

Awareness and ethical views regarding life support among doctors working in tertiary care facilities of Karachi, Pakistan

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Abstract

Objective: To assess the knowledge of Life Support (LS) among doctors and to determine their ethical beliefs for the continuation or termination of Basic and Advanced Life Support services.

Methods: This cross-sectional study was done from March to June 2009 that involved 110 doctors of three teaching Hospitals in Karachi (Jinnah Postgraduate Medical Centre, Aga Khan University and Ziauddin University hospitals). All the subjects were selected by random sampling and were then analysed on the basis of self-administered questionnaires.

Results: Out of the 110 doctors who took the survey, 109 (99%) had heard of Life Support. In the breakdown of doctors, 1 out of the 18 consultants (5.6%), 5 of 45 PGs (11%) and 2 out of 47 House Officers (4%) who took part in this study were unable to correctly identify the right definition of LS. Out of the total number (n=110) of doctors, 94 (85%) said they would use Life Support in their patients and 41 (43%) of them thought life support was the only way the doctor can "do what he is supposed to do i.e. save a life", while the other reason for using LS was "Religiously, the right way".

Conclusion: LS is still a highly sensitive subject that needs still more awareness in Karachi, Pakistan. It was surprising to find out that the knowledge of LS by residents, postgraduates and even consultants was not as high as expected. Making Basic Life Support as a part of the undergraduate course might help in clarifying the discrepancies present in the knowledge of Life Support.

Keywords: Life support, Awareness, Ethical views, Religious beliefs, Euthanasia, Doctor-patient relationship. (JPMA 62: 690; 2012)

Introduction

Life Support is a term applied to medical equipment that assists or replaces important bodily functions and so enables a patient to live who otherwise might not survive.¹ It is divided into two major components of Basic Life Support and Advanced Life Support. BLS is the maintenance of the ABCs (airway, breathing, and circulation) through cardiopulmonary resuscitation (CPR), without auxiliary equipment.² Advanced Life Support entails a higher level of emergency medical care, including invasive techniques such as IV therapy, intubation, and/or drug administration.³ This study took both BLS and ALS. Life Support has been an extremely talked about topic in the field of medicine in recent times. A lot of researches have already been carried out to assess the views of the general population on its usage.⁴⁻⁶

The development and adoption of Life Support technologies during the twentieth century sparked a heated debate that sought to legitimise new procedures like organ transplants, use of euthanasia and others involving mostly the use of ALS. As practices changed and evolved, medical science set about inventing new modalities. However, in Pakistan, almost next to none of the researches have been aimed at determining if indeed the medical professionals, working in today's medical institutions, do have necessary knowledge about what LS entails. More ethical issues arise when the patients or their families have been exposed to the usage of ALS as compared to BLS. ALS usage ventilators etc have always been intensely debated. In 1981, the Study of Ethical Problems in Medicine and Biomedical and Behavioural Research, Defining Death, confirmed the appropriateness of the existing practice that allows withdrawal of Life Support from patients with absent brainstem functions as defined by the 1968 Harvard brain death criteria.⁷ In a recently completed survey in Japan, the topic under scrutiny was the "knowledge and attitude of undergraduates regarding brain stem death and withdrawal of life support". This research concluded that "the level of knowledge is an important factor affecting an individual's decision concerning withdrawal of life support therapy upon the diagnosis of brain stem death. Adequate explanation and counseling are important to facilitate family members in coping with this important end-of-life issue."⁸ A lot of ethical issues have risen regarding what people consider as a fine line between supporting an ill patient to save him from death, and making the patient stay alive artificially. Again, however, none of the researches have been targeted to find out the reasons for the ethically varied number of views.

The patient-doctor relationship is an exquisite bond where the patient puts complete trust in his or her doctor and so does the patient's family.⁹ Because the decision making power of patients (and their families) is somewhat a reflection of their

doctors' views on this subject, it is highly necessary that the doctors' facts are spot-on accurate regarding every matter the patients are dealing with.¹⁰ Awareness of the diversity of beliefs regarding the withdrawal or continuation of LS is something that may be able to avoid the damage to the physician-patient relationship caused by conflicting value systems.

Our study, apart from assessing the knowledge of LS among doctors of prominent tertiary care hospitals of Karachi, also tried to determine their ethical beliefs regarding this important issue.

Subjects and Methods

This was a cross-sectional study carried out in three medical institutions of Karachi, namely Jinnah Postgraduate Medical Centre (JPMC), Aga Khan University and Ziauddin University. The sample size calculation was based on a pilot study done prior to the research. Assuming a prevalence of 50%, the calculated sample size was 100. Keeping a provision of 20% non-response, 120 doctors were approached out of which 110 responded. The sample population consisted of 18 consultants of various specialties, 47 postgraduate residents and 45 house officers. Doctors, who were on duty during the morning shift, were selected via random sampling and given a 16-point survey questionnaire. Included in the study were doctors who were directly responsible in giving an opinion about the patients to the attendants/families. Doctors who had no idea about LS were excluded from the study. The questionnaire consisted of the following variables; age, religion, designation, awareness of LS, past experience with LS concerning family or friends (in which they were direct decision makers or directly witnessed a decision being made about the continuation/removal of LS), definition of LS, ethical belief regarding LS, personal choice for or against LS (focusing more on ALS) and views regarding situations under which ALS should be terminated. An informed consent was obtained from all the participants and confidentiality was maintained at all times. Once collected, the data was analysed by SPSS version 16.

Results

A total of 110 doctors, including house officers, residents and consultants took the survey and 80% of the residents were between 25 and 30 years of age. One of the 110 doctors had not heard about the term Life Support. Seventeen (94.4%) of the consultants and 42 (89%) of the postgraduates knew the correct definition of Life Support as given in the questionnaire. Regarding experiencing Life Support with a family member or a friend, 67 (61%) of the doctors said they had undergone situations in which they were the decision makers in the removal or continuation of LS for their loved one. Two (11%) Consultants had undergone a situation where they decided to put their relatives, suffering from terminal

Table-1: Reasons for agreeing to the usage of Life Support.

%	Frequency	Percentage
Save a life	69	63.3
Duty of a doctor	5	4.5
Prognosis becomes better	7	6.4
Increases the quality of life	2	1.8
Selected cases	13	11.8

Table-2: Respondents answers when asked about situations they would consider terminating Advanced Life Support.

Reasons For Terminating Advanced Life Support	Respondents' Percentage
When expense outweighs prognosis of disease	14 %
When being on life support no longer aids the patient's condition	60%
Family Pressure	11%
Religious Beliefs	6.4%
Other (DNR patients, Homeless/lack of family members of patients support)	8.6%

illness and/or in deep coma, off ventilators after there was no positive response in their conditions after a few days on the machine. Around 5 (28%) Consultants had faced patients' families asking them for advice regarding the pros and cons of keeping their terminally ill relatives on ALS.

One of the questions tested the knowledge of the doctors regarding the components of LS (for example, CPR, feeding tubes, IV drips, dialysis machines, heart and lung machines, catheters and mechanical ventilation machines). Out of the 109 who were aware of Life Support, only 10 (9%) were able to correctly answer the question about the components of Life Support therapies. The majority (72%) respondents seemed to ignore BLS entities like IV drips, dialysis machines as a part of LS and limited ALS units such as heart and lung machines, mechanical ventilation and feeding tubes as the only LS components. When asked about their opinion on using LS, 96 (88%) doctors agreed on the usage of life support, while 13 (12%) disagreed (Table-1).

In one of the questions the respondents were asked to express their ethical views regarding Life Support. The majority of professionals agreed that they would put it into effect in order to save a life. However, the ethical views differed significantly when the responses were grouped according to their past experience concerning Life Support in their loved ones. A larger number of respondents seemed to believe that saving a life of the patient is the priority no matter what the circumstances are and they also took into account the patients' rights and their decisions. Both the groups were parallel when considering the religious aspect of LS (Figure). In the answer to another question about when the doctors would consider termination of life support, interesting

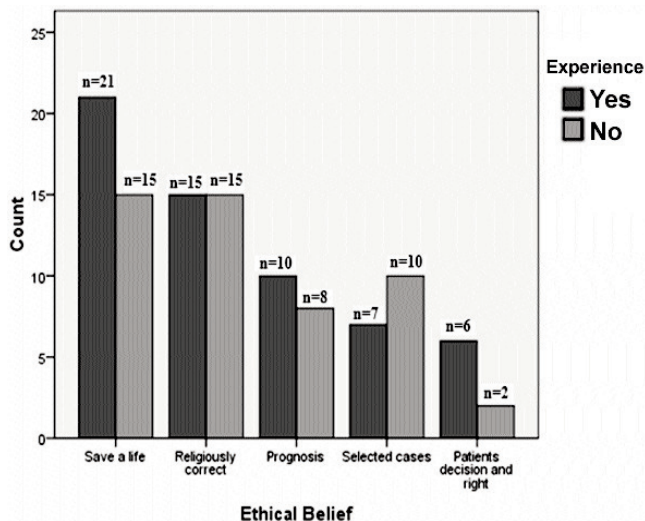


Figure: Comparison of the ethical belief difference between doctors who had a personal experience of Life Support and those who had no personal LS experience.

answers were documented (Table-2).

Discussion

The study revealed that the knowledge of Life Support among the target population of doctors was perhaps lacking in quality. Although most of the respondents were aware of the entity LS, not all of them could clearly identify the correct definition. According to data, 1 (5.6%) of the consultants and 5 (11%) of the postgraduates did not think that it could be defined as "A set of therapies aimed at preserving a patient's life when essential body systems are not functioning sufficiently to sustain life unaided."¹¹ Astonishingly even though the majority had correctly defined Life Support, they demonstrated poor knowledge with regard to the components entailing LS, whether advanced or basic form of it.

In clinical practice, the importance of a profound knowledge on this matter cannot be emphasized enough and certain teaching methods are clearly seen as a resort to tackle this issue of misinformation regarding life support. In a recent survey by another tertiary care hospital in Karachi, it was noticed that there are confusions in the definition of brain death, end-of-life recognition and indications and processes of withdrawal of life support and discrepancies were found for perceptions and attitudes between physicians and nurses. Clearly, teaching programmes will need to incorporate cultural and religious differences in their ethics curricula.¹² Theoretical knowledge on the subject of Life Support among doctors is not adequate in Pakistan, though it is not the only country with this dilemma. According to the Dutch medical education guidelines, junior doctors are expected to be able to perform first aid and basic life support. A study was done to evaluate the level of BLS skills of junior doctors at the

Radboud University Nijmegen Medical Centre. Only 19% of the junior doctors passed the test and CPR was correctly performed by 30% of the students.¹³ This study results matches the present study that more knowledge regarding the subject of ALS and BLS is needed around the world.

Ninety percent of the respondents were Muslim by religion and, thus, the evident strong Islamic beliefs, like "not hurting the human body as it is not entirely our own but a property of Allah" or "helping mankind to our full potential" or "accepting death as a beginning to a new phase of human life", had to be taken into consideration when it came to their views on the usage of Life Support, more so in its advanced form. Our results explain that strong preconceived ethical and religious notions govern most of the doctors' views on the topic under research. Almost one-third (32%) of the doctors who took the survey believed that "saving a life" is their moral as well as religious duty. It also surfaced that some doctors also believe that Life Support should only be used when it can increase the quality of life, along with other views such as using Life Support in selected cases, and when prognosis becomes better by its usage. Of the total 6.4% doctors believed that prolonging life by artificial means is "against the will of God" and to put a "dying person" on Life Support means deliberately hurting the patient's bodily form and giving false hope to their family members.

Often the shocking disparity between the doctors and the family's religious views can spark the fragile doctor-patient relationship as they may fail to understand each other's points of view. A research in Marburg concluded: "The physician-patient relationship is of fundamental importance not only for individual patients but for the healthcare system in general and thus also for bioethical reflections."¹⁴ The turmoil of emotions that a critical Intensive Care Unit (ICU) setting patient's family goes through perhaps cannot be understood completely. However, at this point the advice given to them in support or against Life Support by the doctors should be factual. There is a tremendous need that the advice and suggestions be delivered in a way which is most respectful to the religious and ethical views of the family. Thus, to maintain a healthy relation between the families of the patients and the physician it is of utmost importance that cultural and religious views be kept in mind when suggesting treatment. In support of this point, another research reported: "When the fundamental principles of biomedical ethics are used as guidelines for Life Support decisions, patients, their families, and the medical staff all benefit."⁶

Conclusion

The study revealed that Life Support, though a widely

acknowledged subject, remains a very sensitive issue among the doctors. Most of the professionals have inadequate knowledge about Life Support and many of them feel that ethical and religious issues play a big part in their decisions and advice regarding its usage. As expected, more ethical issues seem to arise out of the usage of ALS (whether because of religious beliefs or involving expenditure of extensive amounts of money or grim prognosis of the disease) than BLS. But it is fair to say that BLS is more of the ignored part when it comes to knowledge regarding LS. Measures need to be taken to make Life Support a widely understood and acceptable phenomenon. These measures could include the passing of a religious "fatwa" by an Islamic scholar to view Life Support positively in the light of Islam. Another suggestion would be to make Basic and Advanced Life Support a part of the curriculum of undergraduates or arranging workshops for the current house officers, postgraduates and consultants, to help them develop clarity on this sensitive but common issue. This will strengthen and simplify the future doctors' ethical decision-making power.

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