

## **Organ Donation:**

**A literature review to compare the attitudes, knowledge and commitment of university health care students with non health care students**

### **Introduction:**

This discussion shows whether the knowledge and attitudes of university health care students differ from non health care students, especially in matters of organ donation and the focus of the discussion is on why student commitment towards the health profession tends to have any impact on attitudes and beliefs on organ donation. This essay describes the process of registering as a donor and the 'opt in' and 'opt out' systems. The attitudes that influence behavior and commitment towards organ donation are also studied and the role of the profession in health care in shaping attitudes and commitment towards organ donation is highlighted. Donor commitment, considering wishes of family members and differences between health care and non health care students are also identified. A brief history of organ donation is also given. The aims of this exercise are:

### **Aims:**

- to investigate whether a health care student's (a student studying in a profession that involves patient care) attitude, knowledge and commitment to organ donation differ from that of a non health care student.

- to explore whether there is a correlation between the choice of profession and attitude, commitment towards organ donation.

**Background:**

According to the NHS, 'Organ donation is the gift of an organ to help someone who needs a transplant. Approximately 2,700 organ transplants are carried out each year in the UK' (NHS, 2007). In the UK, more than 7000 people are waiting for organ transplant at a time and usually people wait for kidney, heart, lung or liver transplant. The NHS maintains a donor register which is a confidential list of people who are willing to donate their organs after their death. Although there are currently 10,926,428 people on the NHS Organ Donor Register, 400 people die every year in the UK as they wait for a suitable transplant as die in circumstances in which they are not able to donate their organs. The recipient of organs may have to take immuno suppressant drugs to prevent their body from rejecting the organ and the donor may experience prolonged pain and other complications. There are ethical issues related to live organ donation as live donors suffer from deteriorating physical health after donating organs and so organs taken from people after their death would be more ethical.

Goz et al (2006) reported on a pilot study conducted to understand knowledge and attitudes of medical, nursing and dentistry or health technician students towards the topic of organ donation and suggested that the knowledge and attitudes of health technical and nursing or medicine students may be one of the factors in organ procurement rates. There seems to be a lack of information and knowledge on how students in the health care field perceive organ donation and how much they approve or know about it. Goz et al (2006) used the questionnaire and survey method with a test used to assess the knowledge and attitudes of students towards organ donation. Among the students 56.8% were men, 91.4% were below 24 years. The results indicated that 65.5% of students were willing and supportive of organ donation, 9% were not willing and 25.5% hesitant or unsure of organ donation. Illegal behavior and problems were some of the commonly cited causes of unwillingness towards organ donation. However 63.1% of the students had no clear idea of the organ donation process and some correlation between gender and the organ donation process has been found. Goz et al (2006) indicated that students lack information on organ donation and the results suggest that greater emphasis should be given on the need for providing information to students in technical, medicine or nursing schools so that future knowledge of health care professionals in matters of transplantation could be improved. This could in fact improve the scenario of shortage of donor organs for transplantation as a healthier attitude towards organ transplant could help both the students and the patients. Richardson (2006) discerns the historical roots and causes of organ transplant and considers how transplantations as a

process and dissection and other processes could provide understanding of the modern phenomenon of organ shortage.

In the UK people who want to register as donor do so through the NHS confidential donor registration system and they get a donor card that identifies them as the donor. Donors are advised to speak with their family members to make the donation process easier after their death. In the UK, the first successful kidney transplant was in 1954 and first heart transplant in 1967 and donation processes began with the success of the transplantation process.

According to Schaeffner et al (2004), in kidney transplantation there is a discrepancy between demand and supply of organs and the study reveal that healthcare professionals can influence the willingness to donate organs or register for the donor card. The attitudes of educated health care professionals towards organ donation have been studied by Schaeffner et al (2004) who conducted a cross sectional study or survey with a 28 item questionnaire among 1136 medical students and physicians and evaluated knowledge and attitudes towards organ donation and transplantation in Germany. The results showed that only 8% of the healthcare professionals actually felt sufficiently prepared for approaching relatives of organ donors. Knowledge and attitude towards organ donation seems to be directly related to levels of medical education. The study indicate that attitudes and levels of education reflected on actually supporting organ donation yet age and gender or personal experience were not factors

determining the donation process. Schaeffner et al emphasized that higher medical education is generally associated with positive knowledge and attitude towards organ donation. In fact health care professionals with higher levels of education are usually more comfortable about discussing organ donation with the donor relatives and also they themselves are likely to hold donor cards. To maximize benefits of the organ donation process, educating the health care professionals seem to be an important part of the process.

As Randhawa (1998) suggests, the issue of organ transplant after death could be an emotional or sentimental one as relatives would still be going through the traumatic time of losing a loved one. Randhawa suggests that nurses should be trained with educational programmes related to organ donation which could be given as presentations, role play situations and discussions based on organ requests and this could result in increased rates of donor consent and reduction in waiting lists for transplants or organ donations (Randhawa, 1998). Randhawa points out that the request for organs will have to be handled sensitively by health professionals when they discuss this with family members and nurses and health care professionals must be equipped to deal with this sort of responsibility. The discussions related to organ donation in an environment of grief could be challenging to any health care professional and making requests for organs during such sensitive moment and providing support to the donor family highlights the role of nurses. Specialist training to nurses should thus be given so that the organ donation process is easily facilitated and nurses can provide

support to donor families. In order to have a healthy and positive approach to the donation process, it is important to have a 'Gift of Life and Sacrifice' viewpoint as put forward by Sque and Payne (2007).

In another related study, Essman and Thornton (2006) aimed to measure the knowledge and attitudes of medical students related to issues of organ donation and transplantation and also sought to understand the extent to which the students have been trained to develop a certain perception towards organ donation and how this changed before and after they attended medical school.

As part of their study, Essman and Thornton administered a 41 question survey to assess knowledge of 537 medical students about organ donation, allocation and transplantation. Students were asked how much they supported organ donation and what sort of training they received on the issue. 264 first year and 236 second year students responded to the questionnaire and the results suggested that only 11% of students received training on organ donation before attending medical school and 22% received training during their attendance at medical school. However second year students were more likely than first year students to have received training on organ donation although both first and second year students were found to be more likely to answer donation related knowledge questions incorrectly. In fact knowledge regarding brain death was lower among medical students than among regular adults (Essman and Thornton, 2006). However donation training in medical school significantly increased

knowledge regarding donation and also patients' question regarding donation. The study shows that medical students have gaps in their knowledge on organ donation and transplantation process. Thus it is imperative for nurses and healthcare professionals to be sufficiently educated in the donation and transplantation process as this is not only associated with improved knowledge in the field but also a level of comfort in addressing patient questions regarding organ donation.

The scenario of transplantation and organ donation do not look very promising with increasing death in unusual circumstances making it impossible to actually attain organs from people after their death. Haustein and Sellers (2004) emphasizes that transplantation of organs has been limited by supply of donor organs and it is important to identify subgroups that do not support organ donation so that support and positive perception on organ donation could be increased. In this study, instead of taking views from students, opinions of non students or patients were used to understand the general knowledge or misconceptions on organ transplantation and donation among non-acutely ill outpatients visiting a community physician's office. The study was conducted on 185 patients and the results indicated that among these 86 were willing to donate, 42 were not willing, 57 were unsure and the willingness to donate was associated with discussion with family, having known other donors, having received higher educational degrees, recognizing the problem of organ shortage and also having a family member working in primary health care (Haustein and Sellers, 2004).

However, gender, race, age, church or religious affiliation, knowing patients and internet access etc did not have any significant impact on positive attitudes towards organ donation in individuals not working in health care. Those who were unsure or uncertain of organ donation thought that it is an expensive process, donors may not received emergency care or that brain dead people could still be alive and recover and would require organs so it would not be ethical to take away organs from them. In order to improve chances of transplantation success or maximize organ donation, it is important not just to improve knowledge of medical staff and students on the process of organ donation but also improve public knowledge and awareness so that more support could be gained for the organ donation and transplantation process in the general public.

In another study related to student perception on organ donation, Burra et al (2005) compared opinions of medical student on organ transplant and donation in their different stages of medical education. The shortage of organ donation is one of the limiting factors in transplantation programs and even Burra et al highlight the fact that a favorable attitude of health professionals towards organ donation can improve the situation significantly by positively influencing families of potential donors although this would require education of physicians and early in their career. The study by Burra et al (2005) included a 10 item questionnaire which 100 students completed and their mean age was recorded at 23.7 years. The results indicated that more than 91% of students showed a positive attitude

towards organ donation and more than 87% were prepared to donate their organs after death. This was quite high compared with the 63% of students who were willing or supportive of organ donation as in Goz et al's study (2006).

However this study by Burra et al (2005) suggests that although medical students become aware of the need for organ donation process they are more supportive of organ donation during their final years at medical school and their attitudes do not improve during the first few years at Medical school.

Kent and Sque (2007) highlight that the donation process has the overall support of healthcare professionals and also the general public. Kent (2007) suggests, "Healthcare professionals have a duty to consider the wishes of the patient and the family and to help those relatives to make the appropriate end of life decision that is right for them."

### **Conclusion:**

The studies here show that an educational program would be necessary to spread awareness among medical students so that they develop positive perception and attitudes towards organ donation and in turn help and encourage more organ donors and also non medical students and individuals who may be less aware of the need and significance of organ donation and transplant.

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