The Importance of Laboratory Ethics and Professionalism

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Abstract

Laboratory ethics and professionalism play an unreplaceable yet overlooked role in the laboratory. The American Society of Clinical Laboratory Science has set a standard for ethical behavior in the laboratory which is the ASCLS Code of Ethics. The sections of the code represent professional responsibilities that each medical laboratory scientist is obligated to uphold. The major ethical principles relevant to the laboratory are privacy and honesty; these are vital to being a responsible and successful laboratory professional. The aforementioned moral codes navigate how the scientist will respond to situations which could potentially have an impact on the patient outcome. Each scientist has an obligation to maintain the privacy of the patient information, and a violation of this would compromise their duty to that patient as well as their responsibility to uphold the profession. A high-quality laboratory is one that benefits society by maintaining an effective, cost-efficient, and professional facility. As our obligation to the profession and society suggests, scientists must be accurate and efficient to maintain laboratory value. Professional laboratory scientists believe in one common goal, which is to provide a high-quality service that results in the practice of good medicine.

The Importance of Laboratory Ethics and Professionalism

Laboratory ethics and professionalism are often aspects of the clinical laboratory that are not a prominent topic. What is ethics? Ethics is the ability to make decisions that are just and correct in moral dilemmas. The application of ethics to healthcare has drawn interest into a newly developed field of bioethics (Desikan, Charkarbati, & Muthswamv, 2011; Aiken, 2002). Laboratory ethics builds upon four underlying principles. These are autonomy, beneficence, non-maleficence, and justice (Leiback, 2014; Desikan, Charkarbati, & Muthswamv, 2011). The biggest concern in ethical application and professionalism for the medical laboratory is the practice of patient confidentiality and autonomy of information (Leibach, 2014). The moral tendencies of the laboratory personnel are of the utmost importance. The principles of honesty and integrity are crucial components of a laboratory employee (Makely, 2009). Laboratory professionals are responsible for a huge amount of information in a patient's electronic medical record (EMR); therefore, these individuals need to have a good moral foundation (Beasely, 2016). Professionalism is thought to be a necessary component of the laboratory scientist's academic curricula. Laboratory professionalism includes things like not working while impaired, obeying safety precautions, and maintaining personal knowledge (Latshaw & Honeycutt, 2010; Makely, 2009). All of these principles are a part of the laboratory scientists' role in healthcare by the American Society of Clinical Laboratory Science. They define these principles in a Code of Ethics. This code includes a duty to the patient, duty to colleagues and the profession, and a duty to society.

Those four underlying principles build the foundation of laboratory ethics. The understanding of these principles—autonomy, beneficence, non-maleficence, and justice—is also essential to the understanding of this topic. Autonomy refers to working independently in

the lab and being responsible for one's own work. Each person in the lab has to work independently to turn out patients' results accurately and without assistance. If a laboratory scientist isn't proficient autonomously, they are not of substantial use to the patient nor the physician. Beneficence means that this test, treatment, or procedure is beneficial to the patient and not harmful (e.g., if you run multiple tests that give the same result then the patient suffers). Non- maleficence is much like beneficence it means that any result, test, or treatment done on or for the patient does not cause harm to the patient. For example, if laboratory personnel turns out a result of a drastically low platelet count on a patient, but the patient was healthy, and the sample was incorrect, then the scientist may cause harm to that patient. In this case, the laboratory scientist is violating principles of beneficence and non-maleficence. This process not only isn't beneficial to the patient the patient might also have maleficent complications due to plasma transfusion. Finally, the last principle is justice. In current society, justice is a common term. However, it is important in this case to realize that justice is not just a right but also a responsibility. Justice is the importance that a professional take equal care and responsibility to each patient. As well as ensuring physicians and other healthcare workers understand what laboratory test best asses the patient with as little expense and pain to the patient as possible (Leiback, 2014; Desikan, Charkarbati, & Muthswamv, 2011).

These responsibilities, outlined in the ASCLS Code of Ethics, define the characteristics required for a laboratory scientist to be ethical and professional in practice (Latshaw & Honeycutt, 2010). The discussion begins with the necessity of the ASCLS code of ethics. The American Society of Clinical Laboratory Science includes three components in this code, and they are of utmost significance to the profession. Number one the laboratory scientist is above all responsible for the patient's outcome of the disease. Naturally, this is not only a responsibility of

the laboratory scientists but also by all healthcare workers as a whole. However, according to Leibach, "Seventy percent of the data in the clinical record is contributed by the laboratory" (2014, pg. 4). This high percentage explains why laboratory testing is so important to patient outcomes. Also, a part of the code of ethics is the duty to their colleagues and the profession. This section involves the ability of a laboratory worker to be a professional. Yes, it is that simple. To be a laboratory professional, a person must be honest and have integrity. In other words, they need to be the type of person that admits their mistakes and cares enough to try to correct them. Also, a professional would be truthful with their colleagues (Makely, 2009). For example, when asked by a coworker if the proper quality control tests were run the day before while they were working, they would admit that they forgot instead of the alternative which would be lying to cover their error. The final portion of the code of ethics is the duty to society, which involves several factors. Maintaining a level of personal education past the board of certification is a major component because it is a big problem in the laboratory. To be effective as a Medical Laboratory Scientist one must keep up with the latest knowledge of up to date testing methods and lab practices so one can perform at the highest potential possible (Latshaw & Honeycutt, 2010; Beaseley, 2016; Beastall, 2013).

The duty to the patient involves how the laboratory is of great importance to caring for the patient outcome. According to Beastall, "Statistically fifty percent of the patient's electronic medical record is made up of laboratory data" (2013, pg. 1). Laboratory employees see so much information that they have to maintain a high level of privacy. Privacy and justice are two of the major ethical points that truly affect the patient (Desikan, Charkarbati, & Muthswamv, 2011). Both of these principles are also an essential component of the duty to the patient. Any healthcare profession requires self-control so as not to broadcast patient medical records to the

world or on social media. Medical conditions are often very private problems that patients are not open to sharing. Any healthcare professional has an obligation to keep up patient privacy. Justice for the patient involves things like the patient's right to effective and cost efficient healthcare. Injustice to a patient includes such things like ordering unnecessary lab tests. It is important to ensure that all tests being performed are medically necessary. It is not legal nor ethical for a laboratory to charge a patient for multiple test when one conclusive test would suffice. However, if laboratory professionals keep up with the newest and best testing methods they can ensure better usage of lab tests by doctors. Laboratory professionals do this by continuing to learn the best usage of these tests and communicating that information to the doctors. (Beasley,2016; Beastall, 2013).

Part of our duty to the patient is to provide care that acts upon the needs of the patient. Health care, in general, is moving in a direction where the ultimate goal is the profit. It is easy for the laboratory to become the avenue for increasing revenue in the hospitals. Since many people don't know what lab tests are for or what information they give it is important for laboratory scientists to specify to the doctors ordering the tests when tests are repetitive or if the test results would not apply to that particular situation (Beasley,2016; Beastall, 2013). Revolutionizing healthcare by moving back toward patient-centered care begins with the laboratory because it is responsible for so much of the patient medical data. It is critical that the patient's electronic medical record is readily available and meaningful to the physician, so the results are better able to contribute to the patient's treatment. Laboratory professionals add value to patient-centered care by eliminating paper requisitions, avoiding error, and being able to inform physicians of the most direct testing methods (Beasley, 2016).

The duty to colleagues and profession includes maintaining the dignity and integrity

associated with the profession. Maintaining an obligation to colleagues doesn't only include laboratory employees but also physicians, nurses, and phlebotomists. Good working relations highly contribute to the effectiveness not only of the laboratory but the entire facility. Being thoughtful, truthful, and punctual all play a role in a professional responsibility to their colleagues. Being thoughtful includes speaking calmly, keeping a well composed attitude, as well as being proficient when the work get stressful. Maintaining the integrity of the laboratory science profession is done by professional honesty in each employee. Dishonesty in the laboratory is often not owning up to one's mistakes. Punctuality is critical in a professional obligation to one's colleagues because the type of work can be strenuous on the eyes and body so no one should have to cover for a late co-worker. Being late for a shift is both irresponsible and unprofessional and most likely will not be tolerated in the laboratory (Makely, 2009; Latshaw & Honeycutt, 2010).

A responsibility to the profession itself involves maintaining one's working knowledge of current or up to date testing methods and their clinical significance relevant to the doctor and patient. Contribute to the pride and integrity of the profession by adding value to the laboratory practice. A high quality laboratory displays characteristics of effectiveness, cost efficiency, quick turn-around time and a professional staff. Achieving this high quality can only be done by adding value. Adding value goes through the process referred to as 'SCIENCE.' SCIENCE is an acronym that described methods for adding values. These methods include things like standardization and harmonization, clinical effectiveness, innovation, cost effectiveness, and education of others. Standardization, for instance, is the maintenance of constant values between laboratories. Effectiveness and cost efficiency are areas that all professionals contribute to by having safe work practices and maintaining a work driven attitude in the workplace. Innovation

is complete by practicing more up to date or better testing methods that are more reliable and less costly for the patients and even provide more rapid results to the physician. In a profession that is so unknown to society the best way to add value is to inform others of that profession. By educating others, you not only add to the basis of the profession but the workforce available. Educating others requires disliked tasks that are often not specified in the job description. Such examples include working with students to spark interest in the profession or attending board meetings with coworkers (Beastall, 2013).

The duty to society is simply a combination of the ideas coming together and affecting the community as a whole. Any laboratory professional must maintain his or her repertoire of knowledge because that scientific knowledge is what makes them useful to society. One of the biggest requirement in any healthcare profession is competence. An incompetent medical laboratory scientist can put patients' lives at risk. Certain organizations regulate laboratory functions as well as patient and personnel rights. Obeying the criteria of these organizations are a part of laboratory scientist's responsibility to the community. For example, HIPPA and HITECH regulate patient privacy rights and involvement. Furthermore, an emerging idea that can give society a little peace of mind is the idea of evidence based testing. Evidence-based practice involves using patient needs and testing capabilities to help physicians make better choices on diagnostic tests (Leibach, 2014). Since laboratory testing methods are growing so rapidly and new genetic testing is emerging and much more patient specific, some physicians may order tests that may not be compatible for what they need. In this situation, the laboratory scientists need to be knowledgeable of the significance of the lab test that they have the ability to bridge the gap (Beasley, 2016; Beastall, 2013). Regarding ethics, the more we can improve testing methods and minimize misuse of laboratory tests then the healthcare experience might be able to give people

justice (Makely, 2009; Beasley, 2016).

When thinking about ethics, one must also begin to think of ethical problems or a situation in which a person may ask himself, "What should I do?" In the laboratory, there are many opportunities for an ethical problem to arise. When people are responsible for so many things that can include, personal information, quality control, working with others, and saving a person's life by identifying deadly disease, there is no doubt ethically controversial situations will arise. However, the best thing is to know how to resolve these situations quickly and efficiently. Communication is the best way to address interpersonal conflicts between co-workers (Makely, 2009). Communication is also key in understanding ethical dilemma between co-workers. Laboratory scientists need to obtain information about each situation, communicate with others and form a plan of action that supports what we believe to be the most ethical decision (Aiken 2002).

The process of resolving ethical dilemmas can be done using two different methods. The first method involves using the basic laboratory principles of autonomy, privacy, beneficence, non-maleficence. This method relies on a person's good nature and intuition. In the Principlism method, the situation comes to a resolution by analyzing the situation comparatively to these principles. Principlism has been the major process by which to resolve ethical situations in clinical situations for over 20 years. It directly applies to the theory of bioethics which include those same four basic principles. The second method is the casuistry model. This model builds on the Catholic moral tradition. The Casuistry model involves comparing the details of the current situation with an already resolved situation and determining if the same resolution would be applicable. The casuistry method often includes a hospital or facility board that compares and contrasts the ethical situation. A standard process, no matter which one applicable, is helpful in

making consistent and accurate moral decisions regarding an ethical dilemma (Requenna Meana, Comoretto & Petrini, 2016).

Professionalism is a practice that many people know about, but very few take as seriously as they should. Professionalism includes a person's actions, habits, appearance, language, work ethic, and cooperation. Professionalism and the principles it includes are not only what makes a person suitable for a position as a laboratory scientist but it also affects their ability to complete the coursework and acquire a position as well. Annoying habits, demeaning and inappropriate language, a bad work ethic are all things that laboratory science programs do not want or need (Makely, 2009). This profession has quite an effect on the well-being of the community; that is why professionalism is so important. Professionalism is something that applies to the training of laboratory scientists and their preparation for entering the workforce. According to Latshaw and Honeycutt, "Cultivating professionalism in students is a goal of all clinical laboratory science NAACLS accredited programs" (2010, pg. 1). By instilling into students the importance of serving the community around them and by ensuring the betterment of their skills, student can help work toward a brighter future. Since people have to depend on the knowledge, skills, and professional actions of the laboratory scientist, it is importance to be sure those entering the workforce have that same professional attitude (Latshaw & Honeycutt, 2010).

In conclusion, laboratory ethics and professionalism is not a new theory but often it is not put to use properly. Ethics is a system for making the logical and correct decision in a situation that challenges one's moral integrity (Aiken, 2002). The emerging system of bioethics, which is the system of ethics in a healthcare application, has become much more prominent over the last couple of decades as medicine advances and moral dilemmas tend to increase (Desikan, Charkarbati, & Muthswamv, 2011). With the invention of new genetic testing and being able to

know more about how things are going to affect an individual, bioethics is more prominent than ever before. The more laboratory medicine advances then medical laboratory scientists need to be more professional, well-educated and have a better moral compass (Desikan, Charkarbati, & Muthswamv, 2011; Aiken, 2002).

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