

# Education and debate

## *For and against*

### Doctors should not discuss resuscitation with terminally ill patients

Doctors in Britain are expected to attempt resuscitation unless patients have agreed do not resuscitate orders. If patients are terminally ill, is discussion of such orders harmful or helpful?

Department of  
Cancer Medicine,  
Faculty of Medicine,  
Imperial College of  
Science, Technology  
and Medicine,  
Hammersmith  
Campus, London  
W12 0NN

Charlotte Manisty  
*senior house officer*  
Jonathan Waxman  
*professor of oncology*

Correspondence to:  
J Waxman  
j.waxman@ic.ac.uk

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**FOR** Patients increasingly want to participate in decisions about their medical treatment. Although this is appropriate in most circumstances, discussing cardiopulmonary resuscitation with terminally ill patients is not practical, sensible, or in the patient's best interests. In these special situations, patient involvement is tokenism and entirely of negative value.

The UK guidelines on cardiopulmonary resuscitation require doctors to attempt resuscitation in all patients who have a cardiac or respiratory arrest unless a do not resuscitate order exists.<sup>1</sup> Doctors are required to discuss the value of resuscitation with their patients before making a do not resuscitate order (box). However, discussion about cardiopulmonary resuscitation forces the patient to confront the inevitability of their fate, with negative consequences. Patients need to maintain some hope—if not for a cure then at least for some comfort. It is not appropriate that all comfort is lost as a result of the inappropriate blanket application of a facile rule. This is particularly true when the rule forces patients to make a choice, when in reality they have no choice.

#### Medical futility

Another argument for not discussing resuscitation with terminally ill patients is medical futility. This term is applied to justify withholding treatments in patients who are likely to gain minimal benefit. Nowhere is the futility of medicine so clearly embodied as in resuscitation procedures for terminally ill patients. In a study of 243 patients who experienced a cardiac arrest and received cardiopulmonary resuscitation, 16 survived to be discharged from hospital. All of these patients were within a group of 73 who had had unexpected cardiac events. None of the 171 patients with terminal cancer who had cardiopulmonary resuscitation survived.<sup>2</sup> In a smaller series of 83 cancer patients who had had a cardiac arrest, eight left hospital, of whom three died within six weeks and two within six months.<sup>3</sup> The survivors were not terminally ill at the time of their arrest.

Much emphasis has been placed on patients' feelings with regard to clinical decision making, but we should also be concerned about the feelings of doctors and their views of procedures that they may not consider to be in patients' best interests. Resuscitation is traumatic, and failed resuscitation awfully traumatic. So why should clinicians be expected to carry out cardiopulmonary resuscitation on a patient dying from cancer?

#### Patients' views

The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment found that 33-50% of patients with metastatic cancer wanted do not resuscitate orders in the 3-6 months before death.<sup>4</sup> Our experience indicates that demand for autonomy and informed choice from patient groups has not been matched by a parallel appreciation of the likely consequences of resuscitation. Television drama has contributed to an optimistic lay view of the potential success of cardiopulmonary resuscitation.

There can be dignity in death and dying, but surely this is not the case when Cheyne-Stokes breathing stops and a team of doctors starts cardiopulmonary resuscitation. Let us leave patients who are expected to die to do so in peace and allow doctors to uphold the



HORACIO SCORIANI/SPFL

tenet, "first do no harm." When people are dying, it is entirely ethical not to discuss resuscitation with them.—Charlotte Manisty, Jonathan Waxman

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**AGAINST** Patients with chronic illness and cancer have special needs. Their treatment options are complex, are offered over longer periods of time because of improved survival, and have benefits and risks that are difficult to weigh. Terminally ill patients often have to make decisions about their final treatment after a protracted period of illness, investigation, and treatment. But this does not mean they don't want to be involved. Poor communication and information leads to poor patient satisfaction, symptom management, and compliance.<sup>1-3</sup> New guidance on effective models of supportive and palliative cancer care suggests that effective training in communication can improve patient satisfaction and some outcomes.<sup>4</sup>

Discussion about cardiopulmonary resuscitation is as important as discussion about any other treatment in terminally ill patients. Some doctors may avoid talking about do not resuscitate orders because they feel it is important to offer a positive outlook. However, silence or incorrect information has been shown to heighten the fear, anxiety, and confusion experienced by patients and families.<sup>5</sup> Uncertainty and anxiety can be worse if patients receive mixed messages. Therefore, everybody caring for the patient and family needs to be kept fully informed of important decisions and wishes.

Doctors have been shown to be inaccurate at predicting the views and wishes of patients and may thus be unlikely to guess patients' desire for resuscitation. A recent study of 255 patients who were designated do not resuscitate in the nurses' files (investigators were unaware of patient wishes, or the extent they were involved in discussions) found that 48% of patients rated their quality of life as good, whereas physicians rated it good for only 9%; 71% of physicians relied on their assumptions about patients' quality of life when making a decision about resuscitation.<sup>6</sup> These results show the importance of involving patients in decisions about resuscitation.

## Making decisions

Nevertheless, discussing resuscitation is more complex when patients are terminally ill. Time is limited, and

### Summary of BMA, Resuscitation Council, and Royal College of Nursing guidelines on do not resuscitate orders

- All medical establishments should have a "do not resuscitate" policy
- Do not resuscitate considerations are embodied in the European Convention on Human Rights
- Resuscitation should be discussed with competent patients or people close to them
- Do not resuscitate orders should be made after considering likely outcomes, patient's wishes, and the patient's right to life
- Do not resuscitate orders should be communicated to all relevant health professionals
- Patients and their relatives should be given a realistic view of the effectiveness of cardiopulmonary resuscitation
- Doctors cannot be required to give cardiopulmonary resuscitation contrary to their clinical judgment

some patients have poor concentration or are unconscious. Decisions should therefore be made before patients reach this stage. Delaying discussions may mean they begin too late because doctors more often overestimate than underestimate survival.<sup>7</sup> Clinicians need to determine how much patients want to be given full information and make decisions. Although many patients value involvement, individual wishes vary.<sup>8</sup> We need to determine how each patient perceives the situation and what is important for him or her.

Patients cannot make decisions unless they understand the different treatment options and the trade-offs between potential risks and benefits. This requires time, support for the professionals involved, and information about effective treatments in an easily understandable form (box). A study of chemotherapy preferences among patients with advanced lung cancer found that although all had received chemotherapy, only one quarter would make the same decision again had they been more fully informed.<sup>9</sup> Similar shifts in treatment choice after fuller information have been found for other conditions.<sup>10</sup> When patients became aware of the low probability of success of cardiopulmonary resuscitation, many (but not all) were less likely to request it.<sup>11</sup>

Research in end of life care has been neglected, and only 0.18% of UK research funding for cancer is dedi-

Department of Palliative Care and Policy, King's College London, Weston Education Centre, London SE5 9RJ

Irene J Higginson  
head of department  
irene.higginson@kcl.ac.uk

### Requirements for effective involvement of terminally ill patients in resuscitation decisions

- Excellent listening and communication skills
- Suitable environment and time
- Assessment of patient's views as circumstances change
- Support for staff in a multiprofessional context
- Ability to predict prognosis accurately and strategies to deal with uncertainties when this is not possible
- Effective communication between doctors, nurses, and all those caring for the patient

cated to end of life care.<sup>12</sup> Unsurprisingly, therefore, our understanding of the effective treatments, patient preferences, and best ways to include patients in decisions remains patchy. The best way to answer the practical difficulties of effectively including terminally ill patients in treatment decisions is through more appropriate training, suitable care infrastructure, public debate, and research rather than by professionals making decisions unilaterally.—Irene J Higginson

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## Teleoanalysis: combining data from different types of study

Nicholas J Wald, Joan K Morris

Teleoanalysis can provide the answer to questions that would be obtained from studies that have not been done and often, for ethical and financial reasons, could never be done

Once a causal link has been established between a risk factor and a disease it is often difficult, and sometimes impossible, to determine directly the dose-response relation. For example, although we know that saturated fat intake increases the risk of ischaemic heart disease, the exact size of the effect cannot be established experimentally because long term trials of major dietary changes are impractical. One way to overcome the problem is to produce a summary estimate of the size of the relation by combining data from different types of study using an underused method that we call teleoanalysis. This summary estimate can be used to determine the extent to which the disease can be prevented and thus the most effective means of prevention. We describe the basis of teleoanalysis, suggest a simple one-step approach, and validate the results with a worked example.

### What is teleoanalysis?

Teleoanalysis can be defined as the synthesis of different categories of evidence to obtain a quantitative general summary of (a) the relation between a cause of a disease and the risk of the disease and (b) the extent to which the disease can be prevented. Teleoanalysis is different from meta-analysis because it relies on combining data from different classes of evidence rather than one type of study.

Randomised trials with disease end points are often not enough to determine dose-response relations; their results tend to be limited by factors such as dose, duration of treatment, and a limited age range of subjects. We also need data from observational epidemio-

logical studies (particularly large cohort studies) and often knowledge of the mechanism of action. Short term trials using drugs or vitamins are also helpful because a drug can have a large specific effect that is not otherwise achievable.

It may also be necessary to quantify the individual effects that relate to separate steps in a causal pathway—that is, the effect of factor A on disease C is determined from the estimate of the effect of A on an intermediate factor B and the estimate of the effect of B on C, rather than by directly measuring the effect of A on C. The exercise is like putting together the pieces in a jigsaw puzzle.

The adverse effects of interventions always need to be considered, and including them in the analysis will



Teleoanalysis can provide the answer to public health problems such as the most effective dose of folic acid to prevent fetal neural tube defects

Wolfson Institute of Preventive Medicine, Barts and the London, Queen Mary's School of Medicine and Dentistry, University of London, London EC1M 6BQ  
Nicholas J Wald professor  
Joan K Morris senior lecturer

Correspondence to: N Wald  
n.j.wald@qmul.ac.uk

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Details of the statistical method for the one-stage process are available on [bmj.com](http://bmj.com)