all their results and 67.7% returned for a feedback. Overall, 40.9% of respondents were satisfied with the medical check-up; 70% of these were least satisfied by time spent, while providerclient interaction had the highest satisfied respondents (88.0%). Majority (88.4%) of respondents recommended that the IMC should continue: Educational level of respondents was significantly inversely associated with level of satisfaction (p=0.0222), with secondary education and below (65%) showing higher level of satisfaction.

*Conclusion:* Client satisfaction among staff in relation with the University of Ibadan medical checkup was low. Respondents with higher education were less satisfied with the service. Incorporation of effective communication and continuous health education into standard of healthcare and health system review could increase participation and effectiveness of Institutionalised Medical Check-up.

# **Keywords**: Institutionalised medical check-up, Experience, Satisfaction, University staff

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# Résumé

*Contexte* : L'examen médical institutionnalisé (EMI) vise à assurer une santé optimale. Tandis que les efforts vont dans la bonne direction, la demande inégale et les perceptions de la mauvaise manière de prestation des services de santé qui affectent le grand public peuvent influencer l'utilisation de ce service. L'étude a examiné l'expérience et la satisfaction avec l'EMI, du personnel du Collège de Médecine de l'Université d'Ibadan.

*Méthode:* Un questionnaire semi-structuré, validé, auto-développé, a été administré à 301 membres du personnel du Collège de Médicine de l'Université d'Ibadan.

*Résultat:* L'âge des répondants était de  $43.9 \pm 15.7$ ans, 36,5% provenaient des départements de service, 32% étaient des cadres non enseignants et seulement 11% du personnel enseignant. La majorité (69,4%) a participé pour connaître leur état de santé, tandis 38,9% que l'ont fait pour satisfaire l'établissement. La majorité (89,7%) a rempli l'EMI, 84% ont recucilli tous leurs résultats et 67,7% sont revenus pour un feedback. Dans l'ensemble, 40,9% des répondants étaient satisfaits du bilan médical. 70% d'entre eux étaient moins satisfaits par le temps passé, alors que l'interaction fournisseurclient avait les répondants les plus satisfaits (88,0%). La majorité (88,4%) des répondants ont recommandé que l'EMI soit maintenu. Le niveau de formation des répondants était significativement inversement associé au niveau de satisfaction (p = 0,0222), avec l'enseignement secondaire et inférieur (65%) affichant un niveau de satisfaction plus élevé. Conclusion: Le niveau de satisfaction des clients visà-vis de la visite médicale à l'université d'Ibadan était faible. Les répondants avec des niveaux d'études supérieures étaient moins satisfaits du service. L'intégration d'une communication efficace et d'une éducation sanitaire continuée dans les normes de santé et la révision du système de santé pourrait accroître la participation et l'efficacité de l'examen médical institutionnalisé.

**Mots - clés** : Examen médical institutionnalisé, Expérience, Satisfaction, Personnel universitaire

# Introduction

In primary care practice, the general health check (also termed periodic health evaluation or routine medical examination) is the usual mechanism used to screen asymptomatic people for diseases [1]. The term is generally not meant to include visits for the purpose of new-born checks, pap smears for cervical cancer, or regular visits for people with certain chronic medical disorders (for example, diabetes). This involves a medical history, a (brief or complete) physical examination and sometimes laboratory tests. Some more advanced tests include ultrasound and mammography [2].

Client satisfaction is the level of satisfaction that clients experience having used a service. It therefore reflects the gap between the expected service and the experience of the service, from the client's point of view [3, 4]. Donabedian (1988), emphasized that client satisfaction is of fundamental importance as a measure of the quality of care [5, 6]. Client experience is what happens to people when they are interacting with the health care system and trying to have their needs met [7]. The relative success of a given health care intervention depends largely on patient's perspective vis-à-vis the health care provider's perspective [8].

In Nigeria, health care delivery systems have attracted many negative comments. These negative comments range from poor quality of service delivery to service delay, discontinuity of care, indifferent staff attitude, and bureaucratic procedures. These have led to poor public confidence in healthcare [9]. Few studies have sought patients' views on satisfaction with IMC, and there is little effort to involve them in measuring satisfaction or defining health service standards [10].

The University of Ibadan administration in a pioncering action mandated its health services to provide free comprehensive medical check-up for all staff. This exercise was to promote good health and prevent sudden death from preventable diseases for staff of the University. The screening exercise focused on six (6) major diseases; hypertension, diabetes, glaucoma, obesity, lipid disorders, hepatitis B infection and malignancies such as cervical, prostate and breast cancer. An assessment of the extent of client satisfaction with health services is relevant, as satisfied clients are more likely to comply with treatment, take an active role in their own care, continuc using medical care services and stay within a health provider and maintain with a specific system [11]. The study therefore investigated the experience and level of satisfaction with IMC among staff of University of Ibadan who participated in the general MC.

#### Materials and methods

#### Settings

The College of Medicine (formerly the faculty of Medicine) was one of the first faculties created when the University College, Ibadan came into being in 1948. The College is situated on the grounds of the University College Hospital, which is the teaching Hospital for the University of Ibadan. It consists of four faculties: Faculty of Basic Medical Sciences, Faculty of Clinical Sciences, Faculty of Public Health, and the Faculty of Dentistry. The total population of staff of College of Medicine is 951; 421 teaching staff, 388 senior non-teaching and 142 junior non-teaching staff [12].

#### Study design

The study was cross sectional and descriptive in design, using a two-stage sampling technique to select respondents who participated in the general medical check-up and willing to give an informed consent. Staffs of College of Medicine were stratified into 4 faculties and service departments and the respondents were purposively selected.

## Sample size

The required sample size of 301 respondents was obtained using Epi-info statistical calculator for estimating minimum sample size in descriptive health studies. The minimum sample size was increased by 10% to take care of non-response, incomplete responses and refusals.

# Data collection and management

A pre-tested self-administered, semi-structured questionnaire was used for the survey. The questionnaire was divided into three (3) sections and contained questions addressing research variables namely: socio-demographic information, experience of respondents with the institutionalized medical check-up and level of satisfaction with IMC. An open-ended question was used to elicit information on how IMC may be improved. Satisfaction was measured on a 14point scale; scores less than 14 was categorised as not satisfied. Experience was assessed using 16 selected domains of what happened during the MC exercise. Four undergraduate students were trained as research assistants. Data from the questionnaires were entered and analysed using SPSS version 16 software from which descriptive and inferential statistics were derived (p=0.05) and results were presented in form of frequencies and percentages.

# Ethical consideration

This study protocol was duly reviewed and approval to conduct the study was given by the UI/UCH Institutional Review Committee. Oral informed consent was obtained from respondents before questionnaire administration. Ethical issues like voluntariness, confidentiality, opportunity to decline interview at any stage and non-exposure to risk was also discussed with each respondent before data collection commenced.

# Results

# Socio-demographic characteristics

Ages of respondents ranged from 21 to 61 years with a mean of  $43.9\pm15.7$  years. Majority (65.2%) were within 30 and 49 years. About fifty-four percent (53.8%) of the respondents were males, (86.7%) were married and 87% of respondents had tertiary education. Some (19.6%) had spent 20 or more years n employment at the institution while 29.2% had spent less than five years. Respondents' average

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 Table 1. Socio-Demographic information of respondents

 (N=301)

Variables	Frequency	Percentage
Age (years)		
<30	29	9.6
30-39	98	32.6
40-49	98	32.6
50+	76	25.2
Sex		
Male	162	53.8
Female	139	46.2
Marital status		
Single	33	11.0
Married	261	86.7
Separated	3	1.0
Divorced	3	1.0
Widowed	1	3
Educational status		
Primary education	8	2.7
Secondary education	32	10.6
Tertiary education	261	86.7
Years of employment		
<5	88	29.2
5-9	74	24.6
10-19	80	26.6
20+	59	19.6
*Average monthly Income		
(Naira) (N=300)		
<50000	149	49.7
51000-100000	75	25.0
101000-200000	52	17.3
≥201000	24	8

monthly income ranged from less than \ 50,000 to over \ 201,000; 49.7% earned less than \ 50,000 (see table 1). Additionally, 36.5% of respondents were from the service, 22.9% each from faculties of Basic. Medical Sciences and Clinical Sciences while only 5.3% were from the faculty of Dentistry. Thirty-two percent of the respondents were senior non-teaching staff while only 11% were teaching staff.

 Table 2:
 Perception of Medical Check-up (N= 301)

Variables	Frequency	Percentage	
Respondents' health rating			
Excellent	87	28.9	
Very good	143	47.5	
Good	67	22.3	
Fair	4	1.3	
Respondents who had			
undergone medical check-up	0		
in the past 12 months			
Yes	194	64.5	
No	105	34.9	
Don't know	2	0.7	
Frequency of medical check-up			
Monthly	95	31.6	
Every 6 months	141	46.8	
Yearly	51	16.9	
Every 2 years	5	1.7	
I don't know	9	3.0	

Perception and practice of medical check-up before the mandatory medical check up

As shown in table 2, an assessment of the perception and practice of medical check-up before the mandatory medical check-up showed that 47.5% and 28.9% of the respondents rated their health as being very good and excellent respectively. Out of the total of 301 respondents, 64.5% had undergone medical check-up within 12 months before the mandatory IMC in 2011. In addition, 141(46.8%) respondents opined that an individual should undergo a medical check-up twice a year. Table 3 showed that 64.8% reported previous practice of medical check-up. However, only 181 reported to frequency of MC out if which only 29.6% had once a year. On further query, about 47.2% of these had their last heck-up one to four years before the mandatory IMC. Among these, the most frequent reason for medical checkup was to check their health status (78.3%).

Experiences with University of Ibadan institutionalized medical check-up

As shown on Table 4a, 69.6% of the respondents claimed that they got the information about the

Table 3:Practice of Medical check-up before themandatory medical check-up by the University (N=301)

 
 Table 4a: Experiences with institutionalized medical checkup in the University of Ibadan

Variable F	Frequency	Percentage	Variable	Frequency	Percentage
Respondents who had undergond	2		Means of Information (N=300	 /))	
medical check-up before the one			Internal memorandum	209	69.6
mandated by the University of			Seminar/conference	23	7.7
Ibadan (N=301)			Email	4	1.3
Yes	195	64.8	Friends	26	8.7
No	106	35.2	Colleagues	38	12.7
Frequency of medical			-	50	12.7
check-up (N=181)			Adequacy of the Information		
Monthly	35	11.6	(N=299)	271	90.6
2-4 times a year	50	16.6	Yes	28	90.0
once a year	89	29.6	No	28	9.4
Can't remember	3	1.0	Respondent felt compelled		
whenever ill	4	1.3	to undergo the medical		
Respondents' last medical		1.5	check-up (N=301)	100	(2.0
check -up before the one			Yes	192	63.8
mandated by the University			No		· 109
(N=161)			36.2		~
<1 year	62	31.8	Health status before undergo		
1-4 years	92	47.2	the medical check-up mandat	ed	
5+	8	4.1	by the University $(N=301)$		
Can't remember	7	3.8	Poor	12	4.0
Purpose of the medical	1	5.0	Fair	23	7.6
check-up ( $N=180$ )			Good	186	61.8
check health status	141	78.3	Excellent	80	26.6
Medical examination for	141	10.5	**Reasons for undergoing the		
pre- employment	16	8.9	medical check-up at that time		
medical appointment	7	3.9	To satisfy the establishment.	117	38.9
Staff games	6	3.3	Early diagnosis and treatment	. 67	23.3
Antenatal	5	2.8	Body fitness	119	39.5
Post-surgery	2	1.1	Know your Health status	209	69.4
routine for all drivers of	4	1.1			
the institution	2	1.1	**Multiple responses were al	lowed	
Can't remember	1	0.6			

medical check-up through internal memorandum while 12.7% heard from their colleagues. Majority, (90.6%) of the respondents acknowledged that the information was adequate and well understood, however, 63.8% of the respondents felt compelled to participate in the medical check-up programme. The major reason for participating was to know health status (69.4%) and to satisfy the establishment (38.9%). Although 82.8% of respondents spent between one to five days to complete the medical check-up, 75.7% considered the timing of the medical check-up convenient for them (Table 4b).

Waiting time for consultation experienced by 66.7% of respondents was about 30 minutes while 2.8% reportedly spent over two hours waiting before consultation. One hundred and forty-one (47.2%) of respondents acknowledged that the healthcare staff gave them opportunity to ask questions and 53.8% had information explained to them in the way they could understand. Out of the 277 respondents who said the medical check-up was beneficial to them, 84.5% acknowledged that it enabled them to know their health status (Table 4c). As shown on table 4d, 89.7% of the respondents completed the medical check-up, 84% collected all their results and only 67.7% went back for a feedback. Out of the 32.3% of respondents who did not take their results back to the doctor, 15(24.2%) said the results were fine and saw no need to return to the doctor. Respondents with major findings that required referral or further investigation were 40.1%.

#### Satisfaction with institutionalized medical check up

Table 5 showed the domains of satisfaction of services by respondents. Time spent for the medical check-up programme had the least percentage of satisfied respondents (67.8%) while provider-client interaction had the highest satisfied respondents (88.0%).

 
 Table 4b
 Experiences with institutionalized medical checkup in the University of Ibadan

Variable	Frequency	Percentage
Timing of the medical check-up	,	
convenient for the respondents		•
(N=301)		
Yes	228	75.7
No	73	24.3
Days spent in completing the		
medical check-up(days) (N=29	7)	
1-5	246	82.8
6-10	41	13.8
11-15	9	3.1
Don't remember	1	0.3
Medical check-up is a waste		012
of time (N=301)		
Yes	85	28.2
No	216	71.8
Waiting time before consultation		
started (N=282)		
d"30 minutes	188	66.7
31-60 minutes	69	24.5
61-120 minutes	17	6.0
e"121 minutes	8	2.8
Respondents given the time an	d	
opportunity to ask questions		
about anything (N=299)		
Yes, at every point in time	141	47.2
Yes, most of the time	79	26.4
Yes, some of the time	55	18.4
No, I was not given the		
opportunity	15	5.0
I don't know/ I can't remember	. 9	3.0
Healthcare staff explain things	10	
respondent in a way that you co	ould	
understand (N=299)		
Yes, completely	161	53.8
Yes, to some extent	113	37.8
No, they did not	18	6.0
I didn't need an explanation	7	2.4

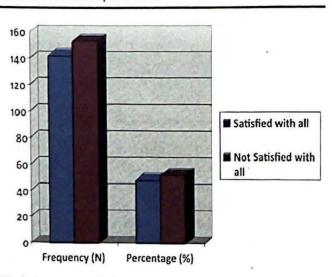


Fig.1: Category code for Satisfaction level with Institutionalized medical check-up (IMC) (N=295)

Overall satisfaction with services

As shown in Fig 1, if those who selected satisfactory and not satisfactory were pooled across the categories, 48.1% of the patients were satisfied with the services received from the institutional health centers.

# Association between IMC and selected sociodemographic characteristics

As shown in table 6, the association of institutional medical check-up and selected related sociodemographic characteristics of respondents revealed a significance only with their educational status; where an inverse relationship was observed.

Table 4c: Experiences with institutionalized medical check-up in the University of Ibadan

Variable	Frequency	Percentage
Medical check-up was		
beneficial to respondents		
(N=301)		
Yes	277	92.3
No	23	7.7
Ways in which medical		
check-up was beneficial to		
respondents (N=277)		
Able to know the present		
health status	234	84.5
Reduced medical expenses	6	2.2
follow up on previous test	2	0.7
to ascertain the fitness of		
my health	15	5.4
It gave me room to make		
other complaints known to		
the doctors and got treatment		
where necessary	2	0.7
Rekindled the consciousness		
of medical check up	1	0.4
No reason	17	6.1
Reasons why some		0.1
respondents didn't see		
the Medical check-up as		
heneficial (N= 23)		
I have a personal doctor	1	4.3
I was not sick	3	13.0
Waste of time	1	4.3
No need to participate	5	21.7
Improper coordination and	-	21.7
planning for the programme	2	8.9
No reason		47.8
· · · · · · · · ·	11	47.0

Respondents with secondary educational level and below were more satisfied with the IMC compared with those with tertiary level of education.  
 Table 4d: Experiences with institutionalized medical checkup in the University of Ibadan

Variable	Frequency	Percentage
Respondents who		
completed the medical		
check-up (N=300)		
Yes	269	89.7
No	31	10.3
Reasons why some responde	ents	
did not complete the medica		
check-up (N=31)		
Travelled	3	9.7
Time factor	10	32.6
Large Population of people		
waiting to see the doctor	3	9.8
Unable to do Pap smear	1	3.2
Could not do cervical test		
because I was pregnant	2	6.5
Staff were not patient enough	h	
so I left	1	3.2
No money	1	3.2
No reason	10	31.8

Ibadan main campus; since most of the college teaching staff were based on the University College Hospital premises, this could further make access difficult. Secondly, also, the teaching staffs of the College of Medicine are likely to be more knowledgeable about health matters and this could make them less enthusiastic about undergoing such institutionalised medical checks. Studies have shown a relatively poor utilization of health services among healthcare professionals [13-15]. Additionally, it could have resulted from the non-probability sampling technique adopted for the study which does not guarantee a representative sample.

In accordance with the religious mentality of many Nigerians, majority of respondents rated their health as very good, thus care should be taken in totally accepting this result as there is a high chance of underreporting of poor health. Furthermore, the use of self-rated health as a measure of health status has been criticized as factors such as age; ethnicity and educational status could highly influence and constitute a major limitation to it [16]. An

Statements	Satisfactory N (%)	Not Satisfactory N (%)	Not Sure N (%)
During my visit to the health clinic,			
the doctors/health officers explained			
things in a way I could understand			
(N=298)	265 (88.0)	29 (9.6)	4(1.3)
The time spent for the medical			
check-up programme (N=300)	204 (67.8)	92 (30.6)	4(1.3)
The quality of the screening tests			
I did during my visit	259 (86.0)	31 (10.3)	11(3.7)
The time spent to discuss with the			
doctor during consultation (N=299)	239 (79.4)	53 (17.6)	7 (2.3)
The quality of courtesy I received			
during my visit (N=299)	232 (77.1)	53 (17.6)	14 (4.7)
I received adequate answers to the			
questions I asked (N=299)	241 (80.1)	48 (15.9)	10 (3.3)
I had enough time to discuss my			
medical problem with the doctors/			
health officers or nurse (N-296)	225 (74.8)	57 (18.9)	14 (4.7)

# Discussion

Many of the respondents recruited were senior nonteaching staff and from the service departments of the College of medicine. The preponderance of nonteaching staff in the sample could be due to the burden of teaching, research and other administrative duties could prevent teaching staff from utilizing the services, the services were provided at the University Health Services (Jaja clinic) on the University of encouraging aspect of individual consciousness towards health seeking is shown in this study as about half of the respondents opined that medical checkup should be done twice in a year. This is demonstrated in the self-report of about two-third of respondents of having undergone medical checkup in the past twelve months. , it is of note that hospital visits in itself is an important first step in disease prevention through early diagnosis and

Demographic	Satisfaction with	Total	$\chi^2$ -value	
Characteristics	Yes (%)	No (%)		(p-value)
Sex				2.284
Male	83(52.2)	76(47.8)	159	(0.131)
Female	59(42.4)	77(56.6)	136	
Age (in year)				2.310
<30	15 (55.6)	12(44.4)	27	(0.511)
30-39	48 (49.5)	49(50.5)	97	
40-49	41 (42.3)	56(57.7)	97	
50+	38 (51.4)	36(48.6)	74	
Years of Employment				1.444
<5	43(50.6)	42(49.4)	85	(0.695)
5-9	31(42.5)	42(57.5)	73	
10-19	38(48.1)	41(51.9)	79	
20+	30(51.7)	28(48.3)	58	
Cadre				3.114
Teaching Staff	13(40.6)	19(69.4)	32	(0.211)
Senior non-teaching staff	77(45,6)	92(54.4)	169	
Junior non-teaching staff	52(55.3)	42(44.7)	94	
*Marital Status				1.294
Single (not married)	19(57.6)	14(42.4)	33	(0.255)
Married	120(47.1)	135(52.9)	255	
Education				5.272
Secondary and Below	26(65)	14(35)	40	(0.022)**
Tertiary	116(40.5)	139(54.5)	255	

Table 6: Association between IMC and selected socio-demographic characteristics

Missing responses were left out

\*\* significant

prompt treatment. The importance of regular medical check cannot be overemphasized; according to the WHO, two thirds of about 55 million people that died worldwide in 2011 were due to noncommunicable diseases such as cancer, diabetes, and chronic cardiovascular and lung diseases [17].

The major purpose of undergoing the medical check was to check individuals' health status. The relatively long period between the respondents' last medical check (1-4 years) and the one introduced by the University shows that the University's programme may have reawakened many respondents about knowing their health status. These further stress the importance of the IMC for staff even though health services in a country like Nigeria faces potential barriers of lack of time and funds especially since health care is obtained through out-of-pocket expenditure. [18]

The major medium of information about the medical check-up was internal memorandum while information through electronic and other media remained very low. Hence the use of traditional methods of communication such as internal memo still appears to be popular and the authorities should take advantage of this medium for future dissemination of information. The very low proportion that reported getting the information through email could be attributed to inadequate electronic and internet facilities within the system [190]. Almost all the respondents testified that the information about the medical check was adequate and well understood, thus increasing their perceived need for the exercise. However, despite seeing the need to participate in the medical check-up, more than half of the respondents felt compelled by the University administration to undergo the medical check-up. This result implies that some respondents perceived they were being forced to take the checkup, a situation that could have affected their attitudes to the programme. An exercise such as a medical check-up should be voluntary; rather than using a coercive approach to change staff's health seeking behaviour, a normative-re-educative approach should be adopted for behavioural change.

The study also revealed that majority of the respondents spent a short period (1-5days) for the investigation. This prompt service portends well for future similar programmes and staffs are more likely

to participate based on a good first experience. Waiting time of respondents before consultation started was fair enough as majority of them spent less than about half an hour before consultation started. Respondents were also given the time and opportunity to ask questions during the consultation and also the providers explained things to them in a way they could understand. The finding that only 67% returned to the doctor with their test results for feedback affirmed the reasons mentioned for participating in the exercise which is to satisfy the University management. Perhaps more would have returned if the normative-re-educative approach of behavioural change was adopted.

The overall satisfaction of patients with different aspects of care was good, over three quarters of respondents in six out of seven aspects investigated were satisfied with the service. Several authors have reported the relatively high level of satisfaction found in this study. For instance Iliyasu *et al* (2010)[20], Olusina *et al* (2004)[21] and Eze (2006)[22] reported that 83%, 75% and 53% of outpatients in Kano, Ibadan and Enugu respectively were satisfied with the services received from different units although in teaching hospitals.

This study shows that there is a significant relationship between level of education and satisfaction. This is in agreement with Iliyasu et al (2010) [21] who stated that the satisfaction levels could be affected by socio-cultural differences and variation in levels of literacy. The lower satisfaction expressed by those with higher educational level could indicate higher expectations about quality of care from the more educated especially since they more likely utilize private facilities or hospitals with higher charges and possibly better services. However, studies have shown that patients differ in their satisfaction with the quality of care and is influenced by a variety of factors such as patient demographics health status, characteristics of the health care provider i.e. technical expertise, interest in patient oriented care and waiting time influence the perceived quality of care in hospitals [23-26].

Patient waiting time in outpatient clinics is often the major reason for patients' complaints regarding their experiences in outpatient clinics. Therefore, patient satisfaction with waiting time plays a crucial role in the overall satisfaction with services. In the present study, time spent for the medical check-up programme had the lowest percentage of satisfied staff (67.8%). Studies have shown that long waiting times are usually an issue in government owned hospitals [27].

This study found that a high proportion of patients (88%) were satisfied with care provided by doctors, nurses and other health workers. Patients were particularly satisfied with their explanation and their listening abilities. Good communication between patients and care providers has been described as the single most important component of good medical practice, not only because it identifies problems quickly and clearly, but it also defines expectation and help to establish trust between the clinician and the patient [28-30].

#### Conclusion

Overall, this study has revealed that staff of the College of Medicine reportedly have acceptable experiences during the mandatory, University of Ibadan, institutional medical check-up. However, waiting time was a main domain of expressed dissatisfaction. In addition, respondents with higher than secondary level of education were less satisfied with the services received during the institutional medical check-up. Periodic health assessment by individuals at different stages of live is of import as emphasised by this study. The innovation of the mandatory institutional check-up for the staff of the University of Ibadan could be viewed as a major strategy to early detection and treatment of both communicable and non-communicable diseases which could bring about a reduction in the double burden of diseases in most developing countries of which Nigeria is one. In order to ensure sustainability and continuity, it is recommended that an effective communication and continuous health education, which could be in form of routine health seminars and short text messages, be incorporated in standard of healthcare delivery to give service improvement and utilisation which would in turn increase participation and effectiveness of Institutionalised Medical Check-up.

### References

- Thompson S and Tonelli M. General health checks in adults for reducing morbidity and mortality from disease [editorial]. Cochrane Database of Systematic Reviews 2012.
- 2 Adejoro L. Why Nigerians don't go for Medical Check-up. Daily times, Nigeria.
- Health care Commission-North West London Hospitals NHS Trust. (2004/2005). Out-patient survey report.
- Larsen DE and Rootman, R. Physician's role performance and patient satisfaction. Social Science Medicine 1976; 10: 29 - 32.
- Donabedian A. The quality of care: How can it be assessed? Journal of American Medical Association 1988; 260: 1743–1748.
- James AW. Hospital management in the tropics and subtropics. New York NY; Sheridan Medical Books. 1990.

- Sixma IIJ, Spreeuwenberg PM and van der 7. Pasch MA. Patient satisfaction with the general practitioner: A two level analysis. Medical Care 1998; 36:212-229.
- Asadi- lari M, Tamburini M, and Grichy D. S Patients' needs, satisfaction and health related quality of life: Towards a comprehensive model. Biomedical digital libraries 2004; 2:32.
- Iloh G, Ofoedu JN, Njoku PU, et al. Evaluation 9. of patients' satisfaction with quality of care provided at the National Health Insurance Scheme clinic of a tertiary hospital in South-Eastern Nigeria. Nigeria Journal of Clinical Practices 2012; 15: 469-474.
- 10 Aiken LH, Sermeus W, Heede KV, et al. Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. BMJ 2012; 344:e1717
- 11. Aharony L and Strasser S. Patient satisfaction: what we know about and what we still need to explore. Med Care Rev 1993; 50: 49-79.
- 12. University of Ibadan Annual Report (2012)
- 13. Ibrahim NA and Odusanya OO. Knowledge of risk factors, beliefs and practices of female healthcare professionals towards breast cancer in a tertiary institution in Lagos, Nigeria. BMC Cancer 2009. 4; 9:76
- 14. Akhigbe AO and Omuemu V O. Knowledge, attitudes and practice of breast cancer screening among female health workers in a Nigerian urban city. Biomedical central- Cancer 2009 9:203
- 15. Awodele O, Adeyomoye AA, Oreagba IA, et al. Knowledge, attitude and practice of breast cancer screening among nurses in Lagos University Teaching Hospital, Lagos Nigeria. Nigerian Quarterly Journal of Hospital Medicine 2009; 19(2):114-118.
- 16. Salomon K, Clift A, Karlsdottir M and Rottenberg J. Major depressive disorder is associated with attenuated cardiovascular reactivity and impaired recovery among those free of cardiovascular disease. Health Psychology 2009; 28:157-165
- Health Statistics 2011, WHO Geneva
- 18. National Population Commission (NPC) [Nigeria]. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria: National Population Commission and ICF Macro.
- 19. Ajuwon GA. Use of the Internet for health information by physicians for patient care in a

teaching hospital in Ibadan, Nigeria. Biomedical Digital Libraries 2006; 3:12

- 20. Iliyasu ZS, Abubakar S, Lawan S and Gajida A. Patients' satisfaction with services obtained from Aminu Kano Teaching Hospital, Kano and Northern Nigeria. Nigeria Journal of Clinical Practices; 2010; 13 (4): 371 - 378
- 21. Olusina AK, Ohaeri JU and Olatawura MO. Patient and staff satisfaction with the quality of in-patient psychiatric care in a Nigerian general hospital. Social Psychiatry and Psychiatric Epidemiology 2004; 37(6): 283-288.
- 22. Eze CU. Survey of patient satisfaction with obstetric ultrasound at University of Nigeria Teaching Hospital Enugu, Nigeria. Nigerian Journal of Health and Biomedical Sciences 2006; 5(1): 93-97.
- 23. Abdosh B. The quality of hospital services in eastern Ethiopia: Patients' perspective. Ethiop Journal of Health Development 2006; 20: 199-200.
- 24. Butler D, Oswald SL and Turner DE. The effects of demographics on determinants of perceived health care quality. The case of users and observers. Journal of Management in Medicine 1996; 10:8-20.
- 25. Mira JJ and Aranaz J. La satisfaction del paciente como una medida del resultado de la atencion sanitaria. Medicina Clinica (Barc) 2000; 114, 26 - 33
- 26. Hall JA and Dornan MC. Meta-analysis of satisfaction with medical care: description of research domain and analysis of overall satisfaction levels. Social Science and Medicine 1998, 27: 637-644
- 27. Hutchinson PL, Do M and Agha S. Measuring client satisfaction and the quality of family planning services: a comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana. BMC Health Services Research 2011; 11:203.
- 28. Reeder LG. The patient-client as a consumer: some observations on changing professionalclient relationship. Journal of Health and Social Behaviour 1972; 3 (4): 406-412.
- 17. World Health Organisation (WHO). World · 29. Wilson P and McNamara JR. How perceptions of a simulated physician-patient interaction influence intensed satisfaction and compliance. Social Science and Medicine 1982; 16 (19): 1699 - 1704.
  - 30. Bush T, Cherkin D and Barlow W. The impact of physician attitudes on patient satisfaction with care for low back pain. Archives Family Medicine 1993; 2(3):301-305