

# **Ethics and Moral Reasoning among Medical Laboratory Professionals**

**Benedictus O. Kukoyi**

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*Ethics and Moral Reasoning among Medical Laboratory Professionals*

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Benedictus O. Kukoyi

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Review Committee

Dr. C.J. Schumaker, Committee Chairperson, Health Services Faculty

Dr. Chester Jones, Committee Member, Health Services Faculty

Dr. Monica Gordon, Committee Member, Health Services Faculty

Provost

Denise DeZolt, Ph.D.

Walden University

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ABSTRACT

Ethics and Moral Reasoning among Medical Laboratory  
Professionals

by

Benedictus O. Kukoyi

M.S.A., Central Michigan University, 2003

Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
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Health Services

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## ABSTRACT

Physicians and patients have received inaccurate medical laboratory test results that have put patients at risk. The purpose of this study is to determine the moral reasoning level of medical laboratory professionals. The theoretical framework that guided this study is grounded by the theories of cognitive development. The study used a population survey and Defining Issues Test, version 2 (DIT-2) questionnaires to collect data. Forty-seven participants from a medical laboratory were surveyed, and hypotheses were tested between moral reasoning scores (dependent variable) and age, gender, level of education, years of experience and job type (independent variables). Data were subjected to ANOVA and the results showed that laboratory professionals' moral reasoning ( $M=26.57$ ,  $P=30.46$ ) was lower than that of other health care professionals. Training in ethics and moral reasoning are some of the recommendations made. Moral reasoning forms the basis for ethical behavior and good decision making; this is limited in people with poor moral reasoning score, which could result in incorrect laboratory results being reported to patients and physicians. Decisions made by medical laboratory professionals affect patients' treatment.

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## DEDICATION

To my entire family: my mother, Matilda Olufunke; my father, David O. Kukoyi; my brothers Kayode Kukoyi and Jude O. Oduwole; and my son Joel, and my daughter, Franziska "Bukky" Kukoyi.

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## CHAPTER 1: INTRODUCTION TO THE STUDY

### Introduction

Corruption in the business community has drawn public attention to unethical practices in health care, such as wasteful spending, embezzlement, Medicare and Medicaid fraud, and overstatement and understatement of financial reports. These unethical behaviors have led researchers to investigate the impact of such unethical practices in health care. Unethical behavior is a growing occurrence in hospitals and most especially in medical laboratories (Berch, 2004, 2005a, 2005b).

The level of moral reasoning of medical laboratory professionals is unknown. Having a good knowledge of moral reasoning could give the necessary insight to ethical behavior and moral judgment (Rest, Navarez, Thoma, & Bebeau, 1999). Several unethical events and decision such as providing physicians and patients with inaccurate test results which occurred at Maryland General Hospital, Reference Pathology Services, Baltimore's Good Samaritan Hospital, and Union Memorial Hospital, to name a few have put patients at risk and jeopardized the safety of laboratory professionals (Berch, 2004, 2005a, 2005b).

## Background

Ethical behavior and moral reasoning could be strategic to decision making, as emphasized by the importance of behavior, professional conduct, rationing, and confidentiality expected by patients in health care. Professional standards are established to guarantee confidentiality and patient safety (Callahan, 1988). Unethical behavior, lack of public trust, rationing, and lack of confidentiality have been a growing problem throughout the health care industry and in several medical laboratories (Berch, 2004, 2005a, 2005b). Confidentiality usually means sharing patient information in confidence and protecting that process with policies and procedures (Callahan).

According to Gorlin (1990), health care organizations should be responsible for controlling and protecting their patients' information and ensuring the confidentiality of their medical records. Hospitals are responsible for controlling and protecting the release of medical information and unauthorized use and establishing policies and procedures for authorized use. As technology advances, so does technology to store and retrieve health information and medical records. Confidential information needs to be

complete and accurate, as well as having controlled access and information technology security system measures in place (Callahan, 1988). Confidentiality in health care is government regulated. Confidential patient information is being collected, transcribed, and requested by many in a single encounter of a patient's visit or treatment. Consequently, protecting patient information has become more difficult as sharing health information, medical records, and data becomes easier with the use of computers and various information systems (Callahan). Protecting patient information is crucial and the importance of ethical behavior and moral reasoning in medical laboratory cannot be over-emphasized. Callahan observed that confidentiality policies in hospitals are put in place mainly to protect the hospital and employees, not to protect the patients. Callahan considered the policies a misplaced priority.

Confidentiality has emerged as one of the characteristics of autonomy in the principles of medical ethics used in decision making. Rationing, though not a characteristic, is a tool used in health care decision making. Rationing is a health care decision used to withhold treatment, control costs in adverse economic

conditions, and to manage scarce health care resources (Sorell, 1998). Sorell observed many objections and increased concern about rationing in health care and noted that health service providers have questioned the basis of the practice. According to Sorell, the opinion that medical or health care resources need to be rationed goes against all ethical principles.

In a medical laboratory setting, particularly transfusion services or the blood bank, some blood centers practice the transfusion of Rh-negative elderly patients and Rh-negative males over 55 years old with Rh-positive blood (incompatible transfusion) because Rh-negative donor blood is in short supply and must be conserved for childbearing females and newborns (Harty-Golder, 2005). This is a form of rationing that is questionable in the practice of laboratory medicine because these patients later develop antibodies that causes health problems. According to Harty-Golder rationing in transfusion services comes down to informed consent; as long as laboratories and blood banks have policies and procedures in place legal ramifications will be minimal. Another important factor to justifying rationing is to make physicians and nurses aware of the conditions under which incompatible transfusions are

done in any facility (Harty-Golder, 2005). In emergency situations with massive blood loss, a patient might receive a massive transfusion where a majority of the patient's blood is replaced with about half a unit in the case of infants and 10 units in the case of adults. In such cases, compatibility becomes irrelevant (Huestis, Bove, & Busch, 1981).

Rationing is sometimes inevitable when limited medical resources are expected to satisfy unlimited or rising medical demand (Dracopoulou, 1998). According to Dracopoulou, rationing is hard to justify with advances in medical technology expanding, standards of living rising and more government policies coming under criticism. Sorell (1998) argued that rationing in medicine and health care can be applicable to procedures and decisions that ultimately have life saving implications and better quality care outcome. The rising costs in health care have also greatly contributed to rationing. Government policies have always come under public scrutiny, but now so too are health care spending, cost, health care quality, ethics and the moral values of health care professionals. The social distrust between corporations and the public is high (Sorell, 1998). Sorell described why comprehensive and

high-quality medical care should be made available to everybody, without barriers like preexisting medical conditions or financial barriers. The principle of availability, which excludes people with preexisting medical conditions, "makes private insurance unaffordable" and creates "unequal citizenship" in a democratic society where health care should be available (Sorell, 1998, p. 142).

According to Callahan (1998), moral issues raise normative questions about right and wrong, welfare of persons, character and the kind of person we should try to be; ethics on the other hand, is the study of what is morally acceptable or unacceptable. Many questions in professional ethics concern moral right or wrong. Should physicians and their families get free laboratory tests? Should medical technologists discuss patients' laboratory test results openly? Protecting patient information has become more difficult with confidentiality issues and increasing public distrust, escalating health care cost, poor quality care and inadequate health care access.

#### Problem Statement

Numerous events have been reported at Maryland General Hospital, Reference Pathology Services, Baltimore's Good

Samaritan Hospital, and Union Memorial Hospital involving administrative system breakdown and failure (Berch, 2004, 2005a, 2005b). These problems could have been from poor moral reasoning and poor decision making, which account for some of the rising costs of medical laboratory testing, staff shortages, and liability and legal implications for hospitals and independent laboratories.

Moral reasoning forms the basis for ethical behavior and decision making (Candee & Kohlberg, 1987; Kohlberg, 1981; Snarey, Reimer, & Kohlberg, 1985). Moral reasoning of medical laboratory professionals when confronted with moral dilemma has not been studied. Medical laboratory professionals are required to make decisions that could affect test result, diagnoses and medical treatment of patients. As a result, when confronted with ethical and unethical choices a moral dilemma arises. Decision making skills when such situation occurs have not been studied in laboratory professionals. Several unethical events and poor decision making by laboratory professionals across the country have put patients at risk and jeopardized the safety of laboratory professionals. Research in moral reasoning of laboratory professionals is needed to understand and solve the growing problem.

### Nature of the Study

The study focused mainly on moral reasoning and the thought process to decision making when faced with moral dilemmas. Piaget (1973) believed that behavior can be controlled by the organization of the mental process. Moral reasoning forms the basis for ethical behavior and is usually presented in developmental stages (Candee & Kohlberg, 1987; Kohlberg, 1981; Snarey, Reimer, & Kohlberg, 1985). Piaget's cognitive development and Kohlberg's developmental stage theory will be discussed in chapter 2, as well as the neo-Kohlbergian ideology.

The mental process during moral reasoning of medical laboratory professionals was investigated and determined. This provided insight to the ethical behavior and decision making in the laboratory. Medical laboratory professionals face a different ethical dilemma than physicians and nurses because patient contact is limited. This study used the Defining Issue Test, version 2 (DIT-2), a self-administered, multiple-choice test used to measure moral reasoning. The DIT-2 consists of five dilemmas that are presented with 12 issue statements (Rest et al., 1999). The participants rated each item relative to their level of importance on a 5-point scale. The 12 items were then

ranked from the highest priority to the lowest priority. The Defining Issues Test (DIT) has been associated with measuring moral reasoning in relation to schemas: preconventional (personal interest schemas), conventional (maintaining norms schemas) and postconventional, which is considered the highest level of moral reasoning (Rest et al., 1999; Rest & Narvaez, 1994). This will be elaborated further under the neo-Kohlbergian ideology in chapter 2.

Moral dilemmas usually involve making moral choices and giving up something of value. Moral dilemmas involve conflicts of value that have to be preserved in making a choice (Callahan, 1998). There seem to be a relationship between age and education. Educational level increases as related to moral reasoning, while gender differences between males and females are small at lower educational level, the differences in gender become more noticeable as educational level increases. The independent variables in the present study were laboratory professionals' age, gender, level of education, years of experience and job type, while the dependent variable was moral reasoning.

#### Purpose of the Study

The purpose of this study was to determine the level of moral reasoning of medical laboratory professionals when

faced with moral dilemmas at Southern Regional Health System, Riverdale, GA. The results will help determine if ethics, moral reasoning and cognitive development training should be made available to participants with low DIT-2 score, or to include it in the curriculum and training of entry-level laboratory professionals or new hires.

This research can also benefit administrators, directors and managers. The study provides the necessary background for future research. Training programs can also be established to increase the moral reasoning and decision making of laboratory professionals.

#### Theoretical Framework

The theoretical framework for this study was grounded by the theories of cognitive development and moral reasoning, and the principles of medical ethics. Piaget (1973) believed that behavior reflects a conscious state of mind and thinking through a dilemma or problem. Moral reasoning forms the basis for ethical behavior and is described in developmental stages (Candee & Kohlberg, 1987; Kohlberg, 1981; Snarey, Reimer, & Kohlberg, 1985).

In medical laboratory, moral reasoning will affect decision making. The level of moral reasoning of laboratory professionals during moral dilemma has not been studied.

Several events and poor decision making in medical laboratories across the country have put patients at risk and jeopardized the safety of laboratory professionals (Berch, 2004, 2005a, 2005b). Moral reasoning has a great influence on decision making (Rest & Narvaez, 1994). The principles of medical ethics or the theories are interrelated to moral reasoning and guide in decision making (Beauchamp & Childress, 1989; Beauchamp, 2003). These has lead to several questions, will the level of reasoning of medical laboratory professionals, during moral dilemmas be as high and comparable to that of other allied health professionals, physicians and nurses? The neo-Kohlbergian ideology developed the Defining Issues Test for measuring moral reasoning in relation to schemas (Rest, Narvaez, Thoma, & Bebeau, 2000). The theoretical framework, theorists and theories was further examined and elaborated in chapter 2.

### Hypotheses

1. There is no significant statistical relationship between moral reasoning scores and the age of medical laboratory professionals.
2. There is no significant statistical relationship

between moral reasoning scores and gender of medical laboratory professionals.

3. There is no significant statistical relationship between moral reasoning scores and level of education of medical laboratory professionals.

4. There is no significant statistical relationship between moral reasoning scores and years of experience of medical laboratory professionals.

5. There is no significant statistical relationship between moral reasoning scores and job type of medical laboratory professionals.

#### Assumptions

1. In medical laboratory, moral reasoning or lack of moral reasoning will affect decision making.

2. As resources continue to be limited, it will lead to rationing during resources allocation and moral dilemmas will become inevitable.

3. Moral dilemma and ethical behavior are perceived differently between medical laboratory professionals and other health professionals.

4. Moral reasoning varies in relation to age, gender, educational level, years of experience and job type of medical laboratory professionals.

### Scope and Limitations

The scope of this study was limited to medical laboratory professionals at Southern Regional Health System, Riverdale, GA. A review of medical ethics history and the principles of medical ethics was within the scope of this study. The measurement of ethics was out of the scope of this study. However, moral reasoning of medical laboratory professionals at Southern Regional Health System was measured, scored, rated, ranked and analyzed using the Defining Issues Test, version 2 (DIT-2).

Ethics is sometimes called morals and it is guided by the principle of right conduct or value. Ethics usually involve the acceptable norms that shape behavior in professional life or society (Callahan, 1988; Encarta, 2005; Gorlin, 1990). "Ethics is the philosophical study of morality, a branch of knowledge that studies conduct" (Callahan, 1988, p. 7). Moral reasoning differs from ethics because it is a coherent thinking process of logical decision making from several options. In moral reasoning, moral deliberation occurs before the decision making process is made (Callahan, 1988; Fox & Demarco, 1990).

### Definition of Terms

*Biomedical ethics:* These are the principles that guide ethical decision making in medicine and health care (Beauchamp & Childress, 1989). Ethical decision making in medicine usually involve patients, their physicians and their health care providers (Callahan, 1988).

*Code of ethics:* This is the conduct that expresses the acceptable characteristics of a profession and ways to conduct business and critically examine ethical issues (Coady & Bloch, 1996).

*Cognitive development:* This is an area of psychology that tries to understand and explain how people think. It is an understanding into how decisions are made and the development of skills involved in reasoning or thinking which is organized into stages (Latif, 2000).

*Cytotechnologist:* A laboratory professional with a bachelor's degree specializing in the study of human cells, the formation, structure, function and diseases (Thomas, 1997).