IMPLEMENTATION OF A SYSTEMATIC PAIN ASSESSMENT APPROACH INTEGRATING A SELF-REPORT SCALE (0-10 NUMERIC RATING SCALE, NRS) WITH A BEHAVIORAL PAIN TOOL, THE BEHAVIORAL PAIN SCALE (BPS), IN THE ADULT INTENSIVE CARE UNIT: STRATEGIES, BARRIERS AND FACILITATORS

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INTRODUCTION / AIM

This study aimed to describe strategies, barriers and facilitators related to the implementation process of a systematic pain assessment approach integrating a self-report scale (i.e., 0-10 Numeric Rating Scale or NRS) with a behavioral pain scale, the Behavioral Pain Scale (BPS/BPS-NI), by the inter-professional team in an adult Intensive Care Unit (ICU) in France.

METHODS

The study was conducted in a 16 bed adult medical-surgical ICU in France staffed by 35 registered nurses, 25 nurse assistants, 3 certified registered nurse anesthetists and 7 attending physicians. The study ICU implemented a systematic pain assessment approach with the 0-10 NRS for patients able to self-report and the BPS/BPS-NI for those unable to self-report.

28 key clinician informants (i.e., 7 physicians, 18 nurses and 3 nurse aids) who were involved with the implementation of the pain assessment tools in the ICU participated in this qualitative descriptive study. Through individual face-to-face or small group interviews (2-3 persons), and using a semi-structured interview guide, information about clinicians’ experience with the implementation strategies employed with the BPS as well as any related barriers and facilitators was sought.

Qualitative content analysis was used, and included both a deductive and inductive approach. Four initial coding categories were developed deductively based on the implementation framework by Pomey et al. (2010), and relate to governance, culture, resources and tools. Then, using an inductive approach, codes and themes were generated from the primary data by looking for similarities and patterns. A qualitative data analysis software package (QDA Miner Provalis Research) was used to facilitate the storage, organization and retrieval of data.

RESULTS

Strategies along with barriers and facilitators were identified at each dimension. Governance: The creation of the Comité de Lutte contre la Douleur (CLUD) and the inclusion of pain management as a health care quality indicator by the government were the most common governance facilitators identified by clinicians. Then, the regular professional practice evaluations for physicians were facilitating by triggering their attunement to recurrent clinical
issues such as pain, and by prompting them to propose corrective actions. Conversely, the hierarchy of health care professional roles acted as a barrier by interfering with open communication about pain management.

Culture: A culture in which pain management and prevention is perceived to be essential in the ICU context, all patients are expected to be pain free, physicians are attuned to pain, and sedation is minimized were reported to be strong facilitators. On the other hand, lack of pain endorsement by some physicians, and reluctance to initiate sedation cessation and administer opioids acted as barriers.

Resources: Several resources were key to the implementation of a systematic pain assessment approach such as the creation of clinical positions in charge of training and of the CLUD, having resource persons in pain management, and easily accessible physicians for the initiation and adjustment of pain treatments. Yet, the most important resource was considered to be the tools, especially the BPS/BPS-NI, that made possible the assessment of pain in ICU patients often unable to self-report. Understaffing and high workloads in combination with a high staff turnover were important barriers.

Tools: Multiple strategies were identified to be facilitating such having a multidisciplinary approach to pain management (identified by > 80% of participants), having an analgo-sedation protocol that gives nurses autonomy in initiating and adjusting pain treatments (68%), ongoing training of new ICU nurses (64%), electronic tracking of pain management (57%), a leader to guide and sustain the implementation efforts (54%), bedside posters as reminders to attend to patients’ pain levels (36%), training physicians (32%), and undertaking performance audits (32%).

**DISCUSSION / CONCLUSIONS**

The failure to recognize and detect the presence of pain is one of the primary barriers to adequate pain relief in the ICU. The implementation of systematic pain assessment approaches are essential to improve the pain management of ICU patients and prevent the adverse consequences of unrelieved pain. This study showed that implementation efforts of a systematic pain assessment approach integrating self-report pain scales with a behavioral pain assessment tool (BPS/BPS-NI) are dependent on the strengthening of facilitators, and overcoming or modifying barriers occurring at various levels.

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