Intensive Care in the Developing World: Is it Worth The Cost?

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Naveed Bari, Peter Kendall (Intensive Care Unit, King Fahad National Guard Hospital, P. 0. Box 22490, Riyadh 11426, Kingdom of Saudi Arabia.)

The remarkable advances in pathophysiology, medical technology and pharmacology, coupledwith the emergence of a dedicated team of physicians, nurses and other paramedical groups, have led to the survival of increasing numbers of patients with complex and severe medical ailments[1,2]. However, all this has not happened without an enormous price tag. As we move into an era of cost containment, we have to look back and see where intensive care has made the most impact and where it has merely prolonged inevitable death, adding unnecessaiy suffering to the patient,. their family and to the national exchequer[3].

The costs incurred in an intensive care unit are dependent on several factors. When we look at the cost per patient m a unit we should carefully analyse the. case mix. Thus, a community hospital with provision of only secondaiy care is goingto have lower operating costs compared to atertiaiy care facility. Similarly, costs inorganspecific ICU's, e.g., coronary care units, cannot be compared to costs in multidisciplinaiy units. Factors such as actual costs versus billed expenditure, level and expertise of physicians and nurses providing care, alongwith across the board billing rather than for the services actually rendered to the individual patient, add to the difficulty of getting a true idea of the cost of intensive care treatment. Despite the wide variations in the cOsts of running different types of intensive care units, the bulk of the expenditure is on equipment, pharmaceuticals and salaries. With ever increasing technological advancements physicians are led to believe that newer is better. We should let our patients' needs dictate what is required rather than technology dictate what we puitbase. To achieve this end, developing nations will have to start concentrating on utilizing simpler machines which will givethe most cost benefit advantage. For example, the newer microprocessorventilators with new weaning modes have not proven to be better. Similarly, the use of non-invasive means of monitoring may well obviate the need for invasive monitoring, except in the very sick[4].

Intensive care medicine has now been practised for enough time that data on the mpact on certain illnesses is available[5]. It clearly appears that our supportive capabilities, due to technological and pharmacological advances, have out-stripped our therapeutic capabilities. Limiting the use of intensive care medicine to those who are likely to benefit most can certainly be a major cost cutting measure. This will entail educating the public and physicians in the limitations of intensive care. Decisions of rescucitation in the terminally ill or those with irreversible diseases causing marked functional impairment will have to be. made in advance. Pre-existing health status, age, severity and the nature of present acute illness and multi-organ system failure have all been shown to influence the outcome[6]. Furthermore, we need to look at long terni functional outcome rather than mere short term survival. In this respect, outcome studies not addressing the long term functional outcome from intensive care units should be viewed with skepticism.

There also exist differences in the type of patient selected for ICU care and the extent of use of various technologies in different parts of the developed world[7]. These differences will need to be further redefmed within the context of the developing countries, in terms of prognosis and resource utilization. Different scoring systems are available; however, for any given individual, they remain imprecise. Their use, however, does help in comparing outcome in general for different groups of patients.

The decision of who will care for the patients in the intensive care unit has generated a lot of controversy and conflict of interest. Suffice to say that critical care medicine has progressively evolved into a multi-disciplinary speciality and it has been shown that better patient outcome can result when

management in the ICU is coordinated by full time staff[8].

Decisions regarding limiting care to the most needy, or withholding or even withdrawing treatment when it is medically unlikely to be of benefit, are always difficult decision[9-12]. These decisions not only involve the medical community but also include the societal values and the price the society is willing to pay. Physicians have traditionally being considered as their patient's advocates and hence thought of as not to be involved in cost containment or rationing. However, in light of the facts that health care costs continue to rise and that the resources of even the most developed countries are not infinite, physicians cannot afford to remain on the sidelines. On the other hand it is our responsibility to ensure provision of well documented and clinically beneficial medical advances. It is hoped that as we look to the developed world as models of better health care systems, we also will learn from their experiences and mistakes. Someone has to make these decisions and if we, as physicians, do not address the question of worth we will find ourselves being dictated to by non-medical personnel. These economic rationalists will say "Wejustcannotafford it even if it is worth it"[13].

References

1. Phillips, G. D. Lifesupportsystems in Intensive care: A review ofhistory, Ethics, Cost, Benefit and rational use. Anaesth Intensive Care, 1977;5:551 -71.
2. Thibault, G. E., Mully, A. 0., Barnett, 0. 0. et at. Medical Intensive care: Indications, Interventions and outcomes. N. Engl. J. Med., 1980;302:938-42.
3. Atkinson, S., Bihari, D., Smithies, M. etal. Identification of futility in intensive care, Lancet, 1994;344:1203-5.
4. Bone, R. C. and Balk, R. A. Non-invasive respiratory care unit, A cost effective solution for the future. Chest, 1988;93 :390.94.
5. Yau, E., Rohatiner, A. Z. S., Lister, T. A. et at. Long term prognosis and quality oflifefollowing intensivecarefor life threatening complicationsofhaematological malignancy. Br. 1. Cancer, 1991 ; 64:938-42.
6. Factors related to outcome in intensive care French Multicenter study. Crit. Care Med., 1989; 17:305-8.
7. Zimmerman, J. E., Knaus, W. A., Judson, J. A. èt al. Patient selection for intensive care: A comparison of New Zealand and United States Hospitals. Crit. CareMed., 1988;16:318-26.
8. Pollack, M. M., Katz, R. W., Ruttiman, U. E. et al. Improving the outcome and efficiency of Intensive care. The impact of Intensivist. Crit. Care Med., 1988;16:11-17.
9. Poses, R. M., Bekes, C., Copare, F. J. et al. The answer to 'What aremy chances, Doctor? depends on whom .is asked: Prognostic disagreement and inaccuracy forthecritically ill patients. Crit. CareMed., 1989;17:827-33.
10. Lo, B. and Jonsen, A. R. Clinical decisions to limit treatment. Ann. Intern. Med., 1980,93:764-68.
11. Snider, G. L. Allocation of Intensive care. The physician's role. AM J. Respir. Crit. Care Med., 1994;150:575-80.
12. NIH Workshop summary withholding and withdrawing mechanicalventilation. Am. Rev. Respit Die., 1986;134: 1327-30.
13. Morreim, E. H. Fiscal scarcity and the inevitability of bedside budget balancing. Arch. Intern. Med., 1989;149:1012-15.