SKILLS AND ABILITIES FOR NURSING PRACTICE IN EYE BANKS

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ABSTRACT: The study describes the skills and abilities required for working in Eye Banks, from the perspective of nurses, and offers subsidies for professional nursing practice in these services. This was an exploratory, descriptive study with a qualitative approach. Data were collected through semi-structured interviews with seven nurses working in this service and analyzed with the support of content analysis. By analyzing the testimonies of the subjects in this study, the managerial dimension was perceived as relevant for the subjects, through their statements. Skills required to work in Eye Banks, from the perspective of nurses, included: skills related to education, communication, leadership to maintain team unity; ability to deal with the corpse; and, dexterity in the technical procedures involved. It became clear that nurses needed to devote greater attention to the dimensions of teaching and research. This is a new scenario for nursing practice and it is required that nurses acquire new professional skills.

INTRODUCTION

Transplants have become more safe and available, being alternatives for health. It is worth noting that therapies are progressively more possible, as they offer the opportunity of survival and of better quality of life. Besides that, alternatives are needed since the population’s expectation of life is increasing.1-2

Brazil stands out as one of the countries with more governmental organ and tissue transplant programs, as it is the second country in the world in number of transplants, falling only behind the United States of America. The Unified Health System (SUS) funds more than 95% of the transplants performed in the country, and also subsidizes all immunosuppressive medications for patients.2

Among the transplants performed, corneal transplant is the procedure of tissue resettling with the highest success in humans, and it is the one most often performed. This occurs, among other factors, due to the growth in the number of donors, low rejection rate for this type of transplant, and because there is an increase in the number of Human Ocular Tissue Banks (HOCTs), more commonly known as Eye Banks. Furthermore, the organization that has the aims of effectiveness and efficiency in these services contributes to corneal transplant being a success in the world and in Brazil.3-4

Corneal transplant is also notable for what it represents in the recovery of vision of an individual, due to the fact that corneal diseases are the second cause of reversible blindness in the world, and cause major economic and social loss. The corneal transplant, or keratoplasty, may have diagnostic, therapeutic or tectonic purposes (when the corneas are used in transplants of urgency). Thus, we can infer what the transplant means to someone who is on the waiting list.3,5

The relevance of this study is anchored in the premises that nursing practice in this area is recent, with a strong trend of expansion, and of significant social impact. Added to those facts is the growing technological advancement in the healthcare field, with expansion of the HOCTs; this is evidenced as a new work field for professionals, and it is conducive to formation of professionals and researchers. It is also noted that the number of studies concerning the competence of nurses in the process of organ and tissue donations for transplants is incipient, especially regarding the role of these professionals in HOCTs. Therefore, research is the nursing field is necessary for improving methods used in both the organization and in the delivery of services in this area. In particular, research is needed that guides the work process of nurses, mainly regarding the expertise and abilities required, since this represents a specialized area that demands specific education.

Under this scenario, the guiding question for the development of this study was: what are the skills and abilities necessary for nurses who work in HOCTs? Therefore, this article had as its objective to describe the skills and abilities for working in the HOCTs, from the viewpoint of nurses, and to offer subsidies for nursing practice in these services.

METHODOLOGICAL ASPECTS

The present article presents part of the results of the research “Human ocular tissue banks: the role of the nurse”, developed as a thesis for the graduate program of the master’s in nursing of the College of Nursing of the Federal University of Juiz de Fora. A qualitative research study was conducted whose methodological design was based on the hermeneutic-dialectic, which is an analysis method derived from the human and social sciences that contemplates the individual as a historical being and considers conflict and contradiction as part of the reality.6 Thus, the analysis that follows the principles of the dialectic attempts to apprehend the social practice in its contradictory movements, in a reality that is not ready and set, but is provisional and in constant change.

The study scenarios were the HOCTs of Minas Gerais (MG), with the exception of the HOCTs of Juiz de Fora, in which the researcher worked as a nurse during part of the time this research was conducted, and the HOCT of Governador Valadares, which was already authorized, but had not yet begun its activities. Thus, the subjects of the research were a group of seven nurses that work in the HOCTs of Belo Horizonte, Uberlandia and Alfenas, and that, upon invitation by phone, agreed to participate in the study. According to the proposed method, a semi-structured interview was the technique adopted for data collection.

The fieldwork, including visit to the service and interview, was conducted between April and October of 2012, through prior appointment by phone or email. The interviews were conducted in a reserved place in the HOCTs, the work environment of each participant, and the time of duration ranged between 10 to 24 minutes.
For analysis of the participants’ testimonials, content analysis was chosen, specifically the “thematic analysis”, as a technique for treatment of the empirical data. Therefore, each interview was transcribed upon its completion, highlighting the themes and relevant matters present in the interviews, concerning the skills and abilities of nurses in HOCTs, including them in the succeeding interviews. Detailed reading and rereading of the material proceeded after completion of the fieldwork, starting with coding of the content using keywords and themes related to the question that were present in the statements, considering repetition of them in each interview.

The coded data were grouped into categories and subcategories according to thematic affinity, considering the essential structures captured in the empirical material. In the analysis of the content, the references were theoretical conceptions present in the field of nursing knowledge, as well as the policies and the results of current research on the topic. Thus, the competencies and skills of nurses in the HOCTs were found in a central category in this analysis.

This study was approved by the Minas Gerais Hospital Foundation Research Ethics Committee (CEP/ADC/FHEMIG, protocol n. 010/2012). The interviewees were given detailed information about the research, especially about the purpose and procedures, ensuring their freedom to accept or decline the invitation. They all signed the Terms of Free and Informed Consent, according to the determinations of the National Council of Ethics in Research. To ensure the anonymity of the subjects, code names of flowers were used.

**PRESENTATION AND DISCUSSION OF THE RESULTS**

Health and education are areas that are directly involved with cultural, economic and political diversity, and with the constant transformations of society, sometimes becoming scenarios of conflicts, contradictions, demands and of challenges that require definitions and changes. Thus, they are continuously called to reflect. Especially in the health field, new social, political, economic, managerial and scientific demands arise, requiring that nurses (re)position themselves and seek new skills.

The HOCT is a new scenario for nursing practice and it requires specialized knowledge. Therefore, the role of nurses in this scenario demands reflections about their socio-political and technical-scientific role, in order to understand and extend the necessary skills and abilities, as well as to guarantee their space in the multidisciplinary team.

The theme of professional competence is an interest of many workers, managers and health researchers. A leading proponent of competence-based training is Philippe Perrenoud, a Swiss sociologist who dedicated himself in a pioneering way in the educational field, to studies about professional process based on competence with a view toward mobilizing knowledge to generate results. For this author, competence is not a given, it is constructed. This construction may be initiated in school, but almost always it is independent of it, requiring from the professional the ability to act effectively in a particular type of situation, an experience of the real world, with the support of specific knowledge, but it is not limited to these.

In the current context of nurse education at the undergraduate level, given its general characteristic, the theme of organ transplantation runs through the curriculum in a transversal way, without the intention of generating the construction of such competencies.

Therefore, HOCT nurses must invest in the development of human and technical competencies and abilities, so they can offer holistic care to those involved in their work process. Among the nurses’ notes about essential skills and abilities for their work, we noticed that something cited repeatedly was the need for knowledge about human anatomy, physiology and pathology. In the following excerpts, this can be observed in the interviewees’ statements:

*I think we should always be studying. It is, for example, I have seen situations of pathologies that are contraindicated and I did not know it. I did not know during undergraduate [school], even during the time I worked in the inpatient unit, I did not know this. So we are always searching. Thus, every time a pathology appears, sometimes even one that is not contraindicated, I have to seek to know, to study it more, so I can really know and be sure (Azalea).*

*another thing would be to know more about the eye anatomy. To know about the pathologies, which are relative and absolute contraindications (Dahlia).*

*I think that if we think about our formation in anatomy, I think it is fundamental (Bird of Paradise).*

*We must have theoretical knowledge, knowing how to evaluate an eyeball, a cornea, if this cornea can be transplanted or not. Because X [cites the name of a physician of the Eye Bank] does that. But we are the*
first people to get this eye, this globe, so I think that way; we need to know the eyeball anatomy (Fleur-the-Lis).

Some interviewees emphasized the need for detailed knowledge about dilution of the blood sample in transfused patients that are potential donors:

We need to know all this knowledge, of physiology, pathology, to even know about dilution of the blood sample, the amount of fluid replacement that the patient received, amount of blood transfusion, do this count to know how much of this blood sample I am collecting will be reliable, even which amount of dilution I’ll be able to consider. So, this way, knowledge is always being sought, no doubt about it (Azalea).

It is also the question of blood transfusion, blood volume transfused, of the blood dilution issue. We need to know this first, to know the contraindications for the donation. This has to be really clear and it must be on the tip of the tongue, because when you are notified by phone, you need to have an immediate answer, because safety is what the person on the other side waits for, for a service of the MG Transplants (Camellia).

Dilution of the blood sample may result in findings that are inconsistent with the clinical situation of the patient, compromising the laboratory analysis and generating unreliable results. Therefore, the nurse needs to know the medical history of the patient, including the treatments performed, so there is no impairment of the donated tissues.

Besides the knowledge about blood dilution, the subject of the study highlighted the importance of having knowledge of the different pathologies that contraindicated corneal donation, to provide agility to the process, given the reports of deaths received. This need was also identified by other subjects, as can be noted in the statement that follows:

[the Eye Bank nurse needs to know] what are some contraindications, that has that big list (Sunflower).

In Brazil, the Resolution of the Executive Board (RDC) n. 67 of ANVISA, of September 30, 2008, regulates the contraindications in the use of donated corneas and the serological exams required for the release of tissues for transplant. These contraindications should be investigated during the gathering of information about the social and clinical history of the potential donor. For that, the patient’s medical record, death certificate, the healthcare team, family or people related to the potential donor, among others, serve as data sources.

It is imperative that nurses who work in HOCTs know the existing contraindications for donation, as they must also be sensitized about the necessity of performing a wide investigation about the behavior and clinical conditions of the potential donors, to ensure quality of the service provided, especially, of the tissue donated for transplant. This is a complex skill, that demands that nurses seek scientific knowledge about the underlying pathology, about the tools, technologies and the processes of care related to harvest and transplant, as well as the development of abilities specific to the management sphere of the HOCTs, that support them in making decisions and that contribute to the formation of a professional profile for the area.

The search and consolidation of this knowledge can be stimulated beginning in undergraduate education, because it is necessary for the continuing education of the professional. It is noteworthy, however, that only having this knowledge is not sufficient. It was abstracted from the empirical data collected that it was necessary to combine scientific and technological development, achieved with the rescue of human values, in order to obtain humanistic care, supported by the principle of integrity. This care encompasses recognition of rights, demands and necessities, and a variety of possible technologies. Some individuals emphasized the need for nurses to know the law about donation of organs and tissue transplants and about the service itself:

[...] well, first know the legislation… the statute, the Eye Bank and MG Transplants regimens […] (Dahlia).

[...] first, I think that it is the theoretical ability, because it is an area that is very bureaucratic. The legislation […] you need to be very careful. It is not just go there, preserve and enucleate […]. I think the professional has to know well the donation and transplant process (Sunflower).

The nurses’ actions, regardless the practice area, must be anchored in legislation and ethics. From the moment that the nurse has the necessary knowledge about legislation, he will have a guideline on how to act and he will know the deficiencies of the law, and may act to transform it.

The confidentiality, you know, is our priority, so when a donor comes [the eyeballs and the donor documentation] he ceases to be named and passes to having a number. I think confidentiality is a priority here (Fleur-de-Lis).
The knowledge and the sociopolitical act of the nurse contribute to a broad vision of the role of the nursing staff facing the responsibility and commitment as agents of organizational, social and political change. The biomedical model does not respond to health demands; it decontextualizes, in a sociocultural way, the human being, fragmenting it as if the human being was separate and independent parts. This rational positivist model does not value the multiple dimensions of the subject, nor his authenticity. As a result, some strategies have been implemented in the pursuit of balance in healthcare practices, such as humanization of care.13-14

Technical skill in this service was highlighted in the interviews with the subjects of this research, as being necessary for the nurses working in HOCTs:

 [...] I also think that it is somewhat connected to the instrumentation, because it is collecting. We have to pay attention; you need to have the ability, be delicate. So I think that it would have to have something in that direction (Bird of Paradise).

 [...] and then the technical skill, also. Because you need to have the technique to do enucleation and, even more, to preserve [the eye]. Thus, you must also have technical ability (Sunflower).

It is prudent to emphasize that nursing needs to find a balance between scientific knowledge and the practice of humanistic behavior. One should not lose the focus of nursing, which is care. In this sense, the necessity of development of different abilities was mentioned by some of the interviewees:

 [...] you should not only have the technical knowledge. You have to have a whole […] [it was understood that the nurse needs technical and cognitive abilities to function in this service, with psychology even involved] (Azalea).

 [...] so I think that it is this way, besides the technical ability, that is not the most important, the most important is to have emotional control, to know how to demonstrate it to the family, and the family has to feel that security from the nurse or other professional who will be approaching (Azalea).

From this statement, the emotional control when confronting related circumstances concerning the work was identified as a required ability of nurses. Dealing with the corpse and with the grieving family are potential sources of stress for the professional. Particularly, during the approach to a family interview, emotional control is necessary, as well as communication skills. Given this, one of the subjects in this study stated that previous professional experiences make a big difference in the performance of nurses in HOCT:

 oh, I think first you have to have a… you need to have a previous knowledge of the hospital environment, thus, the knowledge of the diagnosis (Camellia).

Nursing needs to adapt itself to new organizational, administrative and care challenges that arise. Certainly, the acquisition of skills and abilities contribute to professional practice in a peculiar scenario such as this one. In order for this to occur, the role of education is essential. Advances are needed, since colleges of higher education evolved in the conception of health, and therefore of care, but have shown themselves to be conservative regarding the content discussed and the teaching methods adopted. Furthermore, the fact that innovation occurs faster in the service areas than in the education field is not rare.15

Moreover, the practices of health care have undergone transformations with respect to the conception and way they are performed, due to the consolidation of SUS, which brought changes in how to manage and provide care. Paradigm changes in the organization of the health services imply the necessity of changes in the educational process of the nursing professionals.

Emphasis was also given to the records made by nurses in the service. This can be observed in the excerpts:

 I always like to leave everything very detailed in the chart […]. I think the more information I have, more detail in the chart, most complete, there is less chance of error, less chance of a problem in the future. Knowing that is a document of extreme importance and confidence (Azalea).

 [...] you need to see all the documentation that arrived for you, the documentation you have (Sunflower).

After each donation, the printed copies containing information about the donor and the donation are archived in a specific medical record with alphanumeric identification. In addition, the donation must be registered in the nursing occurrences book. All records of the data about donors, the tissues and the recipients are confidential, respecting the confidentiality of the identity of the donor and recipient, and are archived in the HOCT for a minimum period of twenty years.
It is mandatory that the HOCT document in a specific book with opening and closing made by the Board of Sanitary Surveillance of the State or Federal District, or in a computerized system, with backup and tamper proof copies, of the relevant information about the input records, release and reentry of ocular tissues, as the RDC n. 67, September 30, 2008, determines. It is noteworthy that the HOCT document, as the RDC n. 67, September 30, 2008, determines. It is noteworthy that it should be recorded if the ocular tissues were provided for research, teaching, training, and validation of process when appropriate, and that the results of the serological markers are also archived in the HOCT.

Such records need to be done with legible writing, without erasures, in a clear, objective and complete manner, identified with data, signature and stamp - containing full name, registration number at the Regional Nursing Council (COREN) and occupational category, in accordance with the Resolution COFEN n. 191/96. They serve as a legal basis to protect the professionals and the institution itself, provide continuity of nursing actions, and also subsidize elements for research and improvements in the quality of care.

The need to understand the different types of technologies by the professionals, in a way that the use of them contributes to improvements in the quality of health services, was defended. The inappropriate use of hard and soft technologies leads to anonymity and depersonalization of the patient. It is worth mentioning that technologies are not what depersonalizes the patients, it is caused by the use. Technology and humanization can and must be merged.

The integrality of care is constructed from the perspective of an education of professionals that combines technical-scientific competence and ethical-political commitment. Therefore, the integrality of the care is implied in: the assumption of professors and students as beings in formation; knowledge as something unfinished, as a construction that does not end. Therefore, the stimuli for critical thinking must occur at undergraduate levels and the educational practice should serve as a starting point for reflections regarding praxis and for transformations that may be necessary.

Care is the essence of nursing, and authentic care goes beyond the care for illness or isolated parts of the physical body. Care is involved in various dimensions of the subject. The reconstruction of health practices is necessary in order to see and take care of the individual as someone who is unique, where the whole is certainly greater than the sum of its parts. The student should understand the need for tacit commitment between the profession and society. If this is so, the nurse will be an agent of change in the context where he practices.

Another point highlighted by the research subjects was related to the ability that nurses need to have to be able to work within the Intra-Hospital Commissions of Organ and Tissue Donation for Transplants (CIHDOTTs), so that the expansion in investments and campaigns on the theme works along with awareness of the professionals and inspection of the institutions, to promote effective functioning of these committees. One of the study subjects mentioned the absence of these committees in many hospitals, although its constitution and functioning are mandatory, according to the GM Ordinance n. 905, August 16 of 2000.

The majority of hospitals around here do not have CIHDOTT. So now they are beginning to be implemented (Sunflower).

One strategy identified in the interviews to improve performance in the HOCTs and, consequently, increase the rate of donations and quality of the processes, was the work of the professionals within these committees. Nurses recognized the deficiencies of most of these commissions and mentioned that the next action, whilst they should be partnered, contributed to the development of impactful actions in cornea donation policy in the state and country.

Always be improving the contact with CIHDOTTs. You know, because we know that the CIHDOTTs are not entirely adequate in all hospitals. There are hospitals in which they are more active, and there are hospitals in which they are less [...] (Begonia).

I think the Eye Bank nurse; he should be more active in continuing education. So, therefore, he often gives more service to CIHDOTT. I do not know the other Eye Banks, I believe they do that also, but I think that here we could do more in continuing education. It is perhaps a bureaucracy of the CIHDOTTs, of the professionals themselves; it would have to be improved (Sunflower).

The professionals of the HOCTs must work together with the CIHDOTTs, and this partnership contributes to the strengthening of the health system in our country, in a way that the members of these committees have the support and clarifications necessary. It is known that the constitution of a CIHDOTT was not always easy. This can occur due to: the lack of interest from the boards and professionals; lack of clarification and manager...
supervision of the transplant service in different instances; the decreased number of professionals in the institutions; the workload of many professionals, among other variables.

Growth concerning donation and transplants policies needs to occur within the institutions and the professionals that work in the services of donation/transplants have to assume their roles, especially the managers of the transplant system. In this way we can create effective CIHDOTTs and enhance the number of corneal donations.

Some interviewees affirmed that to maintain the union and integration of the team were priorities in the work of the nurses in HOCTs, as the statements describe:

 [...] it is to maintain the balance and team bonding [...]. It is primarily this ability to work in a team, to make sure the team is always motivated, united [...]. You know, I think that is the principal. Because it is a place where you cannot have holes! (Azalea).

I think the priority is the issue of a well-integrated team. I think that the team training […]. I think the team, being synchronized […]; I think that this is the most important. Because the activity itself is something that you train and do (Camellia).

The investment in human capital is the key to changes in the organizations and the teamwork translating into lasting results. In the health field, the nurse is seen as the facilitator of teamwork. From the moment in which the employee feels recognized and valued, strategies for work are considered and put into practice, aiming toward improvements in the work process. Therefore, it is necessary to reflect on strategies for leadership development and elaboration of an organizational ambiance that is favorable to creativity and respect.20

One professional stated that administration is a priority for the performance in HOCT, both the management of general services as well as the nursing service:

The major activity is removal, enucleation, which is vital. But our activities are numerous, starting with the administrative, the distribution, the monitoring along with physicians, the preservation of corneas, checking materials, organ distribution, delivery, shipment, […] material supply, […] especially in the approach (Begonia).

Still, this professional points out that the ability to deal with the corpse is of extreme importance, as well dexterity in the technical procedures involved. The statement below illustrates the relevance of professional skills to act in the specificity involved in the cornea donation:

It is this ability of knowing how to deal with the corpse itself […], because they often do not have this ability, they handle very well the operating room, many times in surgeries more complex than ours, but they cannot deal with the corpse itself […] and having dexterity, good dexterity and the ability to puncture (Begonia).

This report highlights the importance of the technical ability in some procedures involved in cornea donation, as well as the emotional balance necessary for the performance of activities with the corpse and the family.

Finally, it is noteworthy that the formation and praxis of nurses should encompass the caregiver, managerial, educational, and scientific research dimensions; and those are supported by the Law of Professional Nursing Practice.21 Some of these dimensions were mentioned by the nurses and others not, according to the testimonials presented. This demonstrates that the role of the nurse as educator and researcher requires more attention.

**FINAL CONSIDERATIONS**

A first consideration about the findings of this research rested on how this new scenario has been consolidating nursing actions, with basis in the knowledge that emanates from daily practice, full of specific demands and internal conflicts, contradictions, requiring new professional skills, such as making the interpersonal relationships and the technical-scientific knowledge work together.

It was possible to conclude that the performance of nurses in HOCTs was essential, and that it required both objectivity and subjectivity in the course of the driving actions that guided the working process. It is acknowledged that nurses, as historical and social subjects, should be able to problematize reality, reflect on the care they offer to the public to recreate the reality of work, and develop interventions committed to the needs of human beings. Additionally, the educational process must be continuous, beyond the walls of universities, becoming transformative and supported in the social context of the subjects involved.

It is noteworthy that emotional balance was an important skill to be developed to work in HOCTs, from the viewpoint of the nurses surveyed, other skills were: those related to education; leadership to maintain unity and the integration
of the team; knowledge on how to deal with the corpse; and, the dexterity for the technical procedures involved.

Among the skills captured in the discourse of the nurses, managing the nursing team and sometimes the service as a whole was identified. Possibly it was a first competency to be built when entering this service, since the statements of the subjects identified an exhaustive repetition of actions of a management nature. This included management (bureaucracy) of the service, which required planning and evaluation, as well as leadership skills. It was evident that a demand which they recognized and understood was that they should continuously devote attention to training and research, especially for the recognition of advances in the area of work.

The transformative praxis encourages an emancipatory knowledge, contributing to the empowerment of nursing in different scenarios of operation. This is no different within the HOCTs. It is a new scenario for nursing practice and requires that nurses acquire technical and human skills. In the end, no one denied the importance of technical scientific knowledge for the role of nurses in these scenarios, but it alone did not answer all the needs presented in daily work. More and more transplant and organizational policies need to recognize this and aim towards improving work processes, including those related to HOCTs.

Nursing should not wait passively for professional actions that should be taught to be prescribed, but should proactively embark on understanding and developing skills required for each new social demand, from the knowledge obtained to the knowledge and practices that are specific to them. It is argued, finally, that education is the path to the development of nursing in any area, including the area of donation and corneal transplant.

REFERENCES


