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Assessment Of Awareness of Medical Litigation Among Radiographers in South Eastern Nigeria

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Abstract

Background: Medical litigation is a growing concern in healthcare with radiographers playing a crucial role in the diagnosis and treatment of diseases. Awareness of medical litigation is essential for radiographers to understand their professional responsibilities, adhere to standards of practice, and minimize the risk of adverse events.

Objective: The study assessed the awareness of medical litigation amongst practicing radiographers in South-Eastern Nigeria.

Methods: A cross-sectional study of radiographers practicing in government owned hospitals was carried out between July and December 2024. A well-structured questionnaire was used for the collection of data. The questionnaire consisted of questions pertaining to awareness of medical litigation and measures to be put in place to prevent medical litigation. The questionnaire comprised of three sections: Section A was based on the socio-demographic information of the respondents. Section B was concerned with assessing the awareness of medical litigation among practicing radiographers while section C focused on measures taken to reduce the incidence of medical litigation among practicing radiographers. Data was analyzed using frequency, percentages and Spearman's correlation.

Results: A total of 86 radiographers comprising 51 (59%) males and 35 (41%) females participated in the study. All the radiographers had a good awareness of medical litigation. There was no statistically significant correlation between gender and awareness ($p=0.31$). A statistically significant correlation existed between rank and awareness ($p=0.002$).

The main measure recommended by the radiographers to be put in place to reduce litigation is explaining the examination procedure in plain language to the patients.

Conclusion: There is a need for the government to put up targeted strategies to enhance radiographers' understanding of medical litigation, promote professional accountability, and improve patient safety.

Keywords

Litigation, radiographers, medical, malpractice

Introduction

Medical litigation otherwise known as medical law is a lawsuit that arises when a medical or health care professional violates professional standards in their practice, causing harm to a patient as a result of a careless act or omission.¹ Medical litigation occurs mostly due to medical malpractice. Medical malpractice litigation occurs when a patient brings a legal cause of action against his or her healthcare provider for providing medical treatment that falls short of the accepted medical standard of care.² Medical malpractice litigation involves the testimony of expert witnesses and significant evidence gathering. The growing numbers of medical malpractice claims worldwide has caused alarm in all areas of health care including medical radiography and led to an increasing awareness of legal implications of practice. Errors in diagnosis, treatment, aftercare, or health management could all lead to litigation. A common feature of medical malpractice is that it has three elements. First, it must be demonstrated that the treatment was not in accordance with the standard of care, which is the established and recognized medical treatment. Second, it must be demonstrated that the patient was injured as a result of the negligence. Third, the injury must have resulted in severe damages, such as disability, unusual pain, suffering, hardship, loss of income, or a significant medical bill burden.

In the United States of America (USA) and United Kingdom (UK), litigation has featured prominently in all areas for many years. Report has it that in Ireland, the number of high court cases taken for medical negligence increased from 566 in 2007 to 1001 in 2016. In the United Kingdom also, the cases for medical negligence is on the increase with over 10,000 new claims annually.^{3,4,5} The greatest consequence of a health care service with high litigation rate is that a great number of competent and experienced health care personnel will seek retirement at the slightest opportunity. The 'blame' culture in medical litigation has become established due to a

variety of reasons. The tendency for the legal profession to offer a 'no win, no fee' basis has encouraged individuals to litigate. In recent times, the field of medical radiography has been in the limelight as regards litigation. This increase in litigation is not due to falling standards within departments, but rather increased public awareness.⁶ Notably, the public has access to vast amounts of information on the internet as well as media coverage highlighting areas where problems occur; these have helped to fuel the trend for patients to sue when they encounter an adverse outcome that they would normally have ignored.⁶ A study in UK showed an upward trend in the number of medical litigation cases related to radiographers for over 15 years. This increase was attributed to different reasons, chief among them being that radiographers are heavily involved in day-to-day patient diagnosis, and the field of medical radiography has a higher percentage of medical negligence claims than other health specialties.⁷ Most of the times, radiographers are not aware of the standards expected of them until they are faced with a legal claim. It is not easy to know what the law demands in every situation. This area of confusion hinders the radiographers' ability to respond appropriately at all times. It is generally acknowledged that the full extent of the number of cases of litigation involving radiographers in Nigeria are not known, and suggestions have been made that a database record of all cases should be set up in order to establish actual figures.⁸

Litigation not only causes anxiety for those individuals unfortunate to become involved, it also costs large amount of money. Adejumo and Adejumo carried out a study on the legal perspectives of medical negligence and malpractices in Nigeria.⁹ They stated that medical practice involves so many activities which if not professionally handled, may give rise to liabilities on the medical personnel. These liabilities could be civil liabilities or criminal liabilities. Thus, there is a need for caution and to ensure that justice is done both to the victim and the medical personnel. In a study carried out

by Dumitrescu on litigious side of the medical malpractice in Romania, it was discovered that the number of litigious cases is on the increase yearly.¹⁰ According to the researcher, the radiographer gets a lower quantity of liability when compared to the doctor. This is because the doctor is the supposed head of the health team so, the quantity of law that is applied to him in the case of an erroneous or negligent treatment is higher. Latika et al also carried out a study on communication skills needed to avoid litigation and stated that there has been a change in communication in medical practice.¹¹ There is an effective medical personnel-patient communication with which the patient is encouraged to reveal various intimate aspects of his private psychosocial history and his environment. They stated that patients resort to litigation when there is an unfavorable outcome in the patients' diagnosis or disease which is as a result of breakdown in communication with the medical personnel or hospital staff. The major reasons responsible for most of the litigation cases include a desire to prevent a bad incident that took place in the past from repeating itself, the need to understand why and how an injury occurred, a desire for financial compensation for the injury or loss and to provide for future care and a need to hold the medical personnel or hospital accountable.¹¹

In Nigeria, various bodies are trying to stem the growth in medical litigation by raising public awareness of the detrimental effects this is having on healthcare.⁸ Radiographers stated that fear of litigation is one of the main reasons for their lack of interest in specializing in mammography. More than a third of practicing radiographers are considering leaving the area of breast imaging because of this anxiety. Despite an increase in the number of women undergoing mammography, the number of radiographers performing the examination especially the males have fallen by 5% in the last three years.¹² Not only are radiographers retiring early and closing down practices, but also the costs of healthcare are spiraling, resulting in everyone having to pay more, whether the healthcare is funded by insurance companies or from government taxes.¹³ As the practice of radiography is fast growing in Nigeria, the likelihood that medical litigation cases against radiographers will be common in the future is highly anticipated. There is thus the need to assess the awareness of radiographers on medical litigation in South Eastern Nigeria.

Materials and methods

This was a prospective, cross-sectional study. The study covered all practicing radiographers in the federal government owned hospitals in South Eastern Nigeria. The population of this study consisted of 86 practicing radiographers. Ethical approval to carry out the study was obtained from the Human Research and Ethics Committee of University of Nigeria Teaching Hospital, Ituku-Ozalla. Informed consent was obtained from the radiographers. Any radiographer who did not want to participate in the study was not included. A well-structured questionnaire was used for the collection of data. The questionnaire comprised of three sections: Section A was based on the socio-demographic information of the respondents. Section B was concerned with assessing the awareness of medical litigation among practicing radiographers while section C focused on measures taken to reduce the incidence of medical litigation among practicing radiographers. Closed questions were used to obtain the following demographic data: gender, age, rank, years of practice and qualifications. The measuring tool tested the awareness level of medical litigation among the practicing radiographers. This required the participants to rate their level of awareness on a 5-point Likert scale: 1 = strongly disagree (SD) to 5 = strongly agree (SA). Reliability of the instrument was ascertained by a pre-test where 10% of the total questionnaires were administered to practicing radiographers in one of the government hospitals under study. The questionnaires were collected back after completion and tested for internal consistency of the responses using Cronbach's alpha test. A Cronbach coefficient value of 0.74 was gotten and this showed that the instrument was highly reliable. A total of 86 questionnaires were distributed to the radiographers. These were filled and returned and then the information provided were extracted and analyzed. Statistical analysis was done using Statistical Package for Social Sciences (Windows Version 23; SPSS Inc., Chicago, USA). Descriptive statistics of mean, frequency and percentages were used in the analysis of data. Spearman's correlation was used to ascertain the correlation of rank and gender with level of awareness on medical litigation. Statistical significance was considered at $p < 0.05$.

Results

A total of eighty-six questionnaires were distributed and all were returned giving a response rate of 100%. Table 1 summarizes the demographic characteristics of the 86 participants. There were 51 males (59%) and 35 females (41%). 45 respondents (52%) have practiced for 1-5years,

16 respondents (19%) have practiced for 11-15years, 15 respondents (17%) have practiced for 16-20years while 10 respondents (12%) have practiced for 21years and above

Table 1: Demographic distribution of the respondents

Variables	Frequency	Percentage (%)
Gender		
Female	35	41
Male	51	59
Total	86	100
Age (Years)		
21-35	45	52
36-50	31	36
51 and above	5	6
Total	81	94
Rank		
Intern/corps members	45	52
Senior/principal radiographer	31	36
Assistant Chief/ Chief Radiographer	10	12
Total	86	100
Years of Practice		
1-5	45	52
11-15	16	19
16-20	15	17
21 and above	10	12
Total	86	100
Highest qualification Level		
B.Sc	45	52
M.Sc	31	36
Ph.D	10	12
Total	86	100

Table 2 shows the level of awareness of medical litigation amongst practicing radiographers. All the radiographers (100.0%) had a good awareness of the concept of litigation and factors that can lead to it.

**Table 2:- Assessment of the level of awareness of radiographers about Medical Litigation
(n=86)**

S/N	Awareness of medical litigation	SA (%)	A (%)	U (%)	D (%)	SD (%)
1.	I am aware of the concept of litigation in medical radiography	56 (65.1)	30 (34.9)	0 (0)	0 (0)	0 (0)
2	I understand the factors that can lead to litigation in medical radiography	56 (65.1)	30 (34.9)	0 (0)	0 (0)	0 (0)
3.	I understand the implications of litigation as a radiographer	51 (59.3)	35 (40.7)	0 (0)	0 (0)	0 (0)
4.	I wish that litigation will be taught to radiography students in universities.	30 (34.9)	45 (52.3)	11 (12.8)	0 (0)	0 (0)
5.	I have been involved in a litigious situation in the course of my practice	0 (0)	5 (5.8)	0 (0)	41 (47.7)	40 (46.5)
6.	The hospital where I work introduced me to the concept of litigation in radiography practice	0 (0)	5 (5.8)	0 (0)	51 (59.3)	30 (34.9)
7.	I was introduced to the concept of litigation in radiography as an undergraduate	0 (0)	15 (17.4)	10 (11.6)	46 (53.5)	15 (17.4)
8.	I have never heard of litigation in the course of practice	0 (0)	20 (23.3)	0 (0)	46 (53.5)	20 (23.3)
9.	The knowledge of medical litigation will positively impact the practice of radiography	50 (58.1)	36 (41.9)	0 (0)	0 (0)	0 (0)
10.	The awareness of litigation is not necessary for the practice of medical radiography	0 (0)	0 (0)	0 (0)	46 (53.5)	40 (46.5)
11.	Errors from radiographers are the common causes of litigation in medical radiography practice	20 (23.3)	36 (41.9)	20 (23.3)	10 (11.6)	0 (0)
12.	Failure to obtain informed consent is the most common cause of litigation in medical radiography practice	61 (70.9)	25 (29.1)	0 (0)	0 (0)	0 (0)

Table 3 shows the correlation between rank and awareness of medical litigation amongst practicing radiographers. There was a statistically significant correlation between rank and awareness ($p=0.002$, $r=0.34$).

Table 3: - Spearman's correlation between rank of radiographers and awareness of medical litigation

Variables	p	r
Rank versus medical Litigation	0.002	0.34

Table 4 shows the correlation between gender and awareness of medical litigation amongst practicing Radiographers. There was no statistically significant correlation between gender and awareness ($p=0.31$, $r=0.11$).

Table 4: Spearman's correlation between gender of radiographers and awareness of medical litigation

Variables	p	r
Gender versus Medical Litigation	0.31	0.11

Table 5 shows measures that can be put in place to reduce medical litigation amongst practicing radiographers. 61 (70.9%) respondents strongly agree that radiographers must obtain informed consent before carrying out any procedure, 86 (100%) respondents strongly agree that each procedure should be explained in plain language to patients and the pregnancy status of female patients of child bearing age should be ascertained before carrying out any procedure, 81 (94.2%) respondents strongly agree that unstable patients must be accompanied by the doctor or nurse and relatives, 70 (81.4%) of the respondents strongly agree that there should be accuracy in the diagnosis and treatment of patients.

Table 5: - Measures that can be put in place to reduce medical litigation amongst practicing radiographers

(n= 86)						
SN	Factors	SA (%)	A (%)	U (%)	D (%)	SD (%)
1	Radiographers must obtain informed consent before carrying out any procedure	61 (70.9)	25 (29.1)	0(0)	0(0)	0(0)
2	Radiographers should endeavor to explain each procedure in plain language to patients	86 (100)	0 (0)	0 (0)	0(0)	0(0)
3	The course called Medical Litigation should be introduced into the undergraduate curriculums	30 (34.9)	36 (41.9)	20 (23.3)	0 (0)	0(0)
4	All newly employed radiographers should be sensitized about medical litigation	25 (29.1)	51 (59.3)	10 (11.6)	0(0)	0(0)
5	Ascertain the pregnancy status of all female patients of child bearing age before carrying out radiographic procedures	86 (100)	0(0)	0(0)	0(0)	0(0)
6	Unstable Patients must be accompanied by the doctor/nurse and relatives	81 (94.2)	5 (5.8)	0 (0)	0 (0)	0(0)
7	Timely delivery service to patients	55 (64)	31 (36)	0 (0)	0(0)	0(0)

8	Quality assurance practices should be put in place	45 (52.3)	41 (47.7)	0(0)	0(0)	0(0)
9	Hospitals should provide strict guidelines and outline penalties for breach in the standard of practice	40 (46.5)	31 (36)	15(17.4)	0(0)	0(0)
10	Proper documentation and record keeping	40 (46.5)	46 (56.5)	0 (0)	0(0)	0(0)
11	Proper diagnosis and accuracy	70 (81.4)	16 (18.6)	0(0)	0(0)	0(0)

SA= Strongly Agree, A= Agree, U= Undecided, D= Disagree, SD= Strongly Disagree

Discussion

From the study, 51(59%) radiographers were males while 35 (41%) radiographers were females. The result of this study showed that radiographers had a good awareness of medical litigation and factors that can predispose a radiographer to that. This is similar to the findings of Abdelmoneim et al who carried out a study on medico-legal awareness among health professionals in Sudan. It was discovered that the knowledge of health workers on medico-legal issues is high.¹³ Haripriya and Haripriya carried out a similar study on knowledge about medical law and its negligence among doctors. They found out that most doctors had a good knowledge of medical law.¹⁴ The finding of this study is also in line with the work of Tabitha and Magendran who carried out a study on awareness of medico-legal issues among medical college health professionals. They found out that the medical practitioners had a good level of awareness of medico-legal issues.¹⁵ Similarly, Makhani et al conducted a study on awareness of medico-legal issues amongst medical professionals and discovered that majority of the doctors had a good awareness of the basic concepts of medico-legal issues.¹⁶ Similar results were gotten by Singh et al and Jasuma et al who conducted a study among health care professionals in Udaipur and Vadodra respectively.^{17, 18}

From this study, there was no statistically significant correlation between gender and awareness of medical litigation ($p=0.31$, $r=0.11$). The result of this study disagrees with the study done by Haripriya and Haripriya who discovered that male doctors had more knowledge about medical law than their female counterparts.¹⁴ Also, the result of this study is in disagreement with the work by Singh et al.¹⁷ The disagreement may be as a result of regional differences. The result of this study also

showed that there was a statistically significant correlation between rank and awareness of medical litigation ($p=0.002$, $r=0.34$). This is in line with the study carried out by Haripriya and Haripriya among doctors.¹⁴ They discovered that senior doctors had better level of knowledge of medical law than the junior doctors. Similar results were also gotten by Singh et al and Jasuma et al.^{17, 18}

From this study, the main measures recommended by the radiographers to be put in place to reduce litigation include explaining the examination procedure in plain language to the patients, ascertaining the pregnancy status of all female patients of child-bearing age before carrying out radiographic procedures and ensuring that all unstable patients are accompanied to the radiology department by the doctor or nurse. The result of this study is similar to the work by Latika et al who found out that good communication skills are needed in order to reduce medical litigation.

Conclusion

The radiographer population of South-Eastern Nigeria has a high level of awareness of medical litigation and its aspects in daily practice. This however provides a valuable insight into awareness of medical litigation in Nigeria.

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