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Need for universal critical care guidelines template: Difficult to choose from many!

Clinical practice guidelines are synthesised from the evidence and defined as “systemically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.”^[1] Guidelines help in the standardisation of clinical practice, delivery of quality care, and thus have the potential to improve patient outcomes.^[2] The guidelines have been formulated by various professional bodies across all specialities.^[3,4] Throughout the globe, there is a lack of uniformity in the clinical management protocols due to individual preference, geographical or infrastructural differences. The guidelines reduce the difference between the clinical practice and the scientific evidence available, maximising the patient benefit and minimising potential adverse practices. Various guidelines pertinent to anaesthesiologists like airway management, regional blocks, ventilatory strategies, and cardiopulmonary resuscitation have been published by different professional bodies across the world.

The anaesthesiologist has a key role in managing the critically ill patient. The critical care unit is the most specialised part of a hospital that provides intensive management for critically ill patients. A wide variety of clinical scenarios from medical and surgical etiologies may present in a critical care unit. Comprehensive care involves various areas like ventilator strategy, nutritional support, thromboprophylaxis, antibiotic selection, transportation of the patient in and step-down from a critical care unit, fluid therapy, etc. Decision making can be confusing and difficult for the treating physician due to a wide spectrum of presentations and due to evolving evidence. Standard operating protocols based on evidence are an important guide to safe and uniform practice for managing these patients. Though the critical care services are being

provided primarily by anaesthesiologists or critical care specialists which again has been trained after primary training as anaesthesiologists, various other specialities also manage the critical care services. Given these multiple professional bodies, the guidelines emerge multitude.

Guidelines can be developed locally, regionally, nationally, or internationally. Local guidelines may have limited resources but are more likely to be adopted due to local ownership. Increasingly, the clinicians have to choose from a wide variety of guidelines proposed by different professional societies worldwide. The probable choice for the clinician would be based on his acceptance or attachment to a particular professional body. At times, these guidelines can differ or be contradictory for clinical practice and thus create confusion for the clinician for their real-time applicability. Also, this may create dilemma in a medico-legal case. Though an expert opinion is usually taken for the standard of care by the court, again the contradictions among guidelines may create confusion for decision taking. The clinician may also not be well versed to assess the quality of guidelines as at times; the guidelines of questionable quality are published and can have a negative impact on patient outcomes. At times, a different niche of the population requires customised guidelines. Hence, guidelines must be flexible, systematic, and suit the population that they are serving. For example, the empirical therapy for hospital-acquired infection may vary as per the most common pathogens prevalent in that hospital and their antibiotic sensitivity; even this may change over time.

To explore the discrepancy, let us see the guidelines published by the two major professional bodies – Infectious Disease Society of America and Society

of Critical Care Medicine (SCCM) who have published guidelines related to the management of hospital-acquired pneumonia (HAP) and ventilator-associated pneumonia (VAP) in adults individually.^[5,6] The clinician may get caught up in a dilemma while treating VAP/HAP patients using these two guidelines as they differ at very crucial points. Starting from the diagnosis, one society emphasises on invasive quantitative samples, whereas the other prefers noninvasive sampling with semiquantitative cultures.^[5,6] Similar difference exists for empirical antibiotic therapy. The use of monotherapy and combination therapy for patients with septic shock is advocated by one professional body, while coverage of staphylococcus aureus, pseudomonas aeruginosa, and other gram-negative bacilli for all the patients of VAP/HAP is suggested by the other. SCCM recommends the use of pro-calcitonin along with clinical criteria for the de-escalation of antibiotics, unlike European guidelines. Thus, starting from the diagnosis till de-escalation of antibiotics, a physician has to decide which guidelines to prefer leading to unnecessary delay and confusion. Many such differences are observed among the existing guidelines. Such discrepancy is also observed across other aspects of guidelines like airway management, cardiopulmonary resuscitation, etc., across the speciality.

Blanket statement guidelines leave very little room for clinicians to tailor care to the patient's clinical scenario. Though the guideline experts do mention that guidelines may be modified as per the context and individual patient care, still guideline statements can mislead clinicians and hamper patient care. This may be due to a lack of understanding of the clinician to modify the guidelines as per contextual needs. An alternate solution is to develop standard guidelines that can be adopted universally and still be modifiable locally. This ensures that the basic approach towards a problem remains the same. A limited number of professional societies publish their guidelines. Countries that lack their guidelines tend to adapt from the guidelines published by these societies. Sometimes due to lack of their data, inadequate infrastructure, and lack of understanding, they fail to adapt and implement them successfully. The absence of high-end equipment and expertise can hinder the implementation of guidelines universally. Cardiac monitors may not be easily available in resource-limited settings making it difficult to implement goal-directed fluid therapy in haemodynamic management.

Universal guidelines backed up with scientific reasoning and supported by various societies will ensure better acceptance among clinicians. To bring forward universal guidelines, the first step will be to develop a multiprofessional team from different regions of the world. This can be led by an international professional body like World Federation of Societies of Anaesthesiologists. Each member of the team must be specialised in their field and will be divided into groups as per their specific competence. The conflict of interest of the participating experts also needs to be addressed. Due diligence needs to be followed for the steps of guideline development and the support not only from experts but also from biostatisticians, librarians, etc., also needs to be emphasised. The main aim is to outline minimal requirements but must be adaptable at ground level. Implementation of the universal guidelines can be a Herculean task. One such attempt was made by the European Society of Intensive Care Medicine (ESICM) along with 11 other critical care societies of the world to formulate an expert statement for training in critical care ultrasonography over a period of 2 years.^[7] A great amount of time and effort was put forward to bring together this guideline; eventually, it was endorsed in 13 different societies all over the globe. Such efforts can be tedious, but the results are very encouraging.

To conclude, the evidence for best clinical practice is emerging across the globe by various groups of researchers. The evidence is synthesised into clinical practice guidelines by various professional bodies with certain differences creating dilemmas among clinicians for their real-time use. There is an utter need to collaborate internationally for a universal guidelines template that is desirable for all medical specialities, which may be modified locally as per need.

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