Medical Ethics Education: Doctors' Experience and Perception of Its Impact in Child Healthcare in A Nigerian Teaching Hospital

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ABSTRACT

There is increasing awareness of the importance of medical ethics education in Paediatrics. This questionnaire-based study sought to determine doctors' experience and perception of medical ethics education in child healthcare at a Teaching Hospital. Doctors' socio-demographics, medical ethics education, limitations to its application and measures to improve their practice of medical ethics in child healthcare were sought. Data were analyzed using descriptive statistics.

Out of the 294 doctors, 239 (81.3%) and 156 (53.1%) had medical ethics lectures as undergraduates and postgraduates respectively. Two hundred and twenty-three (75.9%) agreed that the knowledge they had acquired had been useful in child healthcare while 77.2% cited a strong influence of parents' socio-cultural beliefs and practices as limitations. Majority, 75.9%, wanted more practical sessions/workshops on medical ethics, while others wanted more undergraduate and postgraduate courses.

Improved medical ethics curriculum, implementation, adaptation to positive socio-cultural beliefs/customs and institutional support is required for improved child healthcare.

Keywords: Medical ethics; Education; Undergraduates; Postgraduates; Child healthcare

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CONFLICTS OF INTEREST

The Authors declare that there is no conflict of interest.

1. Introduction

Studies have shown that ethical issues often arise in clinical practice (Donkor & Andrews, 2011; DuVal et al., 2004; Kesselheim et al., 2012; Lang et al., 2009; Lo B & Schroeder, 1981; Saarni et al., 2008; Sorta-Bilajac, 2008; Taylor et al., 2009). Ethics is a topical issue that is now recognised worldwide as an important aspect of medicine (Gabel, 2011). This is more so in Paediatrics due to children's lack of autonomy, and the issue of balancing this lack of autonomy with upholding the rights of the child. Also, paediatricians worldwide are facing increasingly complex ethical dilemmas due to the improvements in medical science and care available (Boer et al., 2022). Various studies in Nigeria and other parts of the world revealed that majority of doctors did not receive enough training on medical ethics, both as undergraduates and postgraduates, to prepare them for the ethical challenges they came across during their practice (Aliyu et al., 2015; Boer et al., 2022; John, 2009; Lo B, 1981; Megbelayin, 2014; Nte, 2008; Onankpa et al., 2014; Opara & Eke, 2010).

There is an increasing awareness of the benefits of medical ethics education in patient care among both patients, doctors, in medical schools and postgraduate medical colleges, and the Medical and Dental Council of Nigeria. This is also evidenced by the organisation of mandatory medical ethics courses by the postgraduate colleges. Medical ethics as a topic is offered in various levels in medical training in Nigeria and worldwide (Ekmekci, 2016; West et al., 2020). However, worldwide, there is no standardized curriculum for it hence medical schools teach it at different times and emphasis varies (Attard-Montalto, 2001; Ekmekci, 2016; Guedert & Grosseman, 2012; Mijaljica, 2014). Okoye *et al* (2017) and Ogundiran *et al* (2010) found that majority of medical students in Nigeria were not satisfied with their medical ethics knowledge, and this holds true even for doctors as reported by Fadare et al (2012). Similarly, Hurst *et al* (2007) in the UK found that only half of the doctors were confident of their ethics knowledge.

Advances in medical sciences, which are gradually gaining grounds in developing countries like Nigeria, have also led to the emergence of new ethical dilemmas (Ekmekci, 2016; Owa & Adesami, 2017). These are, in addition to the prevailing socio-cultural and religious dilemmas in our locality which can have a negative effect on child care. Patients/parents are also more aware of their rights with an increase in the rate of litigation following medical malpractice (Ekmekci, 2016).

The inability to identify and resolve ethical dilemmas in children can lead to grave consequences in terms of child health such as paralytic poliomyelitis from parental refusal of child's immunisation. These can result in serious financial implications for the families and social issues for the children, including child abuse and abandonment, which eventually translate into community and national healthcare and social burden.

Most doctors perceive an inadequacy in training curriculum for ethics both at undergraduate and postgraduate levels as contributory to their limited knowledge of medical ethics (Barnie et al., 2015; Brogen et al., 2009; Goldie, 2000; Goold & Stern, 2006; Fadare et al., 2012; Hayes et al., 1999; Kenny et al., 1998; Ogundiran & Adebamowo, 2010; Okoye et al., 2017; Shaheen et al., 2009). At the 51st World Medical Assembly in 1999, it was strongly recommended that the teaching of medical ethics and human rights be included as an obligatory course in the curricula of Medical Schools worldwide (John, 2009). As such, medical schools worldwide are realising the importance of allotting adequate time and resources to the study of medical ethics with emphasis on paediatrics (Ekmekci, 2016; John, 2009; Kidszun et al., 2022). Additionally, institutional backing in form of formal documented and disseminated protocol for the reporting and resolution of potential ethical dilemmas may improve health management outcome especially for the paediatric patient (DuVal et al., 2004).

The aim of this study was to determine doctors' experience and perception of medical ethics education and its impact in child healthcare at the University of Port Harcourt Teaching Hospital (UPTH).

2. Subjects, materials and methods

This was a descriptive cross-sectional study carried out amongst doctors who care for children at the large tertiary hospital in Nigeria. It included Consultants, Resident doctors, Medical Officers and House Officers in the departments of Paediatrics; as well as Surgery, Dentistry, Ophthalmology, Family medicine, Ear, nose and throat surgery, Community medicine and Neuropsychiatry. All doctors who care for children in these departments and who gave consent, were included in the study

A self-administered semi-structured questionnaire was used to obtain information on sociodemographics, doctors' exposure to medical ethics education as undergraduates and postgraduates, impact of acquired medical ethics education on their practice in child care, limitations to its application in their practice and measures to improve their practice of medical ethics in child healthcare. Questionnaires were retrieved immediately afterwards to avoid bias. Data were presented as tables and charts, as appropriate. Quantitative variables (age and years of practice) were expressed using means and standard deviation. Qualitative variables (sex, designation and department) were expressed as frequencies and proportions. We received Ethical approval from the hospital's ethics committee and complied with the requirements.

3. Results

There were 326 doctors eligible for the study and 294 questionnaires were completely filled, giving a response rate of 90.2%. There were 152 females with a female to male ratio of 1.07:1. The mean age of the respondents was 33.9 ± 6.5 years.

Eighty-seven (29.6%) respondents were in the department of Paediatrics while 207 (70.4%) were in the other departments. Two hundred and sixty-five respondents (90.1%) had practiced for less

than 15 years. The mean number of years of practice of the respondents was 8.4 ± 5.0 years (Table 1).

Two hundred and thirty-nine (81.3%) doctors had medical ethics lectures in medical school. Majority of the doctors, 154 (64.4%), received 1-2 lectures and most of the lectures lasted for 1-2 hours each [178 (74.5%)]. One hundred and fifty-six (53.1%) doctors had the medical ethics lectures in their sixth year of medical training out of which 8 (2.7%) received lectures in their second year in medical school. Seventy-three (30.5%) respondents received lectures for more than one school year. Majority of the doctors received their lectures on medical ethics in their fourth to sixth clinical years (Table 2).

One hundred and fifty-six (53.1%) doctors received medical ethics courses after graduation. Eighty-six (55.1%) of the doctors received lectures lasting for 1-2 hours. The main sources of these lectures were during Faculty/College Departmental seminars (28.2%), conferences (22.8%) and at Continuing Medical Education (CME) courses (17.7%). The percentage of doctors from the department of Paediatrics who had medical ethics lectures from their institution, conferences and College Faculties were more than those from the other departments. Two hundred and twenty-three (75.9%) doctors agreed that the knowledge of medical ethics they have acquired so far has been useful to them (Table 3).

Most doctors [227 (77.2%)] cited a strong influence of local socio-cultural beliefs and practices by parents as a major limitation, 53.4% cited a lack of institutional support while the rest were limited by their lack of or defective knowledge on medical ethics (Figure 1).

Majority of the doctors [223 (75.9%)] wanted more practical sessions/workshops on medical ethics where cases could be identified and attempts made at resolving them. Also, 67.7% and 60.9% of the doctors would want more courses on medical ethics organised at postgraduate and undergraduate levels respectively (Figure 2).

N = 294

4. Tables and figures

| Work related characteristics | n | % |
|-----------------------------------------|------------------------------|--------------------|
| Department | | |
| Paediatrics | 87 | 29.6 |
| Family Medicine | 28 | 9.5 |
| Community Medicine | 44 | 15.0 |
| Neuropsychiatry | 9 | 3.1 |
| Surgery | 72 | 24.5 |
| Dentistry | 15 | 5.1 |
| Ophthalmology | 27 | 9.2 |
| Ear, Nose & Throat surgery | 12 | 4.1 |
| Designation | | |
| Consultant | 28 | 9.5 |
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|-----------------------------------------|-----|------|--|--|
| | | | | |
| Senior Registrar | 86 | 29.3 | | |
| Registrar | 110 | 37.4 | | |
| Medical Officer | 21 | 7.1 | | |
| House Officer | 49 | 16.7 | | |
| Years of Practice | | | | |
| 1-4 years | 82 | 27.9 | | |
| 5-9 years | 94 | 32.0 | | |
| 10-14 years | 89 | 30.3 | | |
| 15-19 years | 20 | 6.8 | | |
| \geq 20 years | 9 | 3.1 | | |

Table 1: Department, designation and years of practice of the respondents

| Variables | n | % |
|-----------------------------------------------|-----|------|
| Medical ethics course $(N = 294)$ | | |
| Yes | 239 | 81.3 |
| No | 55 | 18.7 |
| Number of lectures attended (N = 239) | | |
| 1 - 2 | 154 | 64.4 |
| 3-4 | 47 | 19.7 |
| <u>≥ 5</u> | 21 | 8.8 |
| Not sure | 17 | 7.1 |
| Duration of each lecture attended $(N = 239)$ | | |
| 1-2 hours | 178 | 74.5 |
| 3-4 hours | 9 | 3.8 |
| \geq 5 hours | 2 | 0.8 |
| Not sure | 50 | 20.9 |
| Medical school year ethics lectures were | | |
| received * | | |
| Year 1 | 10 | 3.4 |
| Year 2 | 8 | 2.7 |
| Year 3 | 10 | 3.4 |
| Year 4 | 61 | 20.7 |
| Year 5 | 70 | 23.8 |
| Year 6 | 156 | 53.1 |

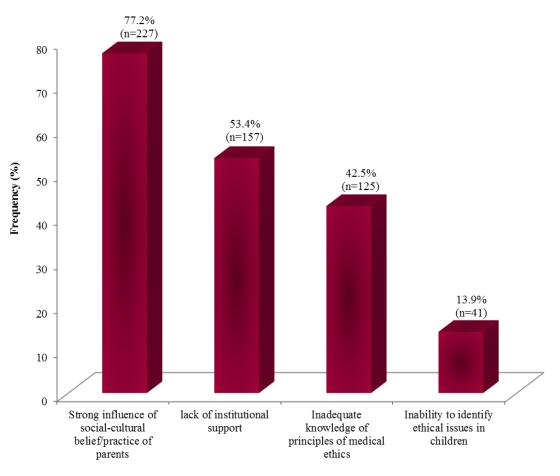
*Some respondents received ethics lecture in more than one school year

| Variables | n | % |
|---------------------------------------------|-----|------|
| Medical ethics lecture received post | | |
| graduation (Respondents = 294) | | |
| Yes | 156 | 53.1 |
| No | 138 | 46.9 |
| Number of lectures (N = 156) | | |
| 1 - 2 | 70 | 44.8 |
| 3-4 | 24 | 15.4 |
| \geq 5 | 46 | 29.5 |
| Not sure | 16 | 10.3 |
| Duration of each lecture attended (N = 156) | | |
| 1-2 hours | 86 | 55.1 |
| 3-4 hours | 18 | 11.5 |
| \geq 5 hours | 17 | 10.9 |
| Not sure | 35 | 22.5 |
| Source of ethics lecture* | | |
| Institutional Ethics Committee lectures | 24 | 8.2 |
| Conferences | 67 | 22.8 |
| Online courses | 13 | 4.4 |
| CME courses | 52 | 17.7 |
| Faculty/College Departmental seminars | 83 | 28.2 |

Table 2: Doctors' exposure to medical ethics course during medical school

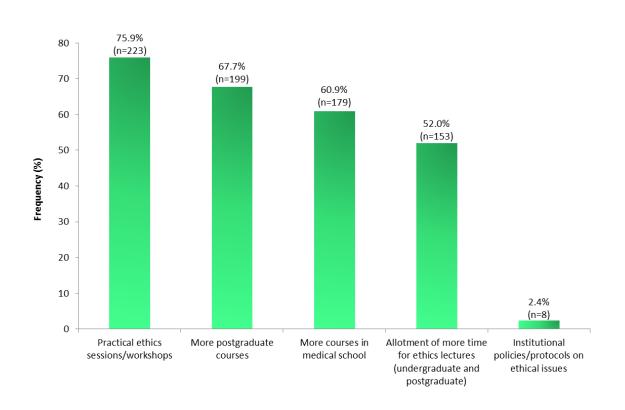
*Some respondents received ethics lecture from more than one source

Table 3; Doctors' exposure to medical ethics courses as postgraduates



Limitations to application of ethical principles

Figure 1; Limitations to application of ethical principles as perceived by the doctors



Doctor's opinion on measures to improve the practice of medical ethics

Figure 2: Doctors' opinion on measures to improve their practice of medical ethics

5. Discussion

Three quarter of the respondents in this index study agreed that ethical issues in children were more challenging. Majority of the doctors in the index study received medical ethics lectures as undergraduates, similar to findings among doctors by Fadare et al (2012) in Ibadan and Boer et al (2022) in Europe. The index respondents had lectures on medical ethics in their clinical years (fourth to sixth year), with half in their sixth year (final year) comprising of one to two lectures only. Similarly, in Turkey the first year medical students receive lectures on the concepts and principles of medical ethics, and thereafter in their third or fifth year they focus on clinical and research ethics, being topics they are likely to face in their practice (Ekmekci, 2016). There are recognised differences in ethics curriculum and its application across various medical education and practice in different geographical regions (Carrese et al., 2011; Fadare et al., 2012; Goldie, 2000). Teaching medical ethics close to graduation and post qualification is thought by many to be more beneficial as medical practice follows soon after, and they can apply the information to their clinical practice (Ekmekci, 2016; Sokol, 2022). Most respondents felt that the medical ethics education they had acquired thus far helped in their care of children. This was similar to findings by Hurst et al (2007) in the UK and Kesselheim et al (2008) in the United States where half of the doctors were confident of their ethics knowledge. In contrast to this study, Okoye et al (2017)

found that only a third of final year medical students in Enugu, Nigeria, were satisfied with their medical ethics knowledge, though their limited clinical experience might have played a role.

Half of our respondents reported receiving medical ethics courses after graduation, much lower than those that had it as undergraduates. This was unlike findings by Janakiram & Gardens (2014) in India where only a third of the doctors had undergone any postgraduate ethics training. Boer et al (2022) found that much fewer European paediatric trainees had postgraduate medical ethics education in their study, with most of them acquiring experience on the job. The low postgraduate ethics training, as evidenced in this study by the few hours dedicated to formal ethics education, may be due to less standardization and quality of postgraduate medical ethics section in most training institutions and a deficiency of postgraduate medical ethics specialists and training programs (Doumbia et al., 2023; Ekmekci, 2016). Majority of the doctors in this study had their postgraduate ethics education from multiple sources including conferences, seminars and trainings which included simulations, similar to results by Boer et al (2022). This low reported rate can be improved by educating doctors and placing more emphasis on the unique challenges of medical ethics in paediatric practice.

Various reasons were given by the doctors as limitations or barriers to their identification of ethical dilemmas. These limitations affected their application of the medical ethics education they have acquired in their clinical practice. The major constraint identified was a strong influence of sociocultural beliefs and practices by parents/caregivers, followed by a lack of institutional support and then low knowledge on medical ethics. Similar observation was reported by Guedert & Grosseman (2012) in Brazil and Donkor & Andrews (2011) in Ghana, where ethical problems in Paediatrics were influenced by the local socio-cultural beliefs. These findings in the index study are not surprising as they reaffirm the widely recognized strong influence of traditional beliefs and practices in the study locality. These beliefs, especially where they clash with the decisions of the doctor and are against the best interest of the child, can cause a strain in the doctor/parent relationship leading to negative child management outcome. Opinions proffered by the doctors as measures to improve their knowledge and practice of medical ethics include practical ethics sessions, more postgraduate and undergraduate courses on medical ethics and institutional support in dealing with ethical issues. These were similar to findings by Fadare et al (2012) in Nigeria and Boer et al (2022) in a study on paediatricians from various European countries also reported that most of the doctors called for a more standardized and expanded ethics curriculum with more casebased training/simulations. A unified ethics curriculum though desired, may come with its limitations as prevailing regional ethical issues differ with different sociocultural, religious and moral beliefs, along with methods at resolution (Boer et al., 2022). The opinions proffered by the doctors in this present study are in keeping with some of the limitations they faced in their clinical practice with children.

6. Conclusion

The findings in this study draws attention to the importance of a focused ethics education in undergraduate and postgraduate training, with emphasis on the peculiarities in child healthcare. This will improve the knowledge base and practice of medical ethics by doctors, and as such improve the quality of care provided by the doctors.

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