

Ethical Considerations On Using Autopsy In Medical Process Of Learning And Research

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ABSTRACT

Autopsy has always been the foundation of medical educational and biomedical research process. During time, post-mortem examinations had a main role in training and forming of medical professionals; many generations of doctors have learned anatomy, pathology and physiopathology at the autopsy room, at autopsy table; results of post-mortem examinations, through pre and post mortem findings have represented the foundation for most of modern medicine knowledge.

Medical students, by attending autopsies, acquire anatomy and pathology information, so, they have the possibility of better understanding the clinical-pathological co-relations, also they have the possibility of differentiating the two types of autopsies (clinical and forensic) and in which cases they choose one or the other.

Another important aspect regards the possibility of knowing legal and ethical aspects relating to death, including how to certify death and filling in a death certificate.

Using autopsy as a teaching tool is a great benefit in medical educational process; visual experiences one has while taking part in an autopsy process last for long and can not be replaced by alternative methods (virtual autopsies and computer software).

From ethical point of view, the acceptability of using autopsy in medical learning process and in medical research is of high complexity due to potential ethical conflict between the necessity and benefit of using autopsy or dissections in the learning process/medical research and the right to physical integrity of a person (even if deceased) whose lifeless body is subjected to post-mortem examination procedures.

KEYWORDS: *autopsy, benefit, ethics, human body/corpse, learning*

1. BACKGROUND

It is well known that autopsy has represented the main “tool” for finding out the mysteries of human body in all its’ complexity.

Autopsy has always been the foundation for medical education and biomedical research; from ancient times it provided precious information that are still valid today, data obtained through dissections and autopsies performed on human corpses.

For most of us, anatomy lessons held in autopsy halls are alive and memorable. We can’t stop remembering the emotions and the reluctant steps towards the autopsy table at our first practical anatomy lesson (dissection) and the tens of questions rolling in our minds regarding what we saw.

Then, as time went by we arrived in the autopsy hall, where, another universe opened before our eyes, while with our youthful enthusiasm, we were trying to absorb as much as possible.

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Using autopsy as a teaching and research tool in the learning and research process involves aspects we cannot overlook.

- the relevance of autopsy in the forming and training of medical students and young doctors
- the fact that autopsies/dissections on human corpses can be a real emotional “challenge”
- medical pre-clinical teaching activity requires a high level of intrusion on the human body during anatomy demonstrations
- obtaining the consent of the care-takers for utilising the body or for harvesting tissues or organs for teaching purposes

2. IMPORTANCE AND ROLE OF AUTOPSY/DISSECTION IN MEDICAL LEARNING PROCESS

Autopsy has always been the main tool for the medical learning process. During time, post-mortem examinations held an essential role in teaching and training medical professionals; many generations have learned anatomy, morpho-pathology, physiopathology in the autopsy room; results obtained constitute the main frame for modern medical knowledge.

Autopsy represents a valuable teaching tool offering the possibility of visualising lesional processes and facilitating the understanding of basic pathology; it allows debating over medical uncertainties and is a measuring tool for the quality of medical health care.

The use of autopsy as a procedure in the teaching-learning process helps medical students understand and integrate knowledge from their pre-clinical years; it is also useful in practicing reason and deduction for understanding clinical cases,[1] has suggested that exposing medical students to autopsies during educational process will help them in their future medical practice, in understanding what means a post-mortem examination and which are its' benefits.[2]

Medical students by attending autopsies acquire deep anatomy and pathology knowledge and so, they have the possibility of a better understanding of clinical and pathological correlations; altogether they learn to differentiate between post-mortem examination and forensic autopsy and the conditions when each applies.

Another benefit is represented by the possibility of knowing legal and ethical issues related to death: how to certify death, how to fill in a death certificate. Hill and Anderson have identified main areas of knowledge that can be effectively taught to students through their attending autopsies.[3]

By attending autopsies, medical students have the opportunity of improving their diagnosis skills; it is also most probable that they acquire and improve the ability to talk to the families of the patients, mostly in difficult cases or in delicate situations like the death of a patient.[1, 2, 4, 5]

From the first two years of medical studies, during demonstration classes of anatomy, dissections help promoting deductive reasoning and co-relating data in order to solve clinical cases.[1] Human bodies' dissections have had an essential role for medical learning process since Renaissance period.[6]

Dissection of the human corpse is the act through which the body is cut open in order to expose the human anatomy for studying purposes: topography and structure of its' components. One can say that the experience of using dissections as a teaching tool offers students a better three-dimensional perception of the human body (and a better understanding of variables and anatomical oddities; knowledge acquired this way are decisive for medical training generally and for surgeons particularly).[7]

3. PSYCHOLOGICAL AND EMOTIONAL ASPECTS RELATED TO THE USE OF HUMAN CORPSES IN THE MEDICAL TEACHING PROCESS

Beyond obvious cognitive benefits, from the emotional point of view, autopsies/dissections on human bodies, as methods used in medical teaching, are a real “challenge”.

Many medical students interact for the first time with a lifeless human body during anatomy classes at dissections demonstrations.

Some authors suggest that emotionally, autopsies and dissections are strenuous and challenging for students; the dissection of a body is not simply a technical exercise as it involves emotional reactions regarding the human dignity of the deceased.[8] Autopsies and dissections offer the opportunity of debates over ethical and legal issues of the death and certifying of death; an autopsy may represent a good opportunity for discussing psychological and social issues co-related with death and clarifying moral and ethical dilemmas regarding one’s death and every aspect that derive from it.

In some authors’ opinion, experience brought by the use of cadavers in the studying process will help the medical students in their future practice as doctors, so that, in spite of their permanent exposure to diseases, suffering and death, they can have a proper empathic attitude towards their patients and their families.[6]

In medical literature a series of medical studies were published with the objective of analyzing attitudes and emotional experiences of medical students while taking part in demonstration classes for autopsies and dissections.

Autopsy/dissection is an emotionally challenging teaching method, but it helps students face situations of high emotional impact without impairing their empathy for the patients.

There are situations when teachers cannot accurately appreciate psychological reactions of their students when viewing what autopsy/dissection procedures mean; consequently this intensely emotional experience can distract attention from the educational benefit. It is imperative to ensure all measures have been taken in order to decrease this type of reaction. [9] also, it is an opportunity for training self-control, professional conduct and integrity, which are so important in their future medical practice.

Teachers have a main role in the teaching-learning process, especially when situations are emotionally challenging for the student. An intensely emotionally situation, be it positive or negative emotion, lingers in memory for a long time; this is why teachers’ role is to guide the medical students to have a positive attitude towards the use of autopsy/dissection teaching method, and help them understand the aim and benefits of this procedure.

These way students can overcome most of the psychological and emotional obstacles towards the teaching method through the use of human cadavers.

Together, teachers and students can debate the proper attitude towards the patient, the use of human body in medical practice and how to manage the rush of emotions that can overwhelm people. From debates like that medical students can experiment the right way to perceive the human body in the autopsy hall and how to discuss “with” and “about” patients; this debates are to have a positive impact on professional social skills of students.

4. ASPECTS REGARDING ETHICAL ACCEPTABILITY OF USING AUTOPSY IN MEDICAL TEACHING PROCESS

From the ethical point of view the acceptability of using autopsies in medical learning and research process is highly complex, due to the potentially ethical conflict between the necessity and the benefit of using autopsy/dissection and the right to physical integrity of a person (even in death) whose body is subjected to the techniques and procedures of a post-mortem examination.

Considering the above mentioned issues, we can justly ask ourselves if the technical maneuvers which are required by a post-mortem examination are against the moral - ethical and religious principles and in accordance with the respect owed to a human being even if “in conditions of technical procedures a post- mortem examination can get ethical acceptability and legitimacy”.

In order to solve these dilemmas, the starting point is the goal of a clinical autopsy, respectively the “why” and “for whom” the results obtained are useful; also, another important issue is to determine if the aim of a post-mortem examination can offer the procedure legitimacy and under what circumstances.

Post-mortem examination was the foundation of medical sciences development. At the beginning of the XXth Century autopsies practiced on patients that died in the hospital played a major role in medical educational process;[4] benefits derived from them being vast and long termed: establishing exact cause of death, diagnosis certainty, enhancing inconsistencies between clinical and post-necrotic diagnosis, possible clinical and pathological co-relations and their positive consequences in medical educational process (college and post college training, forming and performing), ensuring epidemiological data base accuracy with high impact on health policies and strategies, all these are only a part of the multiple positive aspects that define usefulness of post-mortem examinations ensuring the noble status of its’ aim. The way to use a human body for educational activities for autopsy/dissection must be in accordance with the respect we owe to the person as a “former living human being”.

Performing an autopsy/dissection on a dead body can seem to be against the principle of respecting integrity of the human body, but in a strictly controlled environment the performing of these kind of techniques can obtain acceptability and moral-ethical and legal obligatorily.

It is essential to differently approach these two procedures: autopsy and dissection of the human body. In case of autopsy intrusion on the body is only partial and short lived, as the body is returned to the family in a recognizable shape for the burial?

In case of dissection all the maneuvers on the body lead to an alteration (even fragmentation) of the body, at the end of the study the cadaver has a different route that doesn’t include usual religious and funeral services.

The specific techniques of these procedures and the way they are performed, both teachers and students must be careful not to bring damage to the inner value of the deceased.

Due to their specificity, anatomical dissection activities or other educational procedures on the corpse (oro-tracheal intubations, surgical techniques, harvesting parts of the body for permanent anatomical models, a.s.o.) moral-ethical issues of a more delicate nature occur.

The main challenge is how to procure corpse that are to be used in educational processes.

From the ethical point of view the most acceptable source of bodies would be those obtained through voluntary donations of the own body while still alive. [10].

This way is would be respected the basic principle of autonomy and the motivation rests in the fact that it is a selfless gesture in the benefit of society (teaching the future doctors, contribution to the progress of medical science).

We must also mention that the use of the deceased body will be strictly according to the limits offered by the donor or the caretakers through the donation act and at the end of the study the dissected corpse will be used for other didactic purposes (obtaining of skeletal pieces or other permanent anatomical samples) or scientific ones, only if the person or its caretakers have agreed to that.

5. CONCLUSIONS

Autopsy/dissection as didactic tools in medical teaching-learning activity, through the possibility of co-relating lesion aspects with clinical context remain undefeatable, as there is no other equivalent alternative. The impact of directly seeing anatomical aspects and lesion ones while understanding morbid characteristics of diseases is very strong and unforgettable.

‘The need for knowledge ‘in the area of healthcare and clinical education is an important factor in accepting autopsy/dissection. The use of the human body must stay within the limits of profound respect for the deceased. Beyond the obvious cognitive benefits, the use of the human body allows the initiation and development of an attitude of respect, empathy and compassion for MAN and the value of LIFE.

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