### Knowledge, Attitudes and Practice of Confidentiality of Patients' Health Records among Health Care Professionals at Federal Medical Centre, Bida

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# ABSTRACT BACKGROUND:

The quality of information shared with health care professionals depends on their ability to keep it confidential especially in this information technology age when unguided access is imminent. In view of this, the study described knowledge, attitude and practice of confidentiality of patients' health records amongst health care professionals at Federal Medical Centre Bida, Nigeria

### **METHODS:**

A semi-structured self-administered questionnaire on the subject was administered to 313 health professionals chosen by stratified random sampling in the hospital.

### **RESULTS:**

Majority (161, 66.8%) of the participants were less than ten years in practice. Virtually, all (232, 96.3%) have heard about confidentiality mostly from schools (134, 55.6%), on-the-job (61, 25.3%) and from multiple sources (18, 7.5%).

On responsibility for confidentiality; only 35 (14.5%) knew it is the responsibility of every health professional, while the majority; 117 (48.5%) felt it was exclusively meant for health information management professionals. Responses to issues on confidentiality range from 58.1% (revelation of documented next of kin to relatives of dead patients by staff) to 94.2% (employing the service of untrained interpreter). Very few (28, 11.6%) argued that confidentiality and privacy are not synonymous.

Recommendations given to improve the practice of confidentiality include among others, observance of good health records practice by all professionals/stakeholders, continuing sensitisation of all staff and sanction against erring staff.

### **CONCLUSIONS:**

Although, most professionals were aware of confidentiality, there appears a gap of in-depth

knowledge and lack of awareness of respective responsibility towards it. However, they will do better if given the enabling environment and continuing education on the subject.

**KEY WORDS:** Confidentiality, patients' health information, legal responsibility, informed consent, privacy

### **INTRODUCTION**

Health record is the foundation block of health care delivery and its primary purpose is to document the course of patients' health care and provide a medium of communication among health care professionals for current and future use. To fulfil these purposes, significant amount of data must be revealed and recorded. More so, the quality of the information shared with health care professionals depends on their ability to keep it confidential. Otherwise, the patient may withhold critical information, which may affect the quality of the care provided.

Confidentiality is the basis of the legal aspects of health records; it is the ethical cornerstone of good treatment and it is indeed essential for establishing trust between clinicians and patients.[1, 2] It is often used interchangeably with privacy in reference to medical data, but their meanings are distinct. By definition, privacy in health care is the protection of a patient from any disclosure of personal health data, by providing security to the patient and the patient's health records. Whereas, confidentiality is the limiting of information to only those for whom it is appropriate. In other words, it is the restrictive use of information obtained from and about a patient.[1,3]

Confidentiality benefits patients by providing a secure environment in which they are most likely to seek medical care and to give a full and frank account of their illness when they do. It expresses respect for patients' autonomy i.e. people have a right to choose who will have access to information about them, and a rule of confidentiality for medical practitioners reassures patients that they can determine who will be privy to their secrets. To the healthcare industry, it supports public confidence and trust in healthcare services more generally. [4]

It is a generally accepted principle that health record is the physical property of the health care institution.[1] However, the patient has control over the information in the record, except in those instances where this is limited by law or in circumstances where the health care institution must defend its interests or the best interest of the patient.[1] The ownership rights of the patient to the content of the health records are not widely understood. Despite the fact that health care providers are held responsible for generating the information contained in the record, they do not have primary right to control the release of the contents. This right is the prerogative of the patient, or the patient's legal representative.

Researches from the patients' perspectives have shown that patients share basic understanding of confidentiality as protection of information and are influenced by situational factors when deciding if doctors should breach confidentiality. [5] They would be willing to divulge more information if doctors take time to explain to them that their discussion is completely confidential. [6]

As a key player in healthcare industry, health information management (HIM) professionals have as one of their major responsibilities the safeguard of confidentiality of patients' health information as reflected in their code of ethics that: the health information management professionals should protect the confidentiality of patients' health records as mandated by the law, professional standards and the employer's policies and should promote to others the tenets of confidentiality.[1] This responsibility is also transferred to heads of health institutions concerned as it is stated that they shall ensure that all information related to a patient's health status, treatment or stay in their establishment is confidential.[7] More so, doctors have always had a duty to keep their patients' confidences and acknowledge the patients' autonomy which is a principle of modern medical ethics. [8, 9, 10] Despite these ethical and legal obligations, unauthorized access to confidential patient information has become more prevalent in today's health care service environment in the reasoning of the patients. For instance, it has been reported in South Australia that patients have lost the confidence in terms of mistrust based on unauthorized information release.[11]

Unfortunately, not much has been done to determine whether this is a problem among health care providers in Nigeria as search efforts revealed dearth of information in this regard. Therefore, this study aimed to evaluate the level of knowledge, attitude and practice of confidentiality of patients' health records amongst health care professionals at Federal Medical Centre, Bida (FMCB).

### METHODS OBJECTIVE OF THE STUDY

To test the knowledge, attitude and practice of confidentiality of patients' health records among health care professionals at Federal Medical Centre, Bida.

#### **SETTING**

The study was carried out at Federal Medical Centre, Bida Nigeria between February and August 2009. The hospital is a 200- bed tertiary health institution built in 1927 and transformed in 1997 to offer tertiary care. [12]

The survey covered selected relevant groups of health professionals who frequently handle patients' health records in the hospital. They include; medical doctors, health information management professionals, medical laboratory scientists, nurses and secretariat administrators (especially those administrative officers and clerks attached to the offices of the Medical Director, Head of Clinical Services & Training, medical consultants and clinical departmental offices). Participants were drawn randomly from these existing groups which were initially stratified by profession.

### **STUDY MATERIALS**

A semi-structured questionnaire designed by the authors taken into consideration relevant ethical standards related to confidentiality was submitted to the Ethics Review and Research Committee of the hospital (FMCB) for validation and approval. Upon approval, it was pretested amongst few professionals who did not participate in the real study in order to ensure clarity and avoid ambiguity. It was self administered to three hundred and thirteen professionals selected through stratified random sampling method.

It elicited data on; demography, awareness of confidentiality, source of knowledge, practice of confidentiality, in-depth knowledge of confidentiality of records based on the requirements of the United States Health Insurance Portability and Accountability Act (HIPAA)[13], the Nigerian National Health Bill 2008 (SB.50) Sections 25-29 [7], and the Helsinki Declaration.[9] Respondents were asked to make recommendations on ways of promoting confidentiality in the hospital.

The 2006 edition of the Statistical Package for Social Sciences (SPSS) 15.0 developed by SPSS Inc. (an IBM Company) was used to analyse the data. Analysis done was majorly on descriptive statistics which include; simple frequency, cross tabulation, percentages and histogram

### **ETHICAL CONSIDERATION**

The protocol was approved by the Ethics Review and Research Committee of the Federal Medical Centre, Bida and informed consent was obtained from every participant before administration of questionnaire. Those who did not consent objected to participate.

### RESULTS RESPONSE RATES

A total of 241 questionnaires were returned out of 313 distributed, giving an overall response rate of 77%.

### **BASIC DEMOGRAPHY**

Nurses represented 49.4% of all participants; followed by doctors (23.2%), health information management professionals (13.3%) and others (see Table 1 below). The proportion is similar to the population of the various professional groups in the hospital as at the time of the study.

Table 1: Basic Demography

	Indicators	N	%
1	Profession		
	Administration	17	7.1
	Health Information Management	32	13.3
	Medicine (all doctors)	56	23.2
	Medical Laboratory Science	17	7.1
	Nursing	119	49.4
2	Years in practice		
	<=5years	109	45.2
	>6-10 years	52	21.6
	>11-15 years	21	8.7
	>16-20 years	18	7.5
	>20 years	29	12
	Not indicated	12	5

# AWARENESS OF CONFIDENTIALITY AMONGST PROFESSIONALS

Table 2 (see later below) depicts the responses of health professionals regarding their awareness of confidentiality, sources of awareness, importance of confidentiality in health care system and maintenance of confidentiality in the hospital. Most of the participants (232, 96.3%) have heard about confidentiality. All of the doctors (56, 100.0%) have heard about it while medical laboratory scientists had the lowest (14, 82.0%). Majority of the participants acquired knowledge of confidentiality while in school; this was followed distantly by those who acquired it on the job. The health information management professionals had the highest percentage of 75.0% at school while the secretariat administrators had the lowest (18.0%). It is noteworthy that 8 (47.0%) of secretariat administrators acquired it on the job, only 18 (7.5%) of the participants had multiple sources of awareness of confidentiality (only doctors and nurses).

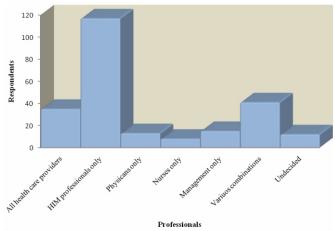
Most of the participants (224, 93.0%) agreed that confidentiality of patients' health records is as important as clinical care with health information management professionals having the highest percentage (97.0%) and medical laboratory scientists; the lowest (88.0%). Very few of the participants (28,

11.6%) knew that confidentiality and privacy are not synonymous. Doctors had the highest (20, 36.0%) while health information management professionals and nurses had the lowest (3.0% each). More than half of the participants (138, 57.3%) agreed that confidentiality is being maintained at Federal Medical Centre, Bida. This is the trend amongst all the professionals except doctors, 55.0% of whom were of a contrary opinion.

# RESPONSIBILITY FOR THE MAINTENANCE OF CONFIDENTIALITY

Figure 1 (see below) displays a clear level of knowledge of responsibility for confidentiality among professionals. Only a few of the participants (35, 14.5%) agreed that its maintenance is the responsibility of all professionals/ stakeholders. Worthwhile to note is the fact that about half of the participants (117, 48.5%) believed that it is the exclusive responsibility of the health information management professionals.

Figure 1: Responsibility for the maintenance of confidentiality



# KNOWLEDGE AND PRACTICE OF CONFIDENTIALITYAMONG PROFESSIONALS

Table 3 (see later below) presents participants' actual knowledge, attitudes and practice (KAP) of confidentiality. The percentage of right/correct responses to various questions bordering on KAP of confidentiality was highest (94.2%) for "the danger of using untrained interpreter" and lowest (58.1%) for "revelation of documented next of kin to relatives of dead patient by staff". This latter question also recorded the highest number of participants (17, 7.1%) who are unsure of the right response and the highest number (70, 29%) who gave incorrect (ethically wrong) response. A significant percentage (27.8%) of participants also had the wrong opinion that every relative has the right of access to the health information of his/her dying patient, while another significant percent (18.3% of participants will wrongly not oblige patient's request for his/her medical history.

### RECOMMENDATIONS FOR IMPROVED CONFIDENTIALITY

Table 4 lists the categorisable recommendations for the promotion of confidentiality in the hospital as made by the participants. More than a quarter of the recommendations was that there should be observance of good health records practice by all professionals/ stakeholders, while others include mass sensitisation of all staff (54, 12%), computerisation of health information services (15, 3%), punishment of erring staff (4, 1%) and others.

Table 2: Awareness of Confidentiality among Professionals

Table 2. Awareness of Confidentiality among 11ores		HIM				
	Admin	profs	Doctors	Nurses	Scientists	Total
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Have heard about confidentiality						
				115		232
Yes	16 (94)	31 (97)	56 (100)	(96)	14 (82)	(96.3)
No	1 (6)	0 (0)	0 (0)	2 (2)	3 (18)	6 (2.5)
Undecided	0 (0)	1 (3)	0 (0)	2 (2)	0 (0)	3 (1.2)
Total	17	32	56	119	17	241(100)
Sources of awareness:						101
At school	3 (18)	24 (75)	37 (66)	64 (54)	6 (35)	134 (55.6)
During seminar	4 (23)	1 (3)	1 (2)	6 (5)	2 (12)	14 (5.8)
Over the media	0 (0)	0 (0)	1 (2)	1(1)	1 (6)	3 (1.2)
On-the job	8 (47)	7 (22)	7 (12)	35 (29)	4 (23.5)	61 (25.3)
Multiple sources	0 (0)	0 (0)	10 (18)	8 (7)	0 (0)	18 (7.5)
Undecided	2 (12)	0 (0)	0 (0)	5 (4)	4 (23.5)	11 (4.6)
Total	17	32	56	119	17	241(100)
Confidentiality is as important as clinical				117	1,	211(100)
care						
	16 (0.4)	21 (07)	52 (05)	109	1.7 (00)	224
Yes	16 (94)	31 (97)	53 (95)	(92)	15 (88)	(93.0)
No	0 (0)	0 (0)	3 (5)	6 (5)	1 (6)	10 (4.1)
Undecided	1 (6)	1 (3)	0 (0)	4 (3)	1 (6)	7 (2.9)
Total	17	32	56	119	17	241(100)
Confidentiality is synonymous to privacy						
FALSE	1 (6)	1 (3)	20 (36)	4 (3)	2 (12)	28 (11.6)
TRUE	8 (47)	23 (72)	29 (52)	94 (79)	12 (70)	166 (68.9)
Unsure	2 (12)	3 (9)	1 (2)	5 (4)	1 (6)	12 (5.0)
Undecided	6 (35)	5 (16)	6 (10)	16 (14)	2 (12)	35 (14.5)
Total	17	3(10)	56	119	17	241(100)
Confidentiality is being maintained at	1/	32	30	119	1/	<u> </u>
FMCB						
						138
Yes	13 (76)	19 (59)	19 (34)	79 (66)	8 (47)	(57.3)
No	2 (12)	12 (38)	31 (55)	28 (24)	6 (35)	79 (32.8)
undecided	2 (12)	1 (3)	6 (11)	12 (10)	3 (18)	24 (9.9)
Total	17	32	56	119	17	241(100)

### Keys:

Admin= Secretariat Administrators

HIM profs = Health Information Management professionals

FMCB = Federal Medical Centre, Bida

Scientists = Medical Laboratory Science

Table 3: Knowledge and Practice of Confidentiality among Professionals

Statement	Yes/True	No/False	Unsure	Undecided	Total
Statement	N (%)	N (%)	N (%)	N (%)	N
Every relative has right to the health records of his dying patient	67 (27.8)	167 (69.3)*	4 (1.7)	3 (1.2)	241
Patient's request for his/her medical history can be obliged	165 (68.5)*	44 (18.3)	11 (4.6)	21 (8.7)	241
Patient's consent is necessary before his health information is released to third party (ies)	178 (73.9)*	27 (11.2)	16 (6.6)	20 (8.3)	241
Staff can reveal the next of kin of a dead patient to his relatives for processing death certificate	70 (29)	140 (58.1)*	17 (7.1)	14 (5.8)	241
Application for patient's folder for impersonal uses should be in writing to the Director of Health Information Services	206 (85.5)*	18 (7.4)	1 (0.4)	16 (6.6)	241
Patient's condition may be discussed with other people other than for treatment, learning and research purposes	29 (12)	203 (84.2)*	0 (0)	9 (3.7)	241
Service of an untrained interpreter is dangerous to confidentiality	227 (94.2)*	5 (2.1)	0 (0)	9 (3.7)	241

<sup>\*</sup>Right/correct responses

Table 4: Recommendations for improved confidentiality

	N	%
Observance of good health records practice	118	26
Employment of health information management professionals		13
Mass sensitization of all staff on confidentiality	54	12
Training and retraining of health information management		
professionals	48	11
Records should not be given to patients or their relatives at all times	29	7
Employment of trained interpreters	24	5
Provision of standard health records library	20	5
Computerization of health information services	15	3
Punishment of those who breach or intend to breach confidentiality	4	1
Others	75	17
TOTAL	447	100

### **DISCUSSION**

Health professionals at Federal Medical Centre, Bida are considerably aware of confidentiality of patients' health records right from their respective training schools and are positively disposed to its relevance and importance to sound health care delivery. These findings agree with the study reported by Garbin CAS et al[14] that most interviewees affirmed to have awareness of the ethical aspects of their professions related to confidentiality. However, it is contrary to the findings reported from Barbados[15] that majority of participants acquired their knowledge of confidentiality and ethics during work and that many of them are either unaware of the importance of confidentiality or are unable to appropriately deal with related issues. School as the major source of knowledge of confidentiality from our findings might imply that curricula in relevant medical and paramedical training schools contain certain instructions on ethical and legal obligations of health care professionals especially on confidentiality. The fact that health information management professionals had the highest percentage of school as their source of information on confidentiality might possibly corroborate the tenet that maintaining confidentiality is one of their major roles in health care services. Also, the few participants who had multiple sources of information on confidentiality were doctors and nurses. This might be due to their weekly exposure to various hospital-based continuous medical education (CME) and continuous professional development (CPD) activities. These many times serve as avenue for dissemination of knowledge on various aspects of professional practice. The level of awareness among these professionals tends to be beneficial to the patients and health care systems in general. Since medical confidentiality provides an essential element of the trust needed to build a successful doctor-patient relationship.[5] Therefore, their level of knowledge determines how much of this rule they know and their ability to put it into practice.

In spite of their level of awareness of confidentiality, professionals in this study have demonstrable gaps in knowledge of this important aspect of health care. Only a few of them agreed that confidentiality is the responsibility of all health care providers while the relative majority opined that it is the sole responsibility of health information management professionals. This last view attests to the obvious existing gap between their knowledge and practice. Although this finding goes with the one reported by Shrier I et al[16] that most professionals do not fully understand their obligations towards patients' records confidentiality; it disagrees with all existing laws on confidentiality[1, 9, 13, 17, 18] which state that all

heath care managers and professionals shall maintain confidentiality of patients' health records.

A good demonstration of sound attitudes towards keeping patients' health information confidential is to be wary of unauthorized release of such information. Professionals in this study agreed that only authorized portion of patient's records shall be released to authorized users and that not everybody irrespective of their relationship to the patient has right to access their patient's health information. Our findings is in tandem with those reported by Perez-Carceles MD et al[19] where professionals only release information to the patient's family members upon permission by the patient and few said they do it only when the patient is a minor who cannot decide for himself. It is contrary to the findings reported by Garbin CAS et al [14] where professionals said they have exclusive access to patient's health information and discuss such freely with their assistants and spouses at home.

Recommendation of observance of good health records practice by all health care professionals and stakeholders is strongly suggestive of a gap between knowledge and practice, i.e. the practice is not in tandem with the knowledge. This further reinforces the necessity for regular sensitisation/update/refresher courses and seminars on confidentiality for staff; emphasising the legal aspects. Appropriate sanctions should also be meted out to erring staff to serve as deterrent to others. An organized reward system will surely foster good health records/confidentiality practice.

### CONCLUSIONS

Although most health care professionals at Federal Medical Centre, Bida have formally or informally acquired knowledge of confidentiality of patients' health records, there is obvious demonstrable gaps in knowledge and practice of their respective obligations towards it. As such they require regular reminder about their responsibility on the subject. However, our findings suggest that they would professionally protect the health information of patients if given enabling environment and continuing education on the subject.

This study on confidentiality of patients' health records is possibly the first of its kinds in Nigeria as such there is need to further explore the topic by other researchers in future.

### **COMPETING INTERESTS**

The authors declare that they have no competing interest.

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AIT conceived of the study, initiated its design, participated in data analysis and coordination, interpreted the data and drafted the manuscript

AAO participated in its design, coordination, data analysis and revised the manuscript ASA participated in its design, coordination, data analysis and revised the manuscript

OKA participated in its design, coordination data analysis and revised the manuscript

OAG participated in its design, coordination, data analysis and revised the manuscript

SEU participated in its design, recruitment of participants, and revised the manuscript

JJA participated in its design, recruitment of participants, and revised the manuscript

FM participated in its design, recruitment of participants and revised the manuscript

ETRO participated in its design, recruitment of participants and revised the manuscript

AAM participated in its design, recruitment of participants, and revised the manuscript

TAA participated in its design, recruitment of participants and revised the manuscript

All authors have read and approved the final

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