

**EDITORIAL**

## **Intensive Care Units in Malaysia**

The concept of Intensive Care/Therapy Units is accepted today as an integral part of almost every general hospital in Malaysia. The first Intensive Care Unit (I.C.U.) was set up in the University Hospital, Kuala Lumpur in 1969.

With the advances in medical care (drugs, equipment, new techniques and increased expertise) more critically ill patients are being managed often requiring specialised facilities to support their vital systems. The philosophy of intensive therapy consists of the care of patients who are deemed potentially salvageable with a relatively good prognosis regarding the underlying or causative pathology. This is an important concept and principle to keep in mind when faced with the decision of whether or not to admit a patient into the I.C.U. ward. There must be guidelines set regarding admissions otherwise the I.C.U. ward would be constantly filled with cases which are terminal, irreversible and beyond salvage. Uncontrolled enthusiasm based on the rising floods of "medical advances" can result in misuse and abuse of crucially needed I.C.U. beds thus defeating the primary purpose of setting up an intensive care/therapy ward.

Every general hospital should have an intensive therapy unit; to be cost effective (in the University Hospital, K.L., it costs approximately \$350/- to maintain per patient per day in the 12-bedded I.C.U. ward) and viable a minimum of four beds should be functional which means that the hospital should have at least 400 beds. Number of I.C.U. beds should be at least 1% of total hospital beds.<sup>1</sup> Trained nursing staff need to be rostered on a basis of one nurse-per patient-per second. Specialised equipment (continuous monitors for the vital systems, ventilators etc.) are required for every bed. There should be a resident doctor on a 24 hours basis.

The management of patients must be on an inter-disciplinary, team-work basis. The anaesthesiologist is often chosen to head the intensive therapy unit because of his background of training in resuscitation, caring for the unconscious, support of vital systems and because he/she should have the least vested interest in bed utilisation compared to a surgeon, physician, obstetrician/gynaecologist, paediatrician or orthopaedic surgeon who by the nature of their involvement with patient-care come into contact with patients narrowed down to conditions involving the particular discipline. At least the discipline bias for bed utilisation should be removed and the I.C.U. ward can be considered a general intensive therapy ward rather than a discipline determined one. The day-to-day patient care plan must follow discussion between the resident doctors and the referral discipline doctors.

A few problems have arisen from the mushrooming of so-called "intensive care wards" in Malaysia. There are existing in this country today "intensive care wards" which do not follow the basic requisites to qualify functionally as such. They do not provide the adequate nursing personnel (either untrained staff or inadequate numbers) and specialised monitoring and equipment are not available per bed. Some of these so-called "intensive care wards" have been set up because the people concerned feel it is the "in thing" or they must "keep up with the Joneses".

Such inadequate intensive care wards expose the critically ill patient to dangers because of inadequate care. What is also disturbing is that patients or relatives are being charged extra for the intensive care/therapy which is not consistent with the elaborate nameboard hung up to identify the area designated as "intensive care ward".

Another problem that has emerged from intensive care involving critically ill patients is the problem of the definition of death. The conventional (pre-I.C.U.) definition of death has been cardiorespiratory cessation. But with aggressive resuscitation intensive therapy, an arrested heart can be restarted and kept beating with drugs and equipment. The respiration can be supported mechanically. Thus artificially a patient can be kept "alive", though by the conventional definition if the artificial supports were not available, or were withdrawn, the patient would be considered dead. Today brain death (brain stem reflexes absent) is accepted as the definition of death in intensive care wards. Brain death as a definition of death is also relevant when organ transplantation programmes commence.

There is no doubt that intensive therapy units can change the outlook on the management of the critically ill patient. In a developing country such as ours it is important at this stage to take stock of the needs of our patients. On the one hand intensive care units are required so that we can provide so much more for our patients. While on the other, there must be some control of such units regarding cost-effectiveness and minimum standards of patient-care.

### **References:**

1. Delilkan A E (1988): Intensive Therapy/Jagaan Intensive. Penerbit Fajar Bakti Sdn. Bhd., pp. 117–126/pp. 3–14.

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