



“Cadavers with a Soul”: A Qualitative Study of Individuals Who Donate Their Body

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Abstract

Aim: The study was conducted to determine the thoughts of individuals who donate their body.

Material and Methods: This study was qualitative research conducted using the case study design. The sample was determined with the purposeful sampling method and 9 individuals who stated that they would donate their body were interviewed. The data were collected between March and April 2022 with an information form and a semi-structured interview form and analyzed with the content analysis method.

Results: The mean age of individuals was 67.11±4.10 years. Five of the participants were male and four were female. Eight out of nine people were married, all were university graduates and retired, and eight had good income level. Two main themes and five sub-themes were revealed in the research. The themes were determined to be support (*contribution to health education, chain of immortality*) and obstacles (*pressure from family and religion, awareness, uncertainty*).

Conclusion: Individuals want to donate their bodies to contribute to health education by leaving a legacy for science and think they will be immortal by offering their cadaver for science. Additionally, they feel pressure due to families and religious beliefs and think that society is ignorant about body donation and that the functionality of the body donation system is inadequate.

Keywords: Cadaver, body donation, thoughts, qualitative study

INTRODUCTION

Cadaver dissection is an integral part of medical education (1). Basic education obtained by observing the organization, structures and tissues of the human body in the real environment is very important for professional development of individuals training in the field of health. Therefore, education and training with cadavers has unique aspects (2-3). Today, with the advances of technology, although there are many visual education methods (4), studies on cadavers are still needed in clinical education and especially surgical sciences in order to improve the dexterity of health professionals (5). It is critical to have enough donors who donate their body to support health education (6). Voluntary body donations made by the general public in England and America meet the needs of health education institutions (7). In other countries such as

Nigeria, India and Iran, the bodies of orphans are donated to health institutions as cadavers (8-10). This situation is caused by many factors such as people's religious beliefs, social taboos, and cultural characteristics (11-14). In order to increase the number of individuals who donate their body, it is emphasized that the perception of the individual about whole body donation and what affects this perception should be known in detail (15). However, it was reported that people should be encouraged to donate because there is a shortage of cadavers all over the world (16).

In this context, it is important to determine the thoughts of individuals who plan to donate their body. In addition, determining the thoughts of individuals who plan to donate their body can contribute to increasing body donation in health education and research studies and awareness

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studies about this subject. In addition, studies that explain the thoughts of individuals who plan to donate their body will contribute to the literature and will also be beneficial to readers. For this reason, this study was carried out to determine the thoughts of individuals who plan to donate their body.

Questions of Research

- What do individuals who plan to donate their body think about body donation?

MATERIAL AND METHOD

Study Type

This research was a qualitative study using a case study design to determine the thoughts of individuals who will donate their body.

Study Population and Sample

The population of this research consists of individuals who applied for body donation in the anatomy department of a faculty hospital in a province of Kayseri in 2022. The sample was determined by the purposeful sampling method and 9 individuals who agreed to participate in the study constituted the sample.

Inclusion criteria for the study

Individuals over the age of 18, who applied for body donation (signed an agreement), talked and explained the subject of body donation with their heirs (family) and volunteered to participate in the study were included. Since having a mental illness would affect the results of the study, individuals with a diagnosis of mental illness, who made any payment or financial demands and did not volunteer to participate in the study were not included in the study.

Data Collection Tools

Data collection tools consist of two parts; "Information Form" with introductory information about individuals and the semi-structured "Interview Form".

Information Form: This consists of questions that include the introductory characteristics of individuals regarding their age, gender, marital status, employment status, income level, education level and body donation (Ten Questions).

Semi-structured Interview Form: This consists of open-ended questions evaluating the thoughts about body donation of individuals who plan to donate their body (Table 1).

Collection of Data

The data were collected by the researchers between March and April 2022 using the personal information form and a semi-structured interview form. The questions included on the semi-structured interview form are listed in Table 1. In the interviews, the questions were asked in

the same order and additional explanations were made when necessary. All of the stated opinions were evaluated as qualitative data. The data were recorded as interview notes with the permission of the participants who refused a voice recorder. Interviews were continued until data saturation was reached and were terminated when data saturation was reached. Interviews lasted an average of 40-45 minutes. The interviews were conducted in an environment where the researcher and participant could see each other easily, where there was no noise and disruption, and where comfortable communication was possible.

Table 1. Semi-structured interview questions

1. What do you think about body donation?
2. What does body donation mean to you?
3. What do you think influenced your decision to donate your body?
4. What do you think are the positive and negative aspects of body donation?
5. Is there anything you want to add that I didn't ask about and you think is important?

Evaluation of the Data

Quantitative data on the Personal Information form were evaluated in the computer environment and expressed as numbers and percentages. Qualitative data were analyzed by content analysis and written as raw data. Qualitative data were first written down in the computer environment by the researchers and then analyzed by content analysis. The themes and sub-themes were formed by revealing the relationships between the categories in the research data. Expert opinion was obtained from two independent researchers with qualitative research training and experience regarding the validity of the themes and sub-themes. After the expert opinions were received, unnecessary coding was removed, the connections between them were regrouped, the main idea in the expressions was discovered and the themes and sub-themes were finalized. Themes were supplemented with direct quotes when necessary. Citations are shown as participant number, gender and age (P1-Female 50, P2-Male 60).

Credibility and Trustworthiness of Qualitative Data

In this study, long-duration interviews, participant confirmation and expert review methods were used to ensure credibility. Before the in-depth interview, necessary information was provided for the establishment of secure communication between the researcher and participant, and data were collected on the planned day, time and place. For participant confirmation, at the end of the interview the data obtained by the researcher were summarized for the individuals and the individuals were

asked to state their thoughts on the accuracy. In addition, individuals were asked whether they had any final opinion that they would like to add. The interview was terminated by recording the additional explanations made. During the planning phase of the study, expert opinion was obtained regarding the questions on the interview form and the themes created. Thus, attempts were made to ensure credibility by obtaining expert opinions from the beginning to the conclusion of the research. Researcher triangulation was used to ensure reliability in the study. In the name of confirmability, interview notes were taken as raw data and notes about the statements of the participants during the interview, and the statements of individuals were directly included in the research report. It is thought that the research results obtained from the interviews with this sample group can be used in similar sample groups in different environments, and thus the transferability criterion was met.

Reflexivity

The self-reflexive knowledge of the researchers in this study is as follows, the first researcher (Ph.D) completed their doctorate in psychiatric nursing and has scientific research experience in qualitative research. The fact that the researcher conducting the interviews was a psychiatric nurse enabled effective communication with the participants. The second researcher (Ph.D) completed their doctorate in anatomy. They have scientific research experience in anatomy and body donation.

Ethical Aspects of the Study

The study protocol was carried out in accordance with the Helsinki Declaration of 1975 and approval was obtained from the Nevşehir Hacı Bektaş Veli University Scientific Research Ethics Committee (Decree no: 2022.03.028). Institutional permission was obtained from the anatomy department of the Erciyes University in the province where the research was conducted (Decree no: 220297). Written informed consent was obtained by explaining the purpose of the study to all participants. The names of the participants were kept confidential, and the participant number, gender and age were indicated as codes instead of names for the statements of the individuals (P1-Female 50, P2-Male 60).

RESULTS

Interview and sample characteristics

The mean age of the individuals was 67.11 ± 4.10 years. Five of the participants were men and four were women. It was determined that eight of the nine people were married, all of them were university graduates and retired, and eight of them had good income level.

Themes emerging from the interviews

In the research, two themes and five sub-themes related to the thoughts of individuals who plan to donate their

body emerged. The themes and sub-themes obtained in the research are presented in Table 2.

Table 2. Themes emerging from the interviews

Main Theme	Sub-Themes
Support	Contribution to Health Education Chain of Immortality
Barriers	Pressure from Family and Religion Awareness Uncertainty

Theme 1. Support

Most of the participants stated that they thought that the knowledge of students who used their body health/medical education would be improved. Individuals stated that their bones can contribute not only to the development of the students, but also to the professions of the students, the patients they treat and care for, society and humanity. However, they emphasized that they believed that the contribution of their body, as a cadaver, would be immortal and that they would live forever as cadavers with souls.

a. Contribution to Health Education

All of the participants stated that the main reason for body donation was that it is difficult to obtain cadavers in health/medical education, and therefore they wanted to support medical education and contribute to science with their body. They also stated that they believed their body would be useful to assist in medical science and teaching, and would be used for teaching and research.

"I learned that it is difficult to find cadavers for the education of medical students, that the cadavers are worn out and it is difficult to work on them. I think body donation is a very good decision. I believe it is necessary for medical school students to receive a better education." (P1, Male - 67)

"At least medical students will benefit from my body, which would just rot under the ground... I believe that many students will complete their education in this way. In addition, I will contribute to the development of not one but two, but hundreds of health/medical students and therefore thousands of patients they will treat" (P2, Female - 61)

b. Chain of Immortality

Almost all of the participants described body donation as a legacy left to science. They believed that they would become immortal in science with the legacy of their body. In addition, they stated that they were influenced by people around them in making body donations, wanted to be immortal in their impact, and that a chain of immortality would be formed with the widespread use of body donation.

"My body is a legacy I leave to science. While people are alive, they have buildings built, water fountains opened or schools built and named after them. To me, body donation

is the same thing, their name, my soul will be immortal!

"The transformation of my body into a cadaver is a symbol of immortality, isn't it? The people around me had a great influence on my decision to donate my body. I feel strong, happy, and well, as if holding hands in a science circle."

Themes 2. Barriers

Most of the participants stated that it was not easy to decide on the issue of body donation, especially that family members objected, and they were able to convince them after long struggles. They stated that there was not enough awareness-raising activities about body donation, and they had to deal with many time-consuming procedures when they decided to donate. In addition, they ambiguously criticized the different systems for body donation in each country and emphasized the necessity of an advanced system for body donation.

a. Pressure from Family and Religion

Most of the participants stated that the pressure of their families and religion was a major obstacle to body donation. They stated that family members associated body donation with worthlessness and opposed it, and they perceived it as a difficulty when they had to convince them otherwise. However, they stated that people around them tried to discourage them because of their intense religious beliefs and that they were uncomfortable with this situation.

"At first, my family was surprised... they didn't want me to donate my body and they were totally against it. I told them they had to respect my decision, although reluctantly they agreed after the last argument."

"Religiously, they say that the body will come to life again in the future. That's why I was put under a lot of pressure. Frankly, there is no meat on the bone when it is under the ground, if it will come to life, it can also come to life when used as a cadaver, right?"

b. Awareness

Most of the participants stated that there was not enough awareness in society about body donation. They stated that when they started to think about body donation, their decision was not clear, but the fact that there were people around them who planned to donate their bodies and they could exchanged opinions with them enabled them to make a firm decision to donate their body.

"I had a chance at body donation; While I was studying at university, I participated in an event for body donation. That's when the lights came on in my mind and soul. I said I could do it too."

"There are many people who ask what body donation is, I wish they knew what they can contribute as a cadaver..."

c. Uncertainty

Almost all of the participants criticized ignorance about

body donation and the fact that there are systems that differ from country to country. They expressed that they were concerned about the possibility that their body would not be used as a cadaver even though they donated it, and thought that the functionality of the body donation system was insufficient.

"There are huge gaps in the law. So I have concerns about whether I will be used as a cadaver after I die. I'm also afraid that instead of my body being donated to medical school I will be buried in a paupers grave. I don't think this system has been developed enough."

"I was given an identity card, but I don't know how clearly it is stated in the population registration. I have the identity card given to me in my pocket, but I am worried if I die at home or die in a traffic accident, if I don't have the identity card with me or it gets lost. Since it is not systematized, this situation gives me anxiety."

DISCUSSION

Cadavers form the basis of morphological research at all levels of health science education (17). In one study, it was found that participants wanted to further medical education/research (primary cause), want their body to have meaning after life (secondary cause), and donate their body to be useful (18). In another study, the majority of the participants were willing to donate their body for medical/research and learning, and about half of them found body donation contrary to their religious beliefs.16 Similar to the literature, the participants in this study stated that their bones could contribute not only to the development of the students, but also to the professions of the students, the patients they will treat and care for, society and humanity.

From ancient times to the present, both cultural and religious aspects and legal regulations have effectively limited the use of corpses for scientific research and teaching (19). Religious factors, socio-economic status, education, marital status or age may be the main factors affecting body donation (20). In a study, although body donation was thought to be a tool for learning surgical practices, it was perceived as an act contrary to belief (21). In another study, it was reported that body donation creates communication anxiety about death, and at the same time, religiosity or belonging to a certain religion negatively affects the decision to donate (22). The reluctance to donate is mostly affected by religion, psychological disability and family reasons (23). In a study, while most of the participants were in favor of donating their body in the future, very few of their families and relatives agreed (7). As a matter of fact, most of the participants in this study stated that despite their determination about body donation, they were pressured by their families due to their religious beliefs and this pressure was a major obstacle to body donation.

In order to train health professionals, it is necessary to raise awareness in society about the ongoing need for and value

of body donation (24). Although body donation is a very controversial issue, it is discussed very little by religions, traditions or society, so there is a need for awareness campaigns about body donation (25). Ignorance of body donation programs, lack of knowledge and religious beliefs are barriers that limit body donation (26). Similarly, most of the participants in this study stated that society was ignorant about body donation and they thought that the functionality of the body donation system was insufficient, so they had anxiety and fears about the completion of their donation.

In the study, the participants stated that when they started to think about body donation, their decisions were not clear. It was found that the participants were encouraged toward body donation after motivation through the media (family members, faculties, celebrities, etc.). It was also emphasized that there is a need for body donation laws to facilitate medical teaching, advance knowledge and expand the field of medical science (27). In this context, awareness studies about body donation may contribute to increasing donations.

Limitations of the Study

The country where the study was conducted is a country with regional differences in terms of culture and religious beliefs. In addition, all of the participants in the study had higher education (undergraduate and graduate) levels. These cases were considered to be limitations.

CONCLUSION

This study provides important findings about determining the thoughts of individuals who plan to donate their body and the approach to body donation. In the study, individuals plan to donate their body to contribute to health education by leaving their body to science and think that they will become immortal with the support they offer as cadavers. However, in the study, individuals emphasized that they were pressured by their families and religious beliefs about body donation, that society was ignorant and they thought that the functionality of the body donation system was insufficient, and therefore they had anxiety and fears. Activities such as body donation week can be organized in order to raise awareness in society about body donation. Donation programs can be organized by learning and taking into account the perspectives and characteristics of the society.

Limitations of the study

The results of this study are valuable in terms of discussing in dermatological and general quality of life HD and influential factors such as pruritus. However, there were some limitations in the study. Firstly, the study was completed with relatively small samples and may only be generalized for its of population. Secondly, a cross-sectional study design is limited in establishing a causal association between dermatological quality of life and pruritus. In order to be able to show causality, longitudinal studies are needed.

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Conflict of Interest: The authors declare that they have no competing interest.

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