Resuscitation is expected to be administered by default to inpatients who have sustained a cardiopulmonary arrest, unless a decision has been made not to do so. A joint statement made by three professional bodies provides national guidance for decision-making on resuscitation. It incorporates the Human Rights Act of 1998 and social ethics. This guidance insists on discussion with mentally competent adults prior to making “Do Not Attempt Resuscitation” (DNAR) orders about them.

This literature review evaluates the current professional and legal guidance for cardiopulmonary resuscitation (CPR) and end of life care, the views of older people regarding discussion of their own resuscitation preferences, and research into physicians’ ability to predict the preferences of patients for whom they provide care. Whether there is actually a need to discuss resuscitation status and the extent to which such discussions take place prior to recording do not resuscitate orders is then explored. Finally, obstacles to discussion of resuscitation preferences with patients are reviewed.

Physicians are expected to make decisions with regard to CPR on patients who are at risk of death in the near future or have terminal illnesses. A joint statement made in 2007 by the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing provides current national guidance for the decision-making process. This places considerable weight on the need to provide information and discuss the issue with patients, and indicates that patients have an ethical and legal right to be involved in decisions that relate to their care.

Even if medical professionals believe CPR is futile, they are expected to respect patients’ wishes. It has been felt that there is no justification in withholding CPR where there is a small chance of success, provided the patient understands and is willing to undertake risks. It is thus implied that discussion should be offered to all mentally competent patients for whom a DNAR order is made.

On the other hand, current guidance acknowledges that doctors are not required to offer treatment against their clinical judgement. It also agrees that a doctor may not be expected to attempt to resuscitate a patient who is in the terminal phase of an illness or for whom the burden of the treatment clearly outweighs the benefits. Thus, it appears that there is some degree of ambiguity in the guidance.

The current GMC guidance on good practice in decision-making related to withholding and withdrawing life-prolonging treatments holds a similar view. It states that, where a patient has the
capacity to decide, the doctor must raise the issue and discuss options. It is for the patient to judge and decide whether any of the options would be acceptable. However, the guidance also acknowledges that if a requested treatment is clinically inappropriate in the doctor’s view, the doctor is not legally or ethically bound to provide it. Whilst acknowledging the possibility of conflict, both sets of guidance make discussion with the patient imperative, provided the patient is mentally competent. If there is a conflict, the British Medical Association, Resuscitation Council and the Royal College of Nursing suggest referral for a second opinion. However, ultimately the patient’s wishes should be respected.

The Mental Capacity Act of 2005 reinforces the fact that capacity is often presumed in people aged 16 years or more, unless proven otherwise when the decision needs to be made. It also states that people must be given all appropriate support and help to make their own decision or maximize their participation in any decision-making process. Therefore, judgment about the patient’s capacity to make an informed decision obviously plays a key role in decision making.

**Older people’s views**

Numerous studies have elicited preferences of older people with regard to decision-making on resuscitation. One survey, conducted by Gunasekara et al, demonstrated that nearly 30% of older adults preferred to take the leading role in such decisions and 80% welcomed an opportunity to express their views in advance. In a questionnaire-based study, by Morgan et al, 89% of older patients wanted their doctors to discuss CPR with them and 34% wanted to make the final decision themselves. A survey, conducted by Liddle et al on an acute geriatric ward, showed that 28% of patients preferred to be involved in CPR decisions, even on admission. Altogether, 57% of the participants preferred active participation in resuscitation decisions at some point during their hospital stay. A questionnaire survey, performed by Mead and Turnbull, yielded similar results, showing that 35% of patients positively desired routine consultation about CPR whilst another 51% were willing to be asked about resuscitation preferences. However, in this study, it appeared patients overestimated the success of CPR.

**Discussion impact**

The study conducted by Morgan et al revealed that 95% of patients did not feel uncomfortable about discussing their resuscitation status. Similarly, in Mead and Turnbull’s study, none of the patients showed distress after such a discussion. However, the observations were limited to the 24 hours following the discussion.

Kellog et al measured the psychological impact of physician-initiated discussions on life-sustaining treatment including CPR. They employed a battery of psychological scales on 20 older people and reviewed 15 survivors after 18 months. The patients involved did not demonstrate any signs of emotional trauma associated with the discussions.

All the studies mentioned thus far imply that older people welcome an opportunity to discuss their resuscitation preferences. However, these were based on patients who were ready for discharge from hospital and were not at imminent risk of death.

In contrast, a focus group discussion conducted by Phillips and Woodward that involved nine participants in their 70s and allowed more freedom of expression, revealed that many feared discussion or making decisions about resuscitation. Similarly, Schade and Muslin found seven competent patients in mental agony following in-depth discussion about resuscitation. These patients had clearly concealed their emotions during discussions only for them to surface later. Only two of these patients were over age 60 years.

Results of the latter two studies cast some doubt in physicians’ minds about the suitability of discussing resuscitation with mentally competent patients reaching the end of their lives. Clearly, there is conflicting evidence concerning the discussion of resuscitation preferences with patients. Discussion could not only pose mental distress to the patient, as it denotes impending death, but also strain the doctor–patient relationship. If patients’ resuscitation preferences were predictable, potentially distressing discussions could be avoided. Still, it should also be remembered that evidence suggests some people welcome discussions of resuscitation, or end-of-life issues, and such discussions do not cause them distress. Perhaps it enables them to plan their limited future,
preferred place of care and the future of their loved ones. Older people’s views clearly suggest they would prefer to be in control of resuscitation decisions under all circumstances.

Preference predictions

Several studies explored the ability of physicians to predict the end-of-life or resuscitation preferences of their patients. Hofmann et al undertook a large prospective study on seriously ill, hospitalised patients. They found that a group of patients who did not want CPR but had not discussed this preference with their physician carried a higher chance of having CPR against their will, compared with those who did not want resuscitation and discussed the issue with their physicians. This study indicated therefore that doctors were unaware of patients’ preferences without discussion.

Mead and Turnbull found a similar situation. Doctors in their study decided to resuscitate 99% of patients whilst only 73% would have wanted CPR. Fischer et al conducted a study on patients aged 65 years or older who had serious medical illnesses that required frequent hospital admissions, and found that primary care physicians were unable to predict treatment preferences, including ventilation and resuscitation, of patients they regularly followed up.

Exploring resuscitation preferences amongst patients with severe congestive cardiac failure, Krumholz et al found that physicians’ wrongly perceived patients’ preferences in 24% of cases. A very large study conducted by Hamel et al of patients’ age and the decision to withhold life-sustaining treatment from seriously ill, hospitalised adults, showed that physicians underestimated older patients’ desire for aggressive therapy including CPR. Based on this evidence, it is clear that physicians are unable to predict resuscitation preferences of older people. Without discussion, negotiation and agreement, doctors are vulnerable to make a decision a patient would not welcome, and a patient may want a specific intervention a doctor may not be willing to provide.

UK data

Some UK data is available regarding the discussion of resuscitation preferences with older people. Hayes et al analysed results from two major and three limited surveys between 1989 and 1998, and found no documentation of discussion with patients who had DNAR orders. The major surveys included all medical patients while limited surveys encompassed only older patients. However, Hayes et al acknowledged that there was no mention of the mental competence of these patients. Butler et al found that introduction of standardised DNAR pro-formas in an NHS trust between 2000 and 2001 tended to improve patient involvement in decision-making. However, even then, only 14-5% of patients took an active role. Data analysis by Diggory et al based on an elderly care department of a university hospital, and published in 2004, showed a significant drop in DNAR orders when the hospital policy made discussion of resuscitation status with mentally competent patients imperative.

A larger, cross sectional study, performed by Cauchi et al and published in 2004, on implementation of CPR guidelines in elderly care departments of 13 hospitals in the UK shows that, on average, discussion took place with just a quarter of patients who carried DNAR orders. A survey, conducted by Myint et al, of doctors who participate in resuscitation decision-making showed that 80% sought the views of patients less than half of the time they make DNAR decisions. In fact, 51% did so less than a quarter of such times. A survey conducted by Hawkins and Wanklyn showed that elderly care physicians make significantly more CPR decisions than general physicians, but sought opinion of only a quarter of patients on whom they placed DNAR orders. It is unclear in these studies whether discussions did not take place due to patients lacking capacity. However, in a clinical audit, Harris and Davies found that 34% of patients who carried DNAR orders were in a position to discuss their own resuscitation status, but only 6% actually did. In contrast to these studies, a questionnaire survey of doctors in three tertiary hospitals in the USA, conducted by Tulsy et al, found that 94% of resident physicians discussed resuscitation status with all seriously ill patients. Meanwhile, another study, conducted in California by Paris et al, shows that the main obstacle to implementation of resuscitation policy was failure of the attending physician to discuss DNAR orders with patients.
The above results imply that discussions about resuscitation preferences with patients do not take place as expected despite the stipulated guidelines and research showing older people’s preference to have them. Their absence also conflicts with the unpredictability of patients’ preferences. Therefore, it appears that there are some obstacles for such discussions.

Obstacles to discussion

A few studies have explored the impediments to discussion of DNAR orders with patients, either directly or indirectly, both in the UK and in the USA. A prospective study by Eliasson et al based on case notes from a tertiary care university hospital in the USA, recognised 149 patients as unsuitable for resuscitation. However, of these 149, only 61 (41%) had DNAR orders placed in their notes. Interviewing the attending physicians of those who did not have DNAR orders in spite of the indications to have it considered, Eliasson et al found three main reasons. Attending physicians often believed that the patient was unlikely to die in the near future; it was a responsibility of a primary care physician to discuss resuscitation preferences with patients; or they lacked an appropriate opportunity to discuss end-of-life issues. The fourth but far less quoted reason was refusal of a DNAR order by the family or the patient.

Attending physicians disagreed with the investigators about the indication for DNAR in five of the 149 cases and quoted impaired mental status of the patient as the reason for avoiding discussion in seven patients. Therefore, collectively, the three main reasons given by the physicians appear to be an indirect expression of their own reluctance to engage in resuscitation discussions with patients.

Information gathered in the UK is even more limited. A survey of junior hospital doctors’ attitudes to CPR by Morgan and Westmoreland showed that 58% of junior doctors including specialist registrars found it difficult to discuss the issue with patients. Myint et al also showed that more than 50% of registrars in geriatric medicine who took part in the survey felt uncomfortable discussing DNAR orders with patients. However, neither of these studies explored whether the reported discomfort was a major obstacle for discussion.

These findings contrast with the previously mentioned study by Tulsky et al in the USA where 77% of doctors did not feel uncomfortable talking about resuscitation issues with patients. In 2006, exploring the reasons for failure to implement resuscitation policy in patients admitted to acute medical wards in the UK, Fielder et al found that only 20% of 374 patients without cognitive impairment or psychiatric illness were willing to discuss resuscitation preferences. Of the rest, 37% declined discussions, 10% could not be approached as they were subsequently found to have dementia or confusion and 28% could not have the discussion as the authors deemed them medically unwell.

It must be remembered that national guidance stipulates that patients who are at risk of dying in the near future should be given the opportunity to discuss their resuscitation preferences. Provided they are mentally competent, medically unstable patients cannot be excluded from such a discussion unless they are clearly unwilling to take part. Therefore, exclusion of patients on such grounds reflects the physicians’ reluctance. The literature highlights two further potential problems: the absence of a reliable clinical gold standard to ascertain mental capacity of patients, and the absence of structured tools to facilitate discussion related to CPR.

Conclusion

In summary, ethical, professional and legal guidance on decision-making related to resuscitation places considerable importance on discussing options with mentally competent patients who are at risk of death in the near future. The Mental Capacity Act 2005 also emphasises the necessity of patient involvement in decision-making. However, there is an ambiguity as the guidance implies that doctors are not expected to offer “futile” treatment options to their patients.

A number of studies have shown that older people prefer to be involved in resuscitation decision-making. Moreover, studies have shown that patients’ choices related to CPR are unpredictable and doctors tend to misjudge the patients’ preferences in the absence of discussions. However, it is debatable whether or not such discussions are detrimental to patients’ emotional wellbeing.
Studies conducted in the UK have shown that doctors often do not discuss resuscitation preferences with mentally competent patients. So far, identified obstacles appear to be vague and ambiguous, suggesting other potential obstacles remain.

At present it remains a duty of physicians to review their current practice and ensure that it fulfils current guidance and recommendations.

Dr Fernando has no conflict of interest

References