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CLINICAL PAPER

Discussing and documenting (do not attempt) resuscitation orders in a Dutch Hospital: A disappointing reality☆

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Summary
Objective: To determine whether the introduction of a patient information sheet about do not attempt resuscitation (DNAR) orders and personal motivation of the medical staff results in an improvement in the documentation of the DNAR orders in the medical records.
Design: Retrospective chart review.
Method: The medical records for all hospital admissions during February 2005 were checked for age, sex, admission time, admitting specialty, admission type (acute or planned), death, documentation of the DNAR order on the admission form, and if this order was complied with and under whose initiative the order was implemented or not. These data were compared to the medical records from 2 years earlier.
Results: In 2005, 119 (9.3%) medical records a DNAR order was found, compared to 10.7% in 2003. In the 43 patients who died DNAR orders were documented more often (18.6%) than in other patients (9%). The DNAR order was written more frequently for patients who were older (46.5 years versus 67.5 years), had a longer hospital admission period (4.2 versus 12.4 days) and for acute admissions. No difference was found for sex. Of the specialties with more than 10 admissions a month, the most frequently written DNAR orders came from internal medicine (36%) and pulmonology (31%); the least from cardiology (2.2%) and thoracic surgery (0%). In 9 of the 119 (7.6%) the DNAR orders were explained, most were initiated by the doctor (7), 1 by the patient an 1 by the family.

☆ A Spanish translated version of the summary of this article appears as Appendix in the online version at 10.1016/j.resuscitation.2006.05.013.

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Conclusion: Giving patients more information about DNAR orders and motivating medical staff personally does not influence the documentation of DNAR orders. If documented, it occurred more in the elderly and the deceased patients. Only a few DNAR orders were specified and most were initiated by the doctor.

Introduction

Cardiopulmonary resuscitation (CPR) is an intensive treatment of an acute life-threatening disease, with a high mortality varying between 80 and 95%.

Compared to other treatments, which are often discussed with the patient, the decisions concerning this intensive treatment are in most cases badly discussed and documented.[1,2] In a hospital situation varying factors play an important role in the outcome after CPR. Prognostic factors for in-hospital cardiac arrest are age and co-morbidity, and the duration of the resuscitation.[3] Nevertheless sometimes elderly or terminally ill patients are resuscitated, where the chance of dying is very high. It is doubtful whether these patients benefit from CPR or if they want to undergo CPR at all. Murphy et al. reported that elderly patients who chose at first to be resuscitated, almost half changed their opinion after they received more detailed information about the possibility of surviving.[4] This study shows that informing the patient about the results of resuscitation influenced the individual wishes for CPR.

Clarity and good communication concerning the DNAR order is a basic requirement. Because resuscitation is a treatment, the doctor is legally obliged, according to the Dutch Medical Treatment Contracts Act (MTCA), to inform the patient in a clear verbal or written way of the proposed treatment (MTCA art. 448). The doctor is also obliged to get the patients permission for a treatment (MTCA art. 450), and has to document this in the record (MTCA art. 454).[5]

In our hospital in 2003, an audit on the documentation of DNAR orders in the medical records of consecutive clinical admissions during 1 month was performed. Only in 10% of the 1237 medical records was the DNAR order documented. Based on these results the hospital resuscitation committee tried different ways to correct behaviour by instructing the medical staff and publishing a patient information sheet about DNAR orders. At the same time all consultants and residents were informed personally about the DNAR order sheet.

The objective of this study was to determine by a follow-up study, whether introducing a patient information sheet about DNAR orders and the effects of motivating the doctors personally, have resulted in an improvement of the documentation and explanation of DNAR orders in the medical records.

Methods

The data of this study were assembled by a retrospective search of the medical records of all clinical admissions during February 2005. All patients were admitted to the Isala Clinics, a tertiary referral hospital in Zwolle, The Netherlands. The authors of this study checked all medical records. Admissions for less than 1 day were excluded.

The records were checked for the following variables: age, sex, admission time, acute or planned admissions, whether the DNAR order was documented on the admission form in the records, and if it was documented, whether the DNAR order was explained in the medical and/or nurse records, and who took the initiative for the DNAR decision. Finally those who died and those were discharged were compared regarding DNAR documentation.

Depending on the level of measurement χ^2 or Student t testing was conducted to test the relationship between determinants and outcome. If no normal distribution was observed, the variable was either transformed to obtain a normal distribution or non-parametric statistics were used.

Results

In 2005 a total 1281 records were analysed. In 119 (9.3%) medical records a DNAR order was found on the admission form compared to 1161 (90.7%) records where no order was found. This is 1.4% less than in 2003 (Table 1).

The DNAR order was more frequently documented when the patient was older (46.5 years [not documented] versus 67.5 years [documented], $p < 0.05$; Table 2). Sex had no influence in agreeing upon a DNAR order (Table 2). The longer the duration of admission, the more often the DNAR order was documented (4.2 days [not documented]