Professional attitudes to cardiopulmonary resuscitation in departments of geriatric and general medicine

ABSTRACT—Cardiopulmonary resuscitation for the elderly has long been a contentious issue. We have established by means of a postal survey the attitudes of 300 consultant geriatricians, 300 consultant physicians and 249 registered nurses to cardiopulmonary resuscitation. We also audited 400 case notes to document current practice in departments of general medicine and medicine for the elderly. No formal resuscitation policies were in operation. Geriatricians were more likely than physicians to make a positive resuscitation decision (p<0.001), and involve nursing staff in the decision-making (p<0.001). All professional groups felt age was unimportant in deciding on resuscitation, while the patients' prognoses and their wishes were most important. Case note audit revealed that geriatricians were better at documenting resuscitation decisions. Inappropriate resuscitation of patients is unacceptable. Each department or hospital ought to have agreed guidelines for cardiopulmonary resuscitation.

Since its description in 1960 [1], cardiopulmonary resuscitation (CPR) has been much discussed. Not all patients are suitable for CPR, and in the USA formal policies for resuscitation and implementation of ‘do not resuscitate’ orders have existed for many years [2,3]. In 1991 the Parliamentary Commissioner for Health expressed surprise at the lack of formal policies in this country [4]. Doctors increasingly accept the need to make and document decisions about resuscitation of individual patients. National organisations, for example the British Geriatrics Society, are now advocating that all hospitals and elderly-care units should have a stated, locally agreed policy on CPR [5]. The age of a patient may be used as a discriminant in decision-making [6], as studies have shown older patients do less well after resuscitation [7,8]. Other criteria, for example the patient's prognosis and disability, are also important when considering CPR.

We asked three professional groups their opinions on CPR: consultant physicians with an interest in cardiology, consultant geriatricians, and registered nurses in departments of medicine and medicine for the elderly (DME). In addition, the current practice of CPR orders on the DME wards was compared with that in the department of medicine.

Methods

A questionnaire survey (available from the authors) was sent to 300 consultant physicians with an interest in cardiology and 300 consultant geriatricians. The consultant physicians were identified by membership of the British Cardiac Society and the geriatricians were selected at random from the British Geriatrics Society handbook. They were asked for their views on the resuscitation of patients: who should make decisions on resuscitation, whether such decisions were recorded, what factors influenced decision-making, and with whom the decision should be discussed. In addition, the geriatricians were asked to outline their admission policy and state whether their beds were serviced by a cardiac arrest team.

A further questionnaire was sent to 249 registered general nurses (RGNs) in the department of medicine and DME working at the Wirral Hospital Trust. The RGNs had different levels of experience but were all expected to take charge of their wards. The Wirral hospital is a 1300-bedded district general hospital.

We looked at 200 medical and 200 DME case notes to establish current practice in making and recording CPR decisions; at the same time the auditor asked the nurse-in-charge which patients were and which were not for resuscitation. The aim was to determine the level of communication between medical and nursing staff.

Statistical analysis was performed using Chi Square tests. A p value of 0.05 was considered significant.

Results

Consultant questionnaire

Completed questionnaires were returned by 128/300 (42.7%) cardiologists and 153/300 (51%) geriatricians. All the cardiologists had acute admission beds and 117/128 (91%) had access to coronary care beds. Twenty-two (14%) geriatricians had acute beds only, 118/153 (77%) acute and peripheral beds (rehabilita-
tion and continuing care beds not on the district general hospital site), and 13 had peripheral beds only. Seventy-nine (52%) of the geriatric departments operated an age-related admission policy. Twelve of the 153 sites were not serviced by a cardiac arrest team.

None of the consultants who responded to the survey operated a formal resuscitation policy. Geriatricians more often made a positive decision to resuscitate patients than did the cardiologists [49/153 (32%) vs 7/128 (6%), $X^2 = 30.79, p<0.001$. Geriatricians preferred to make decisions on resuscitation in consultation with nursing staff and other members of the multidisciplinary team, whereas cardiologists thought it was predominantly a medical decision [57/153 (37%) vs 77/128 (60%), $X^2 = 13.58, p<0.001$]. Although resuscitation was discussed with other members of the health-care team, and on occasion with patients’ relatives, 63 (49%) cardiologists and 67 (44%) geriatricians said they never discussed resuscitation with the patient. The cardiologists recorded their decisions in the medical notes more frequently than the geriatricians [104/128 (81%) vs 92/153 (60%), $X^2 = 13.75, p = 0.0002$].

Registered general nurses questionnaire

The questionnaire was sent to 249 registered general nurses in the departments of medicine (127) and medicine for the elderly (122) and 155 (62%) were returned (medicine 77 (61%) and DME 78 (62%)).

The responses of the the two groups to all questions did not show any significant differences, so their data were pooled. When asked who should make the decision on resuscitation 143/155 (92%) thought it should be a medical decision only, and 100 (65%) believed that it should be made by a consultant or senior registrar. If the decision ‘do not resuscitate’ was made, 79 (51%) nurses wanted the decision to be recorded in the medical notes, while a further 69 (45%) felt the decision should be recorded in both the medical notes and nursing karden. Only seven (5%) nurses thought it was enough to record the decision in the nursing notes alone. Four nurses in the DME had never attended a cardiac arrest, but overall 121/155 (78%) had attended an arrest call within the past six months.

Both doctors and nurses were asked to say which factors most influenced the decision to resuscitate a patient. The results are shown in Figure 1. All agreed that the patient’s prognosis was the most important determinant, while age was of little significance.

Case note audit

Four hundred case notes were examined (200 medicine and 200 DME). The mean ages of the patients were 67.8 years (medicine) and 79.7 years (DME). The principal diagnoses are shown in Figure 2: stroke disease and falls were much more common in the patients on the DME wards [105/200 versus 13/200 in medicine ($X^2 = 99.5, p<0.0001$)]. A decision ‘Do not resuscitate’ was documented more frequently in the case notes in the DME than in medicine [77/200 (39%) versus 22/200 (11%) ($X^2 = 40.6, p<0.0001$)]. In the DME group, the decision was more often made by a consultant and the reason for the decision was more often documented [49/77 (64%) vs 2/22 (9%) ($X^2 = 18.5, p<0.001$)].

The nurse in charge was more aware of the decisions concerning resuscitation in the medicine group [182/200 (91%) cases in the medicine group versus 137/200 (69%) in the DME ($X^2 = 31.35, p<0.001$)].

Discussion

This survey confirmed the lack of formal resuscitation policies in hospitals in the UK. Geriatricians more often made a positive decision to resuscitate patients than did the physicians. This may be a reflection on the availability of a cardiac arrest team to service the geriatric beds. Only 12% of peripheral sites were covered by such a team.

Who should decide which patients should be resuscitated?

Geriatricians thought the decision should be made by the multidisciplinary team, and in particular with input from nursing staff, while physicians felt it was predominantly a doctor’s decision. Almost all nursing staff (92%) concurred with the cardiologists, saying that it should be a doctor’s decision. Some doctors believe patients should participate in this decision-making. Gunasekera et al [9] sought the views of elder-

![Fig. 1. Percentage of each professional group ranking patient factor as most important when deciding on cardiopulmonary resuscitation. MTS = mental state, PTW = patient’s wishes, RW = relative’s wishes, Social - social circumstances of patient.](image)
ly patients on CPR. The majority (80%) thought staff should discuss CPR with patients, but when asked who should make the decision, 57% thought it should be doctors and nursing staff. Bedell et al [10] showed that although physicians expressed a desire to talk to their patients, they rarely did so. They also showed poor concordance between the physicians' opinions of their patients' attitude to CPR and the patients' wishes. In our survey 49% of cardiologists and 44% of geriatricians never discussed CPR with their patients.

What factors are important in making a 'Do not resuscitate' decision?

The three professional groups in this study agreed that the patient's prognosis was the most important factor in decision-making, doctors placing mental state, and nursing staff patients' wishes, as second in importance. Studies have shown that the medical condition is the most important determinant of outcome from resuscitation attempts [11-13], but homebound lifestyle prior to illness [13], functional state and mental state [14] do have an effect. There is debate over the effect of older age on outcome from cardiopulmonary arrest. Early studies showed that age alone did not influence survival following cardiopulmonary arrest either in medical wards [11,15] or in geriatric units [12,16]. However, Tunstall-Pedoe et al [8] showed that age did affect survival, both immediately and in the longer term.

In the review of case notes we found 'do not resuscitate' decisions made and documented in only 39% of patients on the DME wards and 11% of the medical patients. Failure to make, document, and communicate decisions on resuscitation means a decision to resuscitate may be made by default. In the DME it was usually the consultant who documented both the decision and the reason behind the decision. Documenting the reason for the decision may become more important with the implementation of the Access to Medical Records Act 1990 [17]. A similar disregard for appropriate documentation and communication of decisions was found in previous studies [18,19]. We found that nurses were not always aware of decisions made on patients, particularly on the DME wards. This is cause for concern, as some patients thought to be eligible for resuscitation might not have had the cardiac arrest team called to them. The greater awareness on the medical wards may be because, overall, fewer decisions had been made on the patients; the majority of their patients would have had the cardiac arrest team called to them in the event of a collapse.

This study highlights the need for every department or hospital to have agreed guidelines for CPR. A definite decision on resuscitation should be made for each patient after discussion and consultation with all involved staff, especially the primary nurse, and the patient. There should be regular review of the decision, and the reason behind the decision should be stated. The decision should be communicated to all members of the team and implications for other care delineated. Thus CPR will be attempted on patients most likely to benefit, while inappropriate efforts should be prevented.

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