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From the Desk of the Editor

Promoting Better Hand off and Achieving Better Patient Care in ICU

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Health Care industry in the west has begun to recognize the origin of medical errors within the health care system in the recent past. According to the Joint Commission of USA (formerly known as the JCAHO), communication is the top contributing factor of medical errors.[1] There are abundant literatures which report that communication errors are the root cause in the majority of sentinel events in health care.[2]

In 2005, 70% of the sentinel events reported in USA were caused by communication problems and analysis showed that half of the communication breakdown occurred during hand offs.[1]

So what is "hand off" of patient care? It is the process of transferring primary authority and responsibility of providing clinical care to a patient from one departing care giver to one oncoming care giver.[3]

In all important patient care areas of the hospital including the ICU, the process of hand off communication is the real time interactive process of passing patient specific information from one care giver to another for the purpose of ensuring continuity and safety of patient's care.[4]

The care givers in ICU include consultants, medical officers, residents, postgraduate fellows/students of critical care medicine, undergraduate medical students, nurses, respiratory therapists etc. In the real world of clinical practice, hand offs have received many different names, e.g. sign outs, shift report, handover, check out, sign over, etc. creating a sense of ambiguity.

High quality care takes into consideration patient's condition, current status, prior treatment and applies them in decision making, patient management and efficient hand offs when responsibility for patients are transferred. Research has identified the hand off as a vulnerable period in the care process during which information may be lost, distorted or misinterpreted.[5]

When critical information is not transferred between care givers in ICU, effective communication breaks down placing patients at risks for errors or omission of care.[6] In ICU, lack of effective communication means lost information, misinterpretation, misdirected or missed actions during hand off. The primary objective of hand off is to provide accurate information about patient's care, treatment and services, current conditions and any recent or anticipated changes.[7]

Concise and goal directed hand off is perhaps the most important in emergency situation, where even a small delay in diagnoses and treatment could lead to significant morbidity and mortality.

A delay in initiation of assisted ventilation in the setting less than a minute to more than three minutes correlated with decrease in favorable outcome from 21% to 0% in one study.[8]

It has been reported in literature that ineffective hand offs and medical transitions can lead to major harms like wrong treatments, delay in medical diagnosis, life threatening adverse events (mentioned earlier), increased health care expenditure, increased length of hospital stay and even litigation from dissatisfied patients in ICU.[9]

In ICU it is often asked "what kind of information should be included in the hand off?" Hand off should give the accepting clinicians a snapshot of patient information that will enable immediate provision of seamless care while making sure to avoid comprehensive communication of every details of patient's history, clinical course and data which might overwhelm the process of hand off. It should be noted that requirement of standardized hand off is primarily verbal. However it is better to have a written component in addition, that could relate to notes, computer entries, etc.[1]

There are certain elements, which are a minimum requirement for an ideal hand off communication to ICU. First, patients name and medical record number or date of birth should be recorded. Next, diagnosis and current condition should be documented. Third, recent events or changes in patient's condition and treatment are outlined. Fourth, any anticipated change and a contingency plan are to be briefed. Finally there has to be an opportunity to ask questions and clarify information.

Among all the different types of hand off practices in ICU, medical officers' or residents' sign out during shift change, has received most attention in literature. The resident requires the following methods for successful hand off communication.[10] The methods used to enhance effectiveness include face to face verbal updates with interactive questioning, limiting any interruptions, outgoing read back to ensure that information is accurately received, outgoing writes summary before hand off and finally oncoming assesses current status, scans historical data and reviews data changes by outgoing. Over and above using clear language by avoiding confusing statements like "patient is little unstable" is also equally important.

These general guidelines need to be followed no matter what type of hand off is practiced depending on location of patient and type of provider in ICU. A patient may be transferred from ICU to general ward or from emergency room to ICU. Or a patient may be temporarily transferred from ICU to procedure area like bronchoscopy suite, dialysis unit etc. All these situations require some form of hand off communications.

Resident may use standard tools that can facilitate consistency in communication exchanges. There are several mnemonics described in the literature and they can guide standard hand offs and optimize information transfers.[2] "I PASS the BATON" (which stands for Introduction, Patient, Assessment, Situation, Safety concern, Background, Actions, Timing, Ownership & Next) is one of the popular mnemonics found useful during hand off communication in ICU.

Residents often face barriers against effective communications while using these standard hand off guidelines.[5] Hand offs are often truncated or omitted due to work demands or time constraint resulting from duty hour limits. These result in documentations replacing all or some of the interactive exchanges. Often diagnostic or care activities are unfinished at the end of outgoing shifts which put them in higher risk of being dropped. In addition increase in number of shifts results in increase in number of handoffs which in turn increase the number of errors in communication.

Bedside hand off is an integral part of ICU sign out process. Time constraints compounded by unexpected major incident like cardiac arrest in a patient interrupts pace of hand offs. This obstacle forces residents to give urgent attention to this unexpected emergency and as a result there is interruption in smooth hand off and transition of care at bedside.

It has been observed that medical officers at ICU are not formally educated in sign out skills and are not given this knowledge through informed mechanisms[5]. Quality and contents of their sign outs are often not discussed. So teaching them how to hand off early in their training is essential. In Bangladesh such training and teaching in hand off communication are nonexistent and should be included in the curriculum of training programs of critical care medicine.

Patient care and safety in ICU will improve if physicians, nurses and other care givers join leadership in making hand off a system priority. ICU in charge should play a leadership role in initiating hand off programs within his unit setting priority and promoting involvement of academic faculty in teaching hand off to the care givers of ICU.

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