Lifestyles

'Lazarus complex' under fir

By RICHARD DUNSTAN
Lifestyles Editor

Health care workers should think twice before trying to revive the dead, say three Nanaimo authors in a paper in the British *Journal of the Royal Society of Medicine* this month.

Originally a Malaspina College term paper, the article is the work of Margaret Westwood, a former nurse and the paper's principal author; her family physician husband, Dr. David Westwood, who helped with research; and Bob Lane, a Malaspina College philosophy instructor, who edited the work.

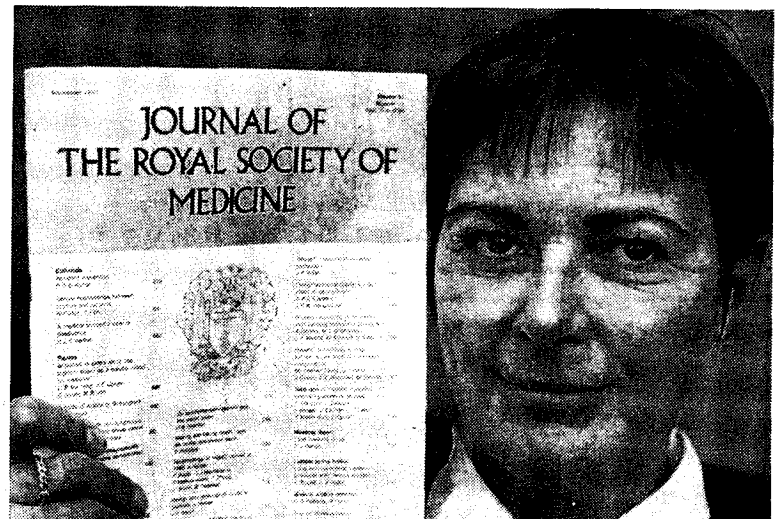
The paper was written last year in Mr. Lane's bio-medical ethics class, where both Westwoods were students. It deals with in-hospital resuscitation for chronically ill people whose hearts and breathing stop.

Entitled Cardiopulmonary Resuscitation: A Panacea or an Ethical Decision?, the paper surveys previous studies of resuscitation and examines hospital policies in the light of utilitarian ethics. Utilitarianism is based on 18th century philosoper Jeremy Bentham's principal of "the greatest happiness for the greatest number."

With hospital CPR the numbers don't work out at all, says Ms. Westwood. A tiny recovery rate is offset by keeping more needy patients out of intensive care beds, and even by extra traffic deaths caused by ambulances rushing to hospital to save people who can't really be saved.

SOMETIMES VALUABLE

The paper applies only to in-hospital resuscitation of adults whose hearts are stopped due to disease. Ms. Westwood says on-the-spot CPR (for example, for people who collapse in public) is highly valuable (see adjoining story). So is resuscitation of children and of accident victims and others suffering from traumatic injuries.



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Margaret Westwood's paper takes a critical look at hospital resuscitation procedures

While there is a theoretical resuscitation success rate of 18 per cent, says Ms. Westwood, that includes anyone whose pulse gets going again — even for only a few hours or weeks of coma in an intensive care unit. A 1988 study of 240 resuscitation attempts in Memphis, Tennessee, showed only two of the patients recovered well enough to go home.

"Locally, during the last two years, there have been occasions when otherwise healthy patients with traumatic injuries have had to be transported to other centres because the intensive care unit was full of chronically sick people," says the paper. "Thus, the reluctance to admit that medicine cannot reverse all the effects of disease and age can needlessly jeopardize the recovery of those it is best equipped to help."

The paper blames the situation on "the Lazarus complex, the idea that doctors can work miracles."

"(Medical personnel) talk about success without defining what success is," Ms. Westwood said in an interview. "Success in human terms is a person back on the street, but that isn't what you get. The idea that resuscitation gives people another chance at life is wrong."

To your health

Dr. Westwood says his own 30 years in practice confirms his wife's research findings.

"There have been one, maybe two people have walked out of hospital on their own steam (after resuscitation), and probably about 500 who haven't," he says. "What you have delayed death."

HARD TO STOP

But resuscitation proce develop a life of their own, Dr. Westwood. When a pat heart stops, personnel beg whole series of progra starting with the same niques CPR trainees use o street and quickly movin electronic and intrave equipment.

"It's extraordinarily diff once you start it, to say 'w minute, why are we d this?'," he says. "In r wards there is a standin struction that no one is all to die."

His own solution is to ta his patients before the que comes up — "I know what want me to do."

Ms. Westwood says Mr. "nagged and nagged and r ed" to get her to submit th ticle for publication. Mr. describes the original pape one of the four best he received in 20 years of teachi

The paper, like the bio-me ethics course as a whole, bined the insights of philos and ethics with those of r cine, he says.

"By paying close attenti the facts about resuscitation is in a better position to value judgments as to its says Mr. Lane. "Value ments are not in some divorced and free-floating. arise from a careful consi tion of factual matters, include not only moral princ but a probabilistic calcul consequences" — in other w figuring out whether the come is likely to be good or b

Mr. Lane, now on leave, he will teach the bio-me ethics class again next fall course usually attracts do other health professionals lawyers as well as philos students.

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Editor: Prof. A J Harding Rains

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C A N A D A

Dear R J Lane

RE: CARDIOPULMONARY RESUSCITATION: A PANACEA OR AN ETHICAL DECISION

Thank you for your letter and help over this paper so that we can proceed immediately.

Yours sincerely

Professor A J Harding Rains
Editor
Journal of the Royal Society of Medicine

Cardiopulmonary resuscitation: a panacea or an ethical decision? Discussion paper

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Introduction

In hospitals and associated health care institutions cardiopulmonary resuscitation (CPR) has become a standard procedure for all patients unless a doctor makes a specific 'Do Not Resuscitate' order (DNR). Also, outside the hospital environment paramedics are trained, and the general public encouraged, to initiate CPR on anyone discovered to be pulseless and not breathing. Society does not have unlimited resources to allot to health care, therefore procedures need to be assessed for their potential costs and benefits. After over 20 years as accepted practice, CPR is overdue for some cost benefit analysis giving weight to both normative and non-normative concerns.

Certain types of patient requiring CPR are excluded from consideration for the purposes of this paper. Children, arrests resulting from penetrating trauma, and cases of hypothermia may, for a variety of reasons, have different response times and survival rates to more frequently seen cases of arrest. Therefore, the following discussion refers only to persons over 20 years of age who are found to be pulseless and not breathing and are not in the above categories.

Factual considerations

Accusations of over-simplification can follow any attempt to separate the data from the emotional overtones and rhetoric surrounding such a difficult and complex problem as CPR. One cannot forget that there are few absolutes in modern medicine. Extreme cases of resuscitation tend to argue against general results and reinforce the human desire to deny the finality of death. It is hardly possible to overestimate the power of the hope engendered by the idea of resuscitation, especially when the media promotes stories about people brought back to life and cults form around 'after life' experiences. Once CPR is perceived as life giving, then DNR orders can be interpreted as life taking. Such highly charged language puts the withholding of CPR in the category of euthanasia without examining the foundation for the claims made on its behalf. Neither the scientific nor the legal fraternities can agree on a clear, universally acceptable definition of death as technology has extended life to the point where it is unclear what criteria count. This sort of technology is costly – if it is to be used by medicine to improve people's lives then attention should be given to value judgments about what it means to be alive and exactly what constitutes an improvement.

Considering the reluctance of physicians to give DNR orders the general public believes that over the last 25 years there has been a dramatic improvement in the success rate of CPR. However, such papers as those of Rozenbaum and Shenkman[1], Mickel[2], and Kellerman *et al.*[3], show that not only is the assumption wrong, but also that there is confusion surrounding the notion of what constitutes success. Medicine as a consequential science should be judged by utilitarian standards, and this position is apparently supported by Rozenbaum and Shenkman when they state that decisions regarding CPR 'should be based as much as possible on solid clinical data'. On the other hand, the two doctors appear to ignore that 'clinical data' not only consists of statistics but also contains key terms which require clarification. Rozenbaum and Shenkman made a 7-month study of hospitalized patients who received CPR. Of the 71 patients in the study group, '29 were successfully resuscitated'. But of these 29, nine died within 24 h, and of those who survived more than 24 h, six remained comatose until death. It is unclear what Rozenbaum and Shenkman equate with success, as the possibilities cover anything from a fully conscious independent existence to a comatose condition requiring unspecified amounts of aid. Their paper also states that 12 of the 29 survivors 'were fully functional and were able to walk out of the hospital'. What does this mean? Did these 12 patients get up, dress themselves, walk to the hospital entrance and hail a cab? Such an interpretation seems unlikely, especially as after even minor surgery patients are discharged via a wheelchair into the care of family or friends. Despite the apparent optimism of the chronicled 18% survival rate, even Rozenbaum and Shenkman conclude that patients already compromised by severe underlying disease processes rarely respond to CPR, also there is a decreasing chance of survival after 15 min of even aggressive treatment.

Kellerman *et al.*[3] reinforce the importance of re-establishing an independent pulse and blood pressure quickly after an arrest. In their paper 'In-hospital resuscitation following unsuccessful prehospital advance cardiac life support', Kellerman *et al.* define 'successful' resuscitation as reestablishment of a pulse and blood pressure sufficient to sustain life and permit admission of the patient to an ICU[1]. Kellerman *et al.*[3] also assess the mental and physical condition of the patients when discharged from hospital. This team from Memphis researched 240 cases admitted without a palpable pulse, of these only four survived to discharge: two went home with 'good neurological outcomes', and the two others were 'eventually discharged to nursing homes with severe neurological

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deficits'. These statistics correspond to figures obtained from eight other centres over a 17-year period.

Discussion

On the evidence of these papers, and within the previously stated limitations, prolonged resuscitation attempts appear incompatible with the idea that CPR will restore the quality of life as experienced prior to the arrest. However, Mickel[2] records the case history of an 88-year-old man who arrested at home with a delay of approximately 5-6 min before CPR was commenced. Despite the man exhibiting signs of severe cerebral injury due to anoxia, he recovered a normal mental state and was discharged 20 days after the arrest. Although Mickel acknowledges the unusual features of this case study, examples of this kind tend to argue against a more consequentialist approach to generalized trends.

Clearly CPR has a less than 20% chance of succeeding for patients who have existing pathological conditions. But, as such patients are already practically dead, what harm is there in trying to revive them? The most tenuous yet pervasive influence of CPR as accepted hospital practice results in what can be called 'The Lazarus Complex', the idea that doctors can work miracles. This 'complex' encourages people to think of death instead of disease as the enemy. The lay public neither hears about the failures of CPR, nor realizes the difference between the objective, clinical sense of 'success', and 'living patient' and the common sense usage of these terms. Hence the apocryphal stories of surgeons saying that 'the operation was a success, but the patient died'. The propagation of ambiguous vocabulary enables medical science to concentrate on keeping patients clinically alive without having to consider the person's subjective, autonomous requirements for any quality of life. Maintaining an objective, scientific position protects physicians from facing painful emotional issues with their patients. However, adopting a paternalistic, godlike role is similar to wearing blinkers: one loses sight of the panoramic quality of human reality.

Because medical specialties compete for funds it is not in their interest to advertise failures. Extreme cases such as the successful resuscitation of the 88-year-old man give credibility to existing practice and attract research funds. Kellerman *et al.*[3] note that in the last 20 years, despite the advances in emergency cardiac care, there has not been a significant increase in the number of patients who survive to be discharged from hospital after CPR. However, in that time the cost of acute care and drugs has risen dramatically. The available evidence[1,3] indicates that the patient's best chance of recovery still hinges on a quick response at the moment of arrest. But, despite the statistics, research money and expertise continue to flow into esoteric life-prolonging experiments[3] and hospital technology. Regardless of the actual prognosis, any patient who responds to CPR has to be admitted to an intensive care unit. Because of the specialized nature of these units, hospitals have only a limited number of ICU beds and people with the expertise to staff them. Locally, during the last 2 years, there have been occasions when otherwise healthy patients with traumatic injuries have had to be transported to other centres because the ICU was full of chronically sick patients. Thus, the reluctance to admit that medicine cannot reverse all the effects of disease and age can needlessly jeopardize the recovery of those it is best equipped to help.

One of the arguments frequently advanced to support unlimited CPR states that any belief in the futility of the procedure would adversely affect the Good Samaritan response of the general public. In light of the evidence this seems an unfounded claim. Determined early intervention at the time of arrest gives the recipient the best chance of survival. Trained response teams of paramedics have sufficient equipment and knowledge to reestablish pulse and respiration in people with the potential for independent existence. However, as Kellerman *et al.*[3] note, the emphasis on the superiority and technical ability of hospitals leads to a 'load and go' mentality which can be counterproductive. There are cases that would have a better outcome if more aggressive efforts at CPR were made on the scene, rather than trying to get them to the hospital as quickly as possible. Also Kellerman *et al.*[3] discovered that between 1977 and 1985 'in contrast to the ten survivors of refractory out-of-hospital arrest . . . 159 motor vehicle deaths involving ambulances in emergency use were reported. Many of these deaths involved pedestrians, drivers, or passengers of non-EMS vehicles'. The number of non-fatal injuries and the amount of property damage resulting from high speed transportation by ambulance is unknown, but is believed to be greater than the reported figures.

Cases of traumatically induced arrest would die if CPR was not readily available. But the emotional appeal of possibly reversing all sudden deaths has overwhelmed the evidence of the counter productivity of generalized, in-hospital CPR. As modern medicine increasingly relies on technology its demand for these scarce resources grows and the need to make cost effective decisions becomes more urgent. As many of the moral dilemmas surrounding the definitions of life and death remain unsolved, perhaps, when considering CPR, it is time to change the emphasis to a more accessible framework. On Utilitarian grounds, CPR as standard hospital procedure for all pulseless patients appears to be an ineffective and costly option for the health care system to endorse.

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