Short Communication

Assessment of ethical and other professional standards in private medical laboratories: Osun State experience

Muhibi M. A.¹*, Hassan A. O.² and Muhibi M. O.³

¹Department of Haematology and Blood Transfusion Science, Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Osun State, Nigeria.
²Department of Medical Microbiology and Parasitology, Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Osun State, Nigeria.
³Department of Health Information Management, Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Osun State, Nigeria.

Accepted 17 January, 2012

Compliance of private medical laboratories in the state with ethical and other professional standards as prescribed by the Medical Laboratory Science Council of Nigeria (MLSCN) was assessed by the researcher’s pre and posts the inspection by the MLSCN. Laboratory environment, personnel, equipment and adherence to Standard Operating Procedures (SOPs) were used as indicators and results obtained were compared. 13/21 (62%) was found to have conformed to environmental specifications before the MLSCN’s inspection. This rose to 84 and 89% a month and 6 months post MLSCN inspection, respectively. 48% had right personnel before the Council’s inspection followed by 74% which dropped to 72% six months later. 15/21 (67%) laboratories had pre-requisite equipment in use before the council’s inspection and this rose to 84 and 89% a month and 6 months later, respectively. Adherence to SOPs was observed to have risen from 76% baseline to 95% a month after; the value dropped to 89% 6 months after the council’s inspection. Follow-up activities of volunteers from members of Association of Medical Laboratory Scientists of Nigeria (AMLSN) were noted to have sustained the improved professional standards in private medical laboratories till 6 months after MLSCN inspection. It is recommended that competent volunteers be engaged by the MLSCN and other stake holders within and outside the country.

Key words: Assessment, ethics, medical laboratory, private, service, standard.

INTRODUCTION

Relevance of medical laboratory service points in diagnosis of ailments, treatment monitoring, prognosis determination and identity testing is well acknowledged. Hence, some people have no symptom at all for infections they harbor while many people develop flu like symptoms such as fever, headache, sore muscles and stomach ache for many microbial infections; specific determinant of which remains medical laboratory test (Koneman et al., 1994; Baker et al., 1998; Kwawukume and Srofenyoh, 2005). Medical laboratory science is defined by MLSCN Act as the practice involving the analysis of human or animal tissues, body fluids, excretions, production of biologicals, design and fabrication of equipment for the purpose of medical laboratory diagnosis, treatment and research (Federal Republic of Nigeria Official Gazette, 2003). The Act also places on the Council responsibility of maintenance of good standard of medical laboratory practice and services with respect to regulation and control of private practice including statutory inspection, approval and monitoring of all medical laboratories including those adjoined clinics, private and public health institutions.

*Corresponding author. E-mail: muhibudeen@yahoo.com.

Quality practices in medical laboratory service are of paramount importance in health care delivery (Mac Donald et al., 1998). External quality assurance mechanism and assessment for accreditation by authorized institution are essential in maintaining quality practice, especially in resource limited and disease endemic countries (DECs) like Nigeria (Mac Donald et al., 1998; WHO, 1995). An accredited medical laboratory is the one that has been certified by law as having fulfilled all specified criteria at the point of assessment. It is solely a finding of laboratory competence and not a product certification. There are being cases, even in advanced countries of the world where accredited laboratories generate as high as 40% error in providing services in specialty of which they were accredited (U K Serious Hazards of Transfusion, 2008). Hence, sustaining and improving quality medical laboratory services requires continuous assessment and standardization. In developed and developing countries of the world, there are different criteria with relevant regulatory bodies use in grading degree of competence of medical laboratories within their domains (Centers for Disease Control - Atlanta - Global AIDS Program, 2008; Okonkwo, 2010).

Checklists being employed as tools, in all cases, have indicators listed, against which qualitative and quantitative assessment are done (Centers for Disease Control - Atlanta - Global AIDS Program, 2008; College of American Pathologists, USA, 2007; International Standards Organization, Geneva, 2007; Ministry of Public Health, Thailand, 2008; National Institutes of Health, 2007). Included in the checklists are questions addressing issues that border on laboratory environment, personnel, equipment and adherence to SOPs (Centers for Disease Control - Atlanta - Global AIDS Program, 2008; National Institutes of Health, 2007; Okonkwo, 2010). However, unethical medical laboratory science practice has been reported in Nigeria in the last few years (Okonkwo, 2010). This appears to be the worst of quackery and/or professional malpractice in medical circle with attendant consequence of misleading other members of the health team. The aim of this study was to access impact of volunteers on the compliance level of private medical laboratories with ethical and other professional standards as prescribed by the MLSCN.

**MATERIALS AND METHODS**

The study was conducted across Osun State of Federal Republic of Nigeria between October, 2009 and January, 2010. Osun State which was created on August, 27, 1991 covers a geographical area of 14,875 square kilometer. The population of Osun State according to the 2006 National Population Census figures is 3,423,536 of which 1,740,619 (or 50.8%) are males while 1,682,917 (or 49.2%) are females (Federal Republic of Nigeria Official Gazette, 2007). All the 21 "stand alone" private medical laboratories in the state were assessed by the authors in October, 2009 - a month before MLSCN Inspection and Accreditation Exercise. Indicators used include laboratory environment, personnel, equipment and adherence to SOPs. The assessment was repeated in December, 2009 and May, 2010; in between which there were follow-up activities from members of Osun State Branch of AMLSN. Activities like awareness creation, sensitization meeting and monitoring were sustained by volunteers on monthly basis, during period of study. Data generated was compared on a component bar chart.

---

**Figure 1.** Indicators rating during phases of assessment. LAB ENV means laboratory environment. PERS means personnel; EQUIP means equipment and SOP means standard operating procedure.
RESULTS

In this study, 13 out of 21 (62%) was found to have conformed to environmental specifications before the MLSCN’s inspection. This rose to 84 and 89% a month and 6 months post MLSCN inspection, respectively. Only 48% had right personnel before the Council’s inspection followed by 74% which dropped to 72% six months later. Of the 21 laboratories, 15 (67%) laboratories had prerequisite equipment in use before the Council’s inspection and this rose to 84 and 89% a month and 6 months later, respectively. Adherence to SOPs was observed to have risen from 76% baseline to 95% a month after; the value dropped to 89% 6 months after the Council’s inspection. The bar chart shows that Figure 1 represents the results.

DISCUSSION

Medical laboratory services represent the rational, scientific basis of the practice of clinical care (Federal Republic of Nigeria Official Gazette, 2003). It does not represent an implausible solution to a complex plot, but rather the way in which clinical care can be audited, controlled, guided and kept appropriate to the funds and the skills available. Arguments are presented to support this statement as well as to analyze what is wrong with health care, from the point of view of laboratory medicine, in sub-Saharan Africa (Federal Republic of Nigeria Official Gazette, 2003; Peter and Jane, 1997).

Follow-up activities of volunteers from members of AMLSN at the Branch level was noted to have positive impacts in sustaining and improving on ethical and other professional standards in private medical laboratories studied. Decline observed are associated with attitudinal issues (personnel and adherence to SOPs). Though, there is dearth of data subject matter, our results are in keeping with the observations of MLSCN’s (Okonkwo, 2010; Registrar and U K Transfusion Laboratory Collaborative, 2008). Private laboratories constitute about 50% medical laboratory service points in Osun State and the only source to access laboratory component of healthcare during industrial strike periods of government employees-situation that is now common in Nigeria.

Public-Private Partnership is a possible lee way of strengthening the sector and sustaining National Health Insurance Scheme (NHIS). It is recommended that volunteers should be regularly engaged as post-inspection assessors by the MLSCN and other stake holders within and outside the country.

ACKNOWLEDGEMENT

We acknowledge the efforts and supports of Messrs Omojowolo Biodun and Lawal Abbass of Osun State Hospitals Management Board and Guild of Private Medical Laboratory Directors of Osun State, respectively.

REFERENCES


