In medicine, there are various divisions and professions. One of these is medical technology. Medical technology is the exercise of scientific and technical functions in medical laboratories. This can also be referred to as biomedical science. Medical technologists used various products in the diagnosis and disease treatment. This involves the preparation and analysis of body tissues, fluids and blood for researchers and doctors in the process of diagnosing diseases.

Medical technology is important towards the enhancement of the life quality of all people. Advancement in medical technology results to the expansion of health care system and thus creating more interest in legal and ethical issues. This paper analyses the ethical and legal issues that the profession of medical technology faces.

Ethical issues

Medical technology involves the use of chemicals, and other laboratory instruments and equipment that may be considered as complex. These are used in the performance of laboratory tests. Therefore, the patient may not understand how, when and why they are used. Medical technologists are also involved in performing complex laboratory analysis. This helps in the evaluation of how the physiological conditions of the patient affect the test results. Today, patients can decide whether or not to undergo these medical tests. There have been debates that people should be fully involved in the process of their medical care provision.

This then leaves the question as to whether there are times when the physician, being the expert should carry out medical tests that they think are important without the full involvement of the patient. Thus, one of the ethical issues in medical technology is the information disclosure to the patients (Eaton & Kennedy, 2007). This poses challenges to the medical technologist since the test may not understand the reasons for carrying out the tests and the reasons as to why the specific procedures have to be used. Individual choice of treatment is now taken as a new ethical decision.

However, though the patient expects to play a key role in deciding the procedures and
methods to be employed, the medical technologist has to provide expertise. It is also an ethical issue to decide whether a person should have organ transplants. Through testing, the medical technologist will give the doctor the information on what the patient requires. Nowadays, scientists have gone close to creating their own human beings. This not only involves the internal vital organs but the external organs as well. For example, the transplant of arms that are obtained from a corpse.

This has negative implication such that even the doctors who perform such operations are not comfortable and in complete agreements to doing that. Technology has advanced such that organs are grown in sheep. These include organs like the kidney and liver. This then questions the morality of the advancement in medical technology. This also questions the relationship that exists between the society and medical technology. This is so because technology is a challenge to nature. One of the greatest ethical issues in medical technology and the field of medicine at large is euthanasia. This is what is popularly referred to as mercy killing (medical technology, 2010).

Mercy killing is where the doctor or technologist decides to end the live of a patient. This is in cases of terminal illnesses or where according to their medical knowledge, the physician perceives that the patient would not survive. They thus choose to terminate their lives with the view that they are saving the patient from more pain. However, this may not be ethically right since no person has the right to terminate life. For example, this can be carried out in the intensive care unit.

If the medical technologist observes that the patient is poorly responding to the machines, they may decide to end their lives. This challenges the physician since they may terminate a life which could otherwise have survived. No matter how well it may be branded, euthanasia is committing murder.

Legal issues

Medical technologists have different personalities. For instance they are safety officers, employees, independent contractors as well as colleagues. Every role among these has its own legal and professional responsibilities. Therefore, each medical technologist should keep a distinction between these varied roles. Safety is one of the issues in medical technology. Medical technologists have the responsibility of properly using radioactive materials (medical technology, 2010). This is a legal commitment that medical technologists have to adhere to. This is because the radioactive materials can be used for terrorism and attacks.

This is also a regulation of the United States Nuclear Regulatory Commission (NRC). Medical technologists face legal issues that are as a result of the enforcement and regulation by the
state. The NRC sets regulations that govern the use of radioactive materials in medical science. Those technologists who violate the regulations face issues of legal liability. Further, those who act in ways that can be seen as negligence also face these issues of legal liability. In most states, the medical technologists’ licensure is not required. What the states require is the practicing medical technologist to be registered with the state before they start practicing in specified subspecialties.

According to the new NRC and regulations of the state, the medical technologist is required to sign what is referred to as a “preceptor” statement. This happens before they start practicing. There is also the issue of professional liability. Every medical technologist has civil liability for their actions. According to the law, negligence is punishable and further the technologist can be criminally liable. There is a special kind of loyalty that medical technologists owe to their patients. Each medical technologist has a legal duty that they are supposed to perform and failure to this may result to the reset of harm.

For instance, the establishment of negligence is the results would not have been obtained in the absence of the actions or inactions of the technologist. Though they are not held solely accountable for all the misfortunes in medical practice, they should ensure that they prudently carry out their practice. Among the many services that medical technologists offer their patients is altering their appearances. This is a process that is referred to as plastic surgery.

It involves several things for instance breast enlargement, change of the nose shape and chin. When the technologist enters a contract with their patient, as a legal issue, the result that is implied should occur. However, there might arise cases where the results do not occur.

This then is something that is challenging for the medical technologist. Since it is a contract that they entered, it means that the results should be obtained and just like in any other contractual arrangements, the patient can take legal action. For instance, the patient can decide to sue the technologist for breaching of contract. Medical technology opens up many doors for people. This includes women who can not reproduce, people who need surgery and in the treatment of other chronic diseases. For instance, women can undergo vitriol fertilization. The survival of cancer patients is enhanced by various processes like chemotherapy, radiation and surgery.

However, when performing these medical services, the technologist should have the consent of the patient (Naarden & Cissik, 2006). Medical technologists should not carry out surgeries and radiations on patients simply because they deem it right for the health of the patient. There are legal documents that define the roles that technologists take in the lives of their patients. in the provision of their medical services, medical technologists should ensure that they follow their roles well. Patients want to get the best quality medical services and following their roles ensures that medical technologists offer good quality services.

Conclusion
In every profession, there are ethical and legal issues that the professionals have to follow. Medical professionals for example medical technologists deal with the lives of people and they thus ought to follow their roles well. Among the ethical issues in medical technology are information disclosure to the patient, mercy killing and morality. The legal issues include the legal commitment to United States Nuclear Regulatory Commission regulations, professional liability and breaching of contract. Further, to offer any medical surgery, radiation or laboratory testing, the medical technologist should have the consent of the patient.

References

