Research

Intensive care unit clinicians identify many barriers to, and facilitators of, early mobilisation: a qualitative study using the Theoretical Domains Framework

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KEY WORDS
Early mobilisation
Barriers
Facilitators
Theoretical domain framework
Intensive care unit

ABSTRACT

Question: From the perspective of intensive care unit (ICU) clinicians, what are the barriers to and facilitators of implementing early mobilisation? Design: A qualitative study using focus groups, with analysis using the Theoretical Domains Framework. Participants: Physicians, nurses, respiratory therapists and physiotherapists from the ICUs of three university-affiliated hospitals in Montreal, Canada. Methods: Four focus group meetings were conducted with 33 participating ICU clinicians. Two researchers independently performed thematic content analysis on verbatim transcriptions of the audio recordings using the Theoretical Domains Framework. Results: Data saturation was reached after the third focus group. Thirty-six barriers were categorised in 13 domains of the Theoretical Domains Framework. The key barriers to early mobilisation were: lack of conviction and knowledge regarding the available evidence about early mobilisation; lack of attention to the provision of optimal care; poor communication; the unpredictable nature of the ICU; and limited staffing, equipment, time and clinical knowledge. Twenty-five facilitators categorised in ten TDF domains were also identified. These included individual-level facilitators (intrinsic motivation, positive outcome expectations, conscious effort to mobilise early, good planning/coordination, the presence of ICU champions, and expert support by a physiotherapist) and organisational-level facilitators (reminder system, pro-early mobilisation culture, implementation of an early mobilisation protocol, and improved ICU organisation). Conclusions: A broad array of barriers to and facilitators of early mobilisation in the ICU were identified in this study. Clinicians can consider whether these barriers and facilitators are operating in their ICU. These may inform the design of tailored knowledge translation interventions to promote early mobilisation in the ICU. (Anekwe DE, Milner SC, Bussières A, de Marchie M, Spahija J [2020] Intensive care unit clinicians identify many barriers to, and facilitators of, early mobilisation: a qualitative study using the Theoretical Domains Framework. Journal of Physiotherapy [2020]–[2021].)

Introduction

Patients discharged from an intensive care unit (ICU) are prone to impairments in body structure and function, limitations in functional activities and participation restrictions, even after the primary pathology that led to ICU admission has resolved. These impairments, limitations and restrictions may be the result of a number of complex interrelated factors involving reduced mobility, which commonly occurs in patients hospitalized in an ICU. Early mobilisation — defined as initiating activities within 24 to 48 hours after ICU admission — has been advocated as a strategy to combat the effects of reduced mobility in the ICU. There is an increasing body of evidence indicating that early mobilisation is safe and feasible, and potentially ameliorates impairments, limitations and restrictions. However, as in all areas of clinical practice, translating this evidence into practice is problematic. Most studies that have attempted to identify the barriers and facilitators of implementing early mobilisation have used surveys. Unfortunately, surveys often fail to adequately explore the reasons behind the responses that are given. Focus groups are often used to trace the cognitive and social processes that influence survey responses and deepen the understanding of complex problems. They can add a human dimension to impersonal data from surveys. Qualitative data is therefore an important complement to quantitative data to inform the design of a knowledge-translation intervention.

Theory-based approaches can inform the development of interview topics, guide data analysis, and provide an understanding of the underpinning behaviours. The Theoretical Domains Framework (TDF) consists of 33 psychological theories and 128 theoretical constructs designed for use in studying the implementation of evidence-based practice and the development of strategies for the effective implementation of this practice. The revised validated version of the TDF has 14 domains. Using the TDF reduces the risk of omitting important factors that may impact decision-making regarding the use of evidence-based care in clinical practice.

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1836-9553/© 2020 Australian Physiotherapy Association. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
This qualitative study is a follow-up of a previous quantitative survey conducted by this team. The initial survey aimed to identify perceived gaps in the clinical practice of early mobilisation, as well as the barriers and facilitators of early mobilisation in critically ill patients.

The aim of the present study was to deepen understanding of the barriers to the practice of early mobilisation in the ICU from the perspective of ICU clinicians: why these barriers exist, what could be done to ameliorate them, and the facilitators that might enhance the practice of early mobilisation.

Therefore the study question for this qualitative study was:

From the perspective of ICU clinicians, what are the barriers and facilitators of implementing early mobilisation?

Methods

Design

Three focus group meetings were conducted with nurses, respiratory therapists and physiotherapists from three McGill University-affiliated teaching hospitals. Heterogeneous groups were chosen to capitalise on the interactive nature of focus groups and the variations in professional perspectives. A fourth focus group was conducted, consisting solely of physicians to avoid hierarchical inhibition of the opinions of other ICU professionals.

Participants

Participants were licensed ICU clinicians working in participating hospitals, with at least 6 months experience in ICU. All had participated in the related survey study.

Data collection

All survey respondents were targeted for recruitment via a cover letter included with the survey questionnaire. All clinicians who responded to the invitation were included in one of four focus groups consisting of about six to ten participants, each lasting about 60 minutes. To ensure homogeneity in the conduct of the focus groups, the same researcher (DA) who had no prior knowledge of the participants facilitated all the meetings. The focus group topic guide, which was developed by the research team, contained ten semi-structured, open-ended questions (Appendix 1). All focus group meetings were conducted in English, although participants were allowed to express themselves in French. Meetings were audio recorded, and two investigators (DA and JS) took notes during the discussions.

Data analysis

Verbatim transcriptions of audio recordings were anonymised and imported into software for coding and analysis. Coding was performed independently by two of the investigators (DA and SM) and disagreements were formally resolved at each step by discussion and in consultation with two other investigators (JS and AB) with expertise in critical care and the TDF framework, respectively.

Qualitative content analysis was performed by concurrently classifying quotes into the relevant TDF domains, and then creating specific statements (ie, barriers or facilitators) summarising similar quotes under corresponding domains. The naming of the barriers and facilitators statements (ie, barriers or facilitators) summarising similar quotes unites in critical care and the TDF framework, respectively.

disagreements were formally resolved at each step by discussion and formed independently by two of the investigators (DA and SM) and no new factors emerged after the third focus group, indicating that data saturation had been achieved; nonetheless, the fourth focus group provided deeper insight into some reoccurring themes.

Results

Focus groups and participants

Thirty-three practising ICU clinicians took part in the four focus group meetings: 18 nurses, six physiotherapists, three respiratory therapists and six physicians.

Barriers and facilitators

A total of 26 barriers and 25 facilitators were identified from the focus group discussions (Table 1). The 36 barriers encompassed 388 independent quotes and reflected 13 domains of the validated version of the TDF. The 25 facilitators encompassed 237 independent quotes and reflected ten domains of the validated version of the TDF. Figures 1 and 2 show the aggregate weight of each barrier and facilitator in the Pugh matrix. Barriers and facilitators were reported with an aggregate weight ≥ 4.5 in the present study (this threshold was determined a priori as a cutoff to report based on the resultant score of the Cervone process).

Key barriers and their associated TDF domains

The barriers and their associated domains, as well as illustrative quotes, are reported below. Quotes are identified by the type of focus group: physicians’ focus group (PFG) or one of the three multidisciplinary focus group (MDFG).

Environmental context and resources domain

Key barriers in this domain included limited staffing, lack of time, limited equipment for early mobilisation, poor communication among care providers and the unpredictable nature of the ICU environment.

Limited staffing

The limited number of physiotherapists, orderlies, nurses and respiratory therapists was reported as a barrier to early mobilisation.
<table>
<thead>
<tr>
<th>Item</th>
<th>Domain (definition)</th>
<th>Barrier</th>
<th>N</th>
<th>Facilitator (presence or availability of)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knowledge</td>
<td>Limited clinical knowledge</td>
<td>17</td>
<td>Clinical knowledge</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Limited procedural knowledge</td>
<td>8</td>
<td>Procedural knowledge</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Skills</td>
<td>Limited clinical and organisational skill</td>
<td>9</td>
<td>Clinical and organisational skill</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Social and professional role and identity</td>
<td>Lack of teamwork</td>
<td>3</td>
<td>Teamwork</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting</td>
<td>Unclear professional roles and responsibilities</td>
<td>13</td>
<td>Clear professional roles and responsibilities</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Negative professional identity (professional self-concept attributes that hinder EM)</td>
<td>2</td>
<td>Positive professional identity (professional self-concept attributes that promote EM)</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Beliefs about capabilities</td>
<td>Low professional confidence</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>Optimism</td>
<td>Lack of optimism</td>
<td>4</td>
<td>Optimism</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Belief about consequences</td>
<td>Negative outcome expectations</td>
<td>4</td>
<td>Positive outcome expectations</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>Acceptance of truth, reality, or validity about outcomes of a behaviour in a given situation</td>
<td>Occupational risk</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Intention</td>
<td>Lack of evidence/data/conviction</td>
<td>16</td>
<td>Evidence/data</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>A conscious decision to perform a behaviour or a resolve to act in a certain way</td>
<td>Low intrinsic motivation</td>
<td>18</td>
<td>Intrinsic motivation</td>
<td>28</td>
</tr>
<tr>
<td>13</td>
<td>Goals</td>
<td>Lack of conscious effort</td>
<td>5</td>
<td>Conscious effort</td>
<td>10</td>
</tr>
<tr>
<td>14</td>
<td>Mental representations of outcomes or end states that an individual wants to achieve</td>
<td>Low prioritisation</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Memory, attention and decision processes</td>
<td>No reminders</td>
<td>2</td>
<td>Reminders</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives</td>
<td>Lack of attention to the provision optimal care</td>
<td>18</td>
<td>Attention to the provision of optimal care</td>
<td>7</td>
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<tr>
<td>17</td>
<td>Obesitya</td>
<td>Obesitya</td>
<td>11</td>
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<td>18</td>
<td>Medical instabilitya</td>
<td>Medical instabilitya</td>
<td>18</td>
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<tr>
<td>19</td>
<td>Sedationa</td>
<td>Sedationa</td>
<td>9</td>
<td></td>
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<tr>
<td>20</td>
<td>Lack of patient comfort or cooperationa</td>
<td>Lack of patient comfort or cooperationa</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Environmental context and resources</td>
<td>Limited staffing</td>
<td>41</td>
<td>More staffing</td>
<td>7</td>
</tr>
<tr>
<td>22</td>
<td>Any circumstance of a person’s situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behaviour</td>
<td>Unpredictable nature of the ICU</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Lack of time</td>
<td>Lack of time</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Limited equipment</td>
<td>Limited equipment</td>
<td>27</td>
<td>More equipment</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Limited space</td>
<td>Limited space</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Poor communication</td>
<td>Poor communication</td>
<td>14</td>
<td>Improved communication</td>
<td>8</td>
</tr>
<tr>
<td>27</td>
<td>Cost</td>
<td>Cost</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>No EM culture</td>
<td>No EM culture</td>
<td>3</td>
<td>Pro-EM culture</td>
<td>13</td>
</tr>
<tr>
<td>29</td>
<td>Poor ICU organisation</td>
<td>Poor ICU organisation</td>
<td>13</td>
<td>Improved ICU organisation</td>
<td>13</td>
</tr>
<tr>
<td>30</td>
<td>Doctor’s order requirement</td>
<td>Doctor’s order requirement</td>
<td>8</td>
<td>No doctor’s order requirement</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>Cumbersome ICU lines and leads</td>
<td>Cumbersome ICU lines and leads</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Lack of protocol/guideline Implementation</td>
<td>Lack of protocol/guideline Implementation</td>
<td>9</td>
<td>Protocol/guideline implementation</td>
<td>9</td>
</tr>
<tr>
<td>33</td>
<td>Social influences</td>
<td>No promotion or support or champion</td>
<td>8</td>
<td>Expert support</td>
<td>13</td>
</tr>
<tr>
<td>34</td>
<td>Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours</td>
<td>Influence of champions</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Peer modelling</td>
<td>Peer modelling</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Peer support</td>
<td>Peer support</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued on next page)
... one physiotherapist, running around the room and dealing with chest regular standard stuff and is not available to do more time-consuming mobilisations. (PFG)

Lack of time

... sometimes it takes me an hour to organise. I go a thousand times around ICU2 and ICU1. I am trying to find the [right] time, but I know the orderly cannot be sure of the time [their availability], so it is hard. (MDFG 1)

Limited equipment for early mobilisation

We don’t have enough [equipment]... it becomes difficult for the nurses and the physiotherapists or anyone who wants to mobilise... we don’t have enough so that is it. (MDFG 1)

Table 1 (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Domain (definition)</th>
<th>Barrier</th>
<th>N</th>
<th>Facilitator (presence or availability of)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>Emotion</td>
<td>Stress and burnout</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Behavioural regulation</td>
<td>Poor action planning and coordination</td>
<td>13</td>
<td>Good action planning and coordination</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: EM = early mobilisation, ICU = intensive care unit.

* These patient-related attributes reflect the ‘complexity of cases/patient’ that influence clinical decision-making.

Figure 1. Barriers identified in the study and their assigned weights. Weights are based on a rating factor of two for each of the following criteria: frequency of quote, divergence of opinion and perceived impact on practice.

EM = early mobilisation, ICU = intensive care unit.
Poor communication

Speaker 1: There is no information communication.

Others: Absolutely!

Speaker 1: ... the orderlies, they know where is the chair... I [the nurse] don’t know how many chairs, what I have available and what I don’t have available. There is a gap in the communication 100%. (MDFG 1)

Unpredictable nature of the ICU

The level of activity and the unpredictability in the context... it makes it very complex... (MDFG 1)

Belief about consequences domain

The key barrier identified in this domain was the belief, by some clinicians (especially physicians), that there is insufficient conviction regarding the potential benefits of early mobilisation or insufficient evidence or data to drive the implementation of early mobilisation practice.

Lack of evidence/data/conviction

But for it to be done consistently people actually have to believe in it... I think that the lack of conviction may be the greatest obstacle. (PFG)

... the Salt Lake City study was not an RCT. It was an observational prospective study. We do have some RCTs as well, but you don’t know whether it’s because they had to change their sedation policy so that they could ambulate. Maybe that was the variable and not the ambulation. (PFG)

Knowledge domain

Limited knowledge of the benefits of early mobilisation, the safety parameters for early mobilisation, the procedures for early mobilisation and the detrimental consequences of immobility were identified as barriers to early mobilisation.

Limited knowledge

At times the nursing staff doesn’t want to mobilise the patient because the patient has a PA catheter in place... although there are no actual contraindications if the patient is hemodynamically stable. (PFG)

Memory, attention and decision processes domain

The lack of the ability to remember, selectively focus and choose care pathways that will result in optimal health benefits for the patient was identified as a barrier.

Lack of attention to the provision of optimal care

Like you could have a patient who like gets up in the chair most of the days, but he has a certain nurse for the whole weekend... and the patient doesn’t get up in the chair the whole weekend because they [the nurse] just didn’t think of it. (MDFG 2)

Key facilitators and their associated TDF domains

The key facilitators and illustrative quotes are given below.

Environmental context and resources domain

The presence of an organisational culture that encourages early mobilisation in an ICU (pro-early mobilisation culture),
reorganisation of the ICU (improved ICU organisation) and implementation of a protocol or guideline were identified as key facilitators in this domain. Participants from one hospital believed that implementation of a protocol/guideline would not promote the practice of early mobilisation.

Pro-early mobilisation culture

Speaker 1: And then it [presence of a dedicated team] also takes care of increasing the awareness of the team towards going in favour of early mobilisation because if you see a dedicated team...you act on it, it is part of our culture, and you are more prone to think about it for your next patient.

Others: Yeah. (MDFG 1)

Improved ICU organisation

If we would have a dedicated team [for early mobilisation], like not using the [regular] orderlies, that will take care of all the probabilities and the uncertainties the regular team takes care of. It lessens the problem of the communication because it is a dedicated team that communicates with you. (MDFG 1)

Protocol/guideline implementation

Well if it’s protocolised... they should just be done, right?...looking for contraindications, not for indications. And I think that’s the key. (PFG)

Speaker 1: When I hear the word protocol, the first thing I think of is more paperwork that actually takes away more minutes from our availability to do actual things with the patient. It is something to... a piece of paper to write on that doesn’t actually change the care of the patient in any...and more like it takes away from the patient.

Speaker 2: Yeah, a guideline would be a better idea than a protocol.

Speaker 3: I don’t know if a guideline will make a difference though. (MDFG 2)

Social influences domain

Facilitators under this domain included the influence of having the assistance of clinicians who are highly skilled in facilitating early mobilisation (expert support) and the promotion of early mobilisation by influential clinicians (influence of champions). Some participants mentioned that the presence of an expert who is both motivated and has the skill to assist them to carry out early mobilisation will have more impact than early mobilisation champions who push them to carry out the practice without getting involved.

Expert support

I think with the physio present, a lot of nurses would feel more comfortable. (MDFG 2)

Influence of champions

Speaker 1: I said that we need to clone [mentions the name of another nurse].

Others: (waves of laughter)

Speaker 1: ... but seriously, she’s a champion, and she’s motivated and... yeah it’s a facilitator. (MDFG 3)

Intentions domain

Being intrinsically motivated (intrinsic motivation) and making a conscious decision to implement early mobilisation were seen as strong facilitators.

Intrinsic motivation

Nothing stops me from getting them up if they are able to get up... I will get them up if they can get up... no matter what. (MDFG 3)

Conscious effort

Some people [doctors] will stop the propofol or sedation for 2 hours, let the patient wake up, it depends. Then you as a nurse, you will have to sort of, that has to be done, I want my patient awake, so let’s do it. (MDFG 1)

Behavioural regulation domain

One facilitator found under this domain referred to the act of forming a plan or organising events to facilitate mobilisation (action planning and coordination).

Action planning and coordination

In terms of organising the planning, I would personally put that higher partly because it’s just such low hanging fruit. It’s so easy, organisational things we can change almost easily. (PFG)

Memory, attention and decision processes domain

Creating a reminder system to remind clinicians about early mobilisation was a facilitator that was highly emphasised, especially by the physicians.

Reminders

Speaker 1: The nurses go through their little checklist, they have it all organised and it always has to come in the same order. And if we had just a rehab line that would act as a reminder for us... just saying ‘from a rehab point of view, yesterday he stood’.

Others: Yeah, yes, yes, easily [the discussion continued about where on the clinical round checklist such a line could fit best]. (PFG)

Belief about consequences

Data showed that clinicians who expect a positive outcome (for the patient or the healthcare system) from early mobilisation were more likely to implement early mobilisation.

Positive outcome expectations

If I knew that every day I got my patient up like twice a day, if I saw that... you know I saw that it cut a week off their stay in ICU, I would be... pushing that harder to get them up. (MDFG 1)

Discussion

This study used focus groups underpinned by a structured theoretical framework, the TDF, to identify and deepen understanding of the multifaceted barriers to and facilitators of early mobilisation and how they influence clinical practice. The findings revealed 36 complex barriers and 25 facilitators perceived to influence the implementation of early mobilisation, which clustered primarily around 13 and 10 domains of the TDF, respectively. The findings of the current study suggest implications for several groups to improve early mobilisation in the ICU. Decision-makers should provide more resources (staffing and equipment) and create early mobilisation reminders. Clinicians should develop a positive early mobilisation culture, reorganise their ICUs, use early mobilisation reminders, and use and improve team communication. Researchers should synthesise the available evidence on the benefits of early mobilisation on several outcomes from robust clinical trials, and develop theory-based knowledge translation interventions to improve the knowledge and skills of ICU clinicians on early mobilisation.
The current findings are consistent with previous studies that identified barriers to and facilitators of early mobilisation. A recent systematic review of 40 studies by Dubb et al identified 28 early mobilisation barriers. While barriers in several TDF domains were also reported in that review, the present study identified additional barriers in these domains: Belief about capabilities, Optimism, Intention, and Memory, attention and decision processes. Furthermore, some of the barriers were uniquely identified for the first time in the current study under these domains: Social and professional roles (professional identity and teamwork), Belief about consequences (negative outcome expectation, lack of evidence/data/conviction), and Emotion (fear). The differences between the current findings and those from the 40 studies included in the systematic review by Dubb et al may be explained primarily by the differences in the design and methods used to identify the barriers and the differences in the settings and participants. Furthermore, the analyses in the few qualitative studies that were included in the review were not informed by a theoretical framework. These differences explain the distinct contribution of the current study.

In the current study, respondents from an initial cross-sectional survey study on early mobilisation in the ICU in the same three ICUs were followed up. While both studies identified that limited resources constitute part of the greatest barrier to early mobilisation, the survey failed to identify barriers from six of the 13 domains found in the current study (Beliefs about capabilities, Optimism, Belief about consequences, Intentions, Emotion, and Memory, attention and decision processes). Unlike in the survey, which found primarily physical and organisational barriers, close to 40% of barriers in the current study were related to clinicians’ attitudes. Finally, contrary to the current study, medical instability, the presence of ICU lines, sedation, and safety concerns of clinicians were the greatest barriers in the survey. These differences highlight limitations associated with survey methodology.

This study had several strengths. Unlike most studies that have investigated barriers to early mobilisation, this study included the perspectives of respiratory therapists, who may be particularly important in the mobilisation of mechanically ventilated patients in some jurisdictions. Also, it is the only early mobilisation study that has used the TDF to guide its qualitative analysis, which limited the risk of omitting important areas when considering factors that impede implementation of evidence-based practice. Two researchers analysed the results in order to minimise bias. Data saturation was achieved. A multi-criteria decision-making model (the Pugh Matrix Analysis), which is a novel approach, was used to determine the relative importance of TDF domains and identify the key barriers and facilitators. The barriers and facilitators were derived from discussions generated by practising ICU clinicians. People’s attitudes are precursors to individuals’ intention to do something or not, which drives professional behaviour. Other novel barriers included fear, expectation of a negative outcome and lack of evidence or conviction.

What was already known on this topic: It is safe and feasible for many patients in intensive care units to be mobilised early in their admission. Despite being recommended to improve patient outcomes, early mobilisation is not provided to many patients in intensive care units. Barriers and facilitators of early mobilisation may be patient-related, structural, process-related or related to the intensive care unit culture.

What this study adds: Previously identified barriers and facilitators were confirmed. Additional novel barriers and facilitators were identified, many of which were related to clinician behaviour. Other novel barriers included fear, expectation of a negative outcome and lack of evidence or conviction.

Footnote: QDA Miner software, Lite version 2.0, Provalis Research, Montreal, Canada. eAddenda: Appendix 1 can be found online at https://doi.org/10.1016/j.jphys.2020.03.001. Ethics approval: The McGill University Ethics Committee and the ethics committees of the participating hospitals approved this study. All participants gave written informed consent before data collection began. Competing interest: Nil. Sources of support: The study was funded by Edith Strauss Rehabilitation Research Project Grant, Richard and Edith Strauss Foundation. Acknowledgements: We thank Ms. Caroline de Marchie for her assistance in the second verification of the audio script transcription and Ms. Heather Owens for her editorial review of the manuscript. We also thank the ICU clinicians who participated in the study, the heads of units/departments, the collaborating physicians at each site for their support and Richard & Edith Strauss for the knowledge translation grant that funded this study. Provenance: Not invited. Peer reviewed. Correspondence: Jadranka Spahija, Axe de recherche en maladies chroniques, Hôpital du Sacré-Coeur de Montréal, Canada. Email: jadranka.spahija@mcgill.ca

References


Anekwe et al: ICU clinicians’ perspectives on early mobilisation


