



Attitudes, Knowledge, and Proficiency in Relation to Organ Donation: A Questionnaire-Based Analysis in Donor Hospitals in Northern Denmark

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ABSTRACT

The aim of this study was to assess knowledge, attitudes, and proficiency in relation to organ donation among staff members of intensive care units (ICUs) in donor hospitals, and possibly identify areas for improvement. The investigation was carried out as a collaboration between the transplant center and appointed key persons in all 17 ICUs in 15 hospitals in northern Denmark. A total of 1168 structured questionnaires were distributed to the health care professionals in the ICUs in the region; 689 were returned, giving a response rate of 59%. In general, there is a positive attitude among health care professionals toward organ donation. However, a considerable fraction of 11% declares to be against organ donation. Only 49% of the ICU health care professionals are willing to donate their own organs after death. By comparison, 74% of the general Danish population are willing to donate organs after death. Doctors are more positive toward organ donation than the nursing staff. Thus, 95% of the doctors are positive to organ donation compared to 81% of the nurses; 70% of the doctors will donate own organs after death compared to 45% of the nurses. Further, the survey demonstrates as expected a significant lack of experience in organ donation. Our data show a considerable need for more education and training, especially on how to inform and support the donor relatives and how to identify potential donors. The survey also discloses a substantial need for information regarding the results of transplantation.

THE DEMAND FOR ORGAN transplantation is steadily increasing and in Denmark, as in many other countries, there is a chronic imbalance between the number of donors and the numbers of patients on a waiting list in need for an organ transplantation. The role of health care professionals in the organ procurement process is crucial and their ability to handle the entire process is necessary for the supply of organs for donation.

In Denmark, there is no available information about attitudes, knowledge, and proficiency among health care professionals in relation to organ donation. Several international studies indicate that there is a demand for further education and information about organ donation and transplantation.¹⁻³ Other studies have demonstrated that a tailor-made educational program made especially for this group has a positive affect on the rate of organ donors.^{2,4-6}

The purpose of this study was to assess attitudes, knowledge, and proficiency among staff members of intensive care units (ICUs) in donor hospitals, and possibly identify areas for improvement.

MATERIALS AND METHODS

The investigation was carried out as a collaboration between the transplant center and appointed key persons in 17 ICUs in 15 hospitals in northern Denmark. The units include 15 ICUs and two neuro-ICUs in the four northern countries of Denmark, serving 1.64 million inhabitants. A total of 1168 structured questionnaires, each containing 27 questions, were distributed in September 2000 to the ICU health care professionals. All respondents were assured anonymity and participation in the study was voluntary. Questions were mainly asked in closed-response format combined with a few open questions. Questions were asked concerning demographic characteristics as well as current knowledge, attitudes, and proficiency in relation to organ donation.

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RESULTS

The overall response rate was 59% (689/1168), ranging from 46% to 95%. Fifteen of 17 ICUs had a response rate >50%. One hundred ten (16%) of the returned questionnaires came from physicians, 512 (75%) from nurses, and 61 (9%) from auxiliary nurses. Of the respondents, 577 (85%) were women and 105 (15%) men.

Attitude Toward Organ Donation

Among the health care professionals, 559 (82%) support organ donation. However, a considerable fraction of 71 (11%) declared to be against donation. Only 49% (337) of the ICU health care professionals were willing to donate their own organs after death. Doctors were more positive toward organ donation than the nurses and the auxiliary nurses. Thus, 104 (95%) of the doctors were positive to organ donation compared to 410 (81%) of the nurses and 45 (70%) of the auxiliary nurses. Seventy-seven doctors (70%) declared to be willing to donate their own organs after death compared to 45% (230) and 47% (30) of the nurses and the auxiliary nurses, respectively.

Knowledge and Proficiency in Relation to Organ Donation

Only 54% (368) of the respondents declared to have sufficient knowledge to explain brain death to the relatives, and only 42% (283) had sufficient knowledge in approaching the bereaved families about organ donation. Our data demonstrated a considerable need for more education and training among all staff members, especially on how to inform and support the donor relatives and how to identify potential donors. This survey also disclosed a substantial need for information regarding the results of transplantation; this subject was especially requested by the doctors 64 (58%).

DISCUSSION

With a response rate of 59% the results have to be interpreted cautiously. It is possible that nonresponders are more likely to be less interested or even more against organ donation. This bias would, if anything, even increase the demand for more education. In accordance with similar studies on health care professionals,^{4,7,8} the results of this cross-sectional survey show a high general support for organ donation (82%). But when it comes to more personal questions, the answers are not equally positive. Only 49% of

the ICU staff members were willing to donate their own organs after death. By comparison, 74% of the general Danish population are willing to donate organs after death.⁹ The nursing staff are less likely than doctors to donate their own organs after death. The Danish nurses in this study seem to differ from nurses in other countries. Similar studies from Italy, the United States, and England have shown that 75% to 90% of the nurses are willing to donate own organs upon death.^{1,2,10} There is further need for studies to explain this difference of opinion. This survey also demonstrates a considerable lack of experience in organ donation and there is a need for a professional education strategy to cover the entire donation process. These findings are in accordance with other studies.^{2,3,6,11}

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