



## Research Article

# Use of Facebook in a quality improvement campaign to increase adherence to guidelines in intensive care: A qualitative study of nurses' and physicians' experiences



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## ABSTRACT

**Objectives:** This study aimed to explore intensive care unit nurses' and physicians' experiences with professional content provided through closed Facebook groups, as part of a quality improvement campaign to improve guideline adherence.

**Research methodology:** This study used an exploratory qualitative design. In June 2018, data were collected through focus groups of intensive care nurses and physicians who also were members of closed Facebook groups. Data were analysed using reflexive thematic analysis, and the study was reported according to the consolidated criteria for reporting qualitative research.

**Setting:** The study's setting was four intensive care units at Oslo University Hospital, Norway. Professional content on Facebook comprised audit and feedback on quality indicators on intensive care topics with related pictures, videos, and weblinks.

**Findings:** Two focus groups of 12 participants were included in this study. Two main themes were identified: 'One size does not fit all' described that quality improvement and implementation are influenced by several factors related to current recommendations and personal preferences. Various strategies are required to serve different purposes and meet individual needs. 'Matter out of place' described conflicting experiences of being offered or exposed to professional content on Facebook.

**Conclusion:** Although the audit and feedback on quality indicators presented on Facebook motivated improvements, professional content on Facebook was perceived as inappropriate. Hospital platforms with applicable features of social media, such as reach, availability, convenience, ease, and possibility for commenting, were suggested to secure professional communication about recommended practices in intensive care units.

**Implications for clinical practice:** Social media platforms may be useful for professional communication among ICU personnel, but appropriate hospital applications with available and applicable social media features are recommended and needed. The use of several platforms may still be needed to reach all.

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## Introduction

Social media has changed the way people communicate worldwide. Healthcare professionals report a high frequency of social media use, even during work and for professional purposes, but the usage may vary with age, sex, graduate status and country of residence (Khan et al., 2021; Piscotty et al., 2016; Surani et al., 2017; Tunnecliff et al., 2015; Wang et al., 2019). With its speed, reach and accessibility through smartphones, social media may improve communication, information sharing and collaboration among healthcare professionals, and provide an educational medium for improving knowledge, adherence to research evidence and clinical behaviour (Chan and Leung, 2018; Maloney et al., 2015). However, reported limitations related to social media are concerns about data protection, privacy, liability and issues in professionalism (Chan and Leung, 2018). Cyber security in hospitals is a growing concern with the increased use of technology and the internet (Wasserman and Wasserman, 2022).

In intensive care, few studies have explored the use of different modern social media for education and dissemination of knowledge (Bourgault et al., 2022; Kleinpell et al., 2017; May et al., 2021; Witherspoon et al., 2016). Frequent use of social media was reported among both nurses and physicians in intensive care units (ICU), with Facebook being the most popular (Petosic et al., 2019). A Facebook profile was more common among those younger than 40, and daily use was more frequent among females and nurses. ICU nurses reported a more positive attitude towards receiving professional content in closed Facebook groups than physicians. In a subsequent clinical study, we used previously established, nurse-administered, closed Facebook groups for a multifaceted quality improvement campaign (Hauff et al., 2023; Petosic et al., 2021). Group membership was voluntary for the employees at four ICUs in Oslo University Hospital. Most ICU nurses, some physicians, and other healthcare personnel were members of the groups, mainly used for social content and for shift-swapping. Audit and feedback on quality indicators were provided first during educational events, followed by a six-month period via weekly Facebook posts with related pictures, videos, and weblinks, defined as professional content (Table 1). The quality indicators were related to pain, agitation/sedation, delirium, early mobilisation, early enteral nutrition, multi-professional ward

**Table 1**

Main components of the 26 weekly Facebook posts (Nov.'17-May'18).

<b>Audit and feedback of the following quality indicators</b> (20 posts, one post included feedback of both PAD and mobilisation):
- Pain, agitation/sedation and/or delirium (7 posts)
- Early Mobilisation (4 posts)
- Early enteral nutrition (3 posts)
- Multi-professional ward rounds (1 post)
- Pressure injuries (3 posts included feedback on quality indicator, 1 post on the topic, but without feedback)
- All five quality indicators (3 posts)
- None of the five topics mentioned specifically (4 posts)
Feedback on quality indicators via social media in general
Ventilator-associated pneumonia
Silly Happy Holidays video
Facebook poll of preferred place of information
<b>Posted content related to the ICU quality indicator</b> (two posts had both pictures and weblinks):
- Image (11 posts)
Graph: development of QIs within the ICU (2 posts)
Table: QIs levels for all four ICUs (1 post)
An algorithm from the guidelines (3 posts)
Picture (5 posts)
- Video (11 posts)
Interviews (8 posts)
Educational (2 posts)
Silly Happy Holidays video (1 post)
- Weblink (3 posts)
- Podcast (1 post)
<b>Call for action;</b> likes and comments including prizes to one of them

Abbreviations: ICU; intensive care unit, QIs; quality indicators.

rounds, and pressure injuries in ICU patients. Facebook posts were seen by many of the group members but commented on and liked only by a few (Petosic et al., 2021), indicating exposure to the content, but the experiences of those exposed were not described. We made the assumption that using a qualitative approach may provide a nuanced and deeper knowledge about this novel way of using Facebook as an implementation strategy for quality improvement in ICUs. Therefore, the present study aimed to explore ICU nurses' and physicians' experiences with professional content provided through closed Facebook groups as part of a quality improvement campaign, to improve guideline adherence in ICUs.

## Methods

### Design

A qualitative exploratory design was used to develop an understanding of the experiences with Facebook usage in a quality improvement campaign. Focus groups were chosen to facilitate dialogue, discussion, and interactivity and provide a range of participants' ideas and feelings (Green and Thorogood, 2018; Krueger and Casey, 2015). For this study, we followed the consolidated criteria for reporting qualitative research (COREQ) (Tong et al., 2007).

### Setting

Nurses and physicians from four mixed ICUs at Oslo University Hospital participated in the focus groups. The four ICUs were located across two separated locations, with two ICUs at each location. Each ICU had 6–10 beds, 60–100 nurses per unit, and 8–10 physicians per site. While nurses only worked in one ICU, physicians covered two ICUs at the same location. Contact between the two professional groups existed primarily during direct patient care and daily rounds. Hospital information was available to employees via an intranet site and e-mail, which requires physical presence at the hospital for the vast majority. Internet access through hospital computers was subject to strict limitations, and Facebook posts were accessible only through personal smartphones or computers.

### Participant recruitment

Purposive sampling was used (Patton, 2002), and ICU nurses and physicians working full-time during the intervention period and being members of one of the four ICU Facebook groups were considered eligible to participate. We aimed to maximise variation to ensure diverse perspectives and were able to recruit two heterogeneous groups of participants in terms of profession, sex, age, experience, and workplace. Contact persons in each ICU recruited participants to two focus groups: seven in each focus group, two physicians, and five nurses representing both ICUs at each site. We believe that sufficient information power for this study should be achieved with two focus groups of 5–7 participants, considering the narrow study aim, the specific sample, and the exploratory analysis strategy aimed to uncover relevant patterns of meaning (Malterud et al., 2016).

### Data collection

Two semi-structured focus group interviews (one at each location) were conducted in hospital meeting rooms in June 2018, a month after completing the Facebook campaign. An interview guide was developed and discussed within the research group to capture all experiences of using existing closed Facebook groups to provide professional ICU-related content. To facilitate entry into a specific topic, we initiated discussions on the general experiences of implementing evidence-based recommendations. HW conducted the interviews with AP as an observer. All participants knew one or both researchers as colleagues.

AP was responsible for the Facebook campaign, and her presence during the focus groups may have hindered openness about possible negative experiences. To encourage openness, we emphasised that both positive and negative experiences were considered important and useful for informing future interventions. To invite participants to confirm or add to the main topics of the discussion, a summary of the interviewer’s understanding was presented at the end of each focus group. Focus group interviews were recorded and transcribed verbatim by AP.

**Data analysis**

Data analysis was performed using the six phases of reflexive thematic analysis described by Braun and Clarke, aiming to identify themes that are patterns of meaning in qualitative data (Braun and Clarke, 2006, 2019). The six phases comprised familiarisation with the data, generating initial codes (coding), generating themes, reviewing themes, defining and naming themes, and producing the report. The analysis was an active, reflexive, recursive and iterative process across the six phases and, as recommended, was not linear or stepwise (Braun and Clarke, 2006, 2019).

Data familiarisation was accomplished by interview participation and manual transcription, by actively listening to the recorded focus groups and repeatedly reading the transcripts, making notes, and listing initial ideas for coding. This process was performed independently and was followed by discussions in the research group (AP, HB, HW). NVivo software (version 12.7.0) was used to organise the data in the following process. Initial codes were generated inductively with semantic codes of explicit or surface meanings of the data, coding for as many potential patterns as possible and preserving surrounding data in the coded data extracts. We coded the two focus groups using NVivo; AP coded and discussed the codes and coding process with HB and HW in several meetings throughout the coding of both focus groups and in the subsequent process. Data were extracted from NVivo to tables to check for coherence and discussions among the three researchers. Following the discussion, the codes were renamed and adjusted to capture sufficient

**Table 2**  
Example of data extract, code, subtheme, and theme.

Data extract	Codes	Subthemes	Theme
<i>But the advantage was exactly as you say.. that as you sit and scroll through Facebook in the evening and then and suddenly something good appears (laughs) from work, then you have to look at it anyway. (other participant confirming) So.. it's both.</i>	Conflicting experience	Applicable yet inappropriate	Matter out of place -Professional content on Facebook.
<i>I think, I do not think it (professional content) is suitable together with everything else.</i>	Inappropriate mix-up of content		
<i>I have to say that I felt that ... ehm.. sitting at home on the couch, finally my legs up, relaxing, checking out the friends' latest updates. And then a lot off professional content appears.. Oh no!.. it was.. it really disgusted me..</i>	Invading private time		

meaning. *Generating themes* included the process of collecting codes into groups and then gathering them into larger groups before generating subthemes and themes (Table 2). *Reviewing themes* was done in relation to the codes and the entire dataset, whereupon the codes, subthemes, and themes were again adjusted, regrouped, or renamed. The two phases of *defining and naming themes* and *producing the report* included the process of moving back and forth between the data and writing the results section. All authors provided substantial input during these phases.

**Methodological considerations**

*Trustworthiness* was sought by applying the Lincoln and Guba framework (Lincoln and Guba, 1985; Shenton, 2004). *Credibility* was sought through descriptions and quotations. A summary of the interviewer’s understanding was presented to the participants at the end of each focus group to ensure the comprehension of the descriptions. Co-authors were involved in the analytic process to ensure *confirmability* and by presenting the analytic steps from codes to themes. *Dependability* was sought by transparency through detailed descriptions of the research process, allowing the reader to assess research practice. *Transferability* was sought by providing relevant contextual information about the participants and the study ICUs to enable the reader to relate the findings to their practice.

**Ethical considerations**

Ethical approval for the study was obtained from the Regional Ethics Committee of Southeast Norway (2016/2281/REK sør-øst A), the Data Protection Officer of Oslo University Hospital, and the department heads. Written informed consent was obtained from each participant before their participation. Confidentiality was maintained by storing the original data on a secure hospital research server and by anonymisation. In the transcribed text, all names of participants, other people mentioned, hospitals or units were exchanged with numbers or an X. A participant code list was kept safely in a locked cabinet at the hospital.

**Findings**

We recruited seven participants for each focus group. However, two initially recruited participants at one site were unable to attend on the day of the focus group and did not participate in the study. The final sample comprised 12 participants. Among the 12, three were physicians and nine were nurses, three were male and nine were female, aged 32–53 years, with an average ICU experience of >10 years, and representing all four ICUs (Table 3). The two focus groups lasted 96 and 75 min, respectively.

The thematic analysis resulted in two main themes and five sub-themes (Table 4).

**Table 3**  
Characteristics of the participants (n = 12).

Focus group	Age group	Profession	ICU-experience (years)
1	50–59	physician	20 +
1	40–49	nurse	10–19
1	40–49	nurse	5–9
1	40–49	nurse	10–19
1	40–49	nurse	20 +
2	50–59	nurse	10–19
2	30–39	nurse	5–9
2	40–49	nurse	10–19
2	40–49	physician	5–9
2	30–39	nurse	0–4
2	50–59	nurse	20 +
2	40–49	physician	5–9

Abbreviations: ICU; Intensive care unit.

**Table 4**  
Overview of Main themes and Sub-themes.

Main themes	Sub-themes
One size does not fit all	Simplifying practice or justifying change Targeting individual barriers
Matter out of place	Content is key Applicable, yet inappropriate Ensuring information

#### *One size does not fit all*

The first main finding was the participants' experience that quality improvement and implementation was influenced by several different factors and personal preferences. This is described in two sub-themes illustrating that one size does not fit all purposes or individual needs, hence requiring different strategies.

#### *Simplifying practice and justifying change*

In terms of quality improvement and implementation in general, the participants favoured improvements in daily work, leading to less complicated or time-consuming procedures that were also considered equally beneficial to patients. Several examples were provided, such as:

*'When things simplify everyday life for us, it becomes easier to implement. Less frequent routine care of the injection site, for example, or closed suctioning, or when our workload decreases, it is easier to get it implemented.'* (focus-group-1)

Simplification was also described as facilitating the new practices, for example, by placing the delirium assessment tool at the bedside.

To convince and motivate staff to adhere to recommendations, participants agreed that the implementation of new knowledge had to be justified through evidence proving safer or improved practices for patients. The quality improvement Facebook campaign contained professionally justified recommendations but did not necessarily simplify practice. Demanding new practices were more likely supported when they were considered to improve patient outcomes.

*'The knowledge must be convincing. Having more and more awake patients in the ICU is more challenging and demanding, but you see and understand that this is beneficial for the patients, - that it is documented [to be] beneficial, ...'* (focus-group-1)

Despite showing confidence in new practices holding evidence for improved patient outcomes, the participants expressed the need for help and support during the implementation process, suggesting several implementation strategies.

#### *Targeting individual barriers*

Implementation barriers related to staff were raised in general terms during the focus groups. Barriers, such as lack of information, knowledge, or motivation to change, were associated with difficulty in reaching all personnel with information and convincing them:

*'...working shifts, with always someone not being present [when information is provided], it's kind of random what information comes your way.'* (focus group-1)

*'Those who do it, [the requested task] ... do it quite regularly every day. Likewise, others notoriously don't, and it is hard to convince them.'* (focus group-2)

The participants suggested several strategies, such as educational events, audits and feedback, reminders, and the use of local opinion leaders, to overcome these barriers. Some participants indicated a need

for constant reminders because of the many work-related demands and priorities, although some nurses found them annoying. The suggested strategies and barriers discussed in general terms during the focus groups corresponded to the quality improvement campaign provided, except for Facebook. Use of Facebook was not proposed as a strategy by the participants; however, when asked directly, some confirmed that the posts might work subconsciously as a reminder.

Preferences varied regarding the appropriate time and place for receiving information. It was argued that various interventions and communication strategies are needed, including the presentation of information on several platforms. However, pleasing everyone appeared impossible.

*'Some will say that I don't have time to log on to the intranet, so if I am on leave, I want to catch up ... I don't want everything on mail, then Facebook is better. (...) While others will say: No, I don't want Facebook because so and so, and it's my private phone and all the other arguments, so anyway ... you cannot please everyone.'* (focus group-1)

In addition to one size not fitting all, there was also ambiguity regarding Facebook use, which was presented as the second main finding.

#### *Matter out of place*

The other main finding of this study was the ambivalence expressed regarding Facebook use. Professional content provided via Facebook, especially feedback on quality indicators, was regarded as valuable. However, when the content appeared on Facebook, many regarded it as inappropriate, disruptive, or even provocative, constituting the theme "matter out of place". Instead of Facebook, employers were expected to provide appropriate communication platforms to ensure information. This theme includes three subthemes.

#### *Content is key*

Participants from both focus groups agreed that the professional content provided in the multifaceted quality improvement campaign was important and had the potential to raise awareness and improve practice. This particularly applied to the audit and feedback on quality indicators posted on Facebook. However, Facebook as a platform alone was considered insufficient, but the content was crucial.

*'There must be something ... a little more ... substantial. So, if you are to introduce something new, and you are supposed to trigger the audience, I believe you have to use meetings, information, e-mail..., so, you can use several platforms, but I think it's the content that ... eh ... if it's an interview or a fancy movie on Facebook, ... and that's it, it won't catch [my attention]. It's not quite enough.'* (focus group-2)

According to the participants, feedback on audited quality indicators focusing on adherence provided a quick overview of the current status of each ICU compared to each other. This motivated improvements through competition, especially if ICU performance fell short of expectations.

One of the participants, who did not prefer or actively read the posted content on Facebook, described how simply noticing the posts may have subconsciously influenced her and affected her practice, for example, how she documented in the patient chart.

#### *Applicable, yet inappropriate*

Facebook was perceived to be *applicable* by the participants due to its ability to reach many people, its accessibility outside the hospital, and its ease. Facebook posts frequently led to professional discussions both in Facebook groups and otherwise, for instance, during handovers.



*'I really think it has been a good platform because... well, it reaches many. I notice among the staff that we discuss a lot more what was posted on Facebook than what was written in the group e-mail from the manager.'* (focus group-2)

Although there were few comments on Facebook posts, they were highlighted as positive and were told to increase reflection and awareness. Facebook usage was considered double-edged, meaning that even if some participants did not prefer to read professional content on Facebook, they read the posts when they appeared in their Facebook feed while scrolling.

The reluctance to adopt Facebook as a platform for professional communication was associated with concerns related to Facebook's sharing of data and lack of privacy protection, exemplified by the recent Facebook data misuse scandal. Some participants disliked Facebook as a platform in general because it was associated with exclusively positive and self-praising posts. Another concern was the lack of access to Facebook through the hospital computer, forcing the staff to use their personal smartphones. Furthermore, social media, in general, as the name implies, was perceived as social and personal and should be used for these purposes. Work-related content on Facebook led to an inappropriate mix-up of content, time, and roles, as it appeared during off-hours, along with other social content or shift changes. When professional content appeared either when scrolling through posts in the pre-existing Facebook group or their Facebook feed, participants indicated that it might lose its importance.

*'I must say I felt ... ehm ... sitting at home on the couch, finally my legs up, relaxing, checking out the friends' latest updates, and then loads of professional content appears ... Oh no! ... it was ... it really disgusted me ...'* (focus group-1)

For some of the participants, it resembled unwanted advertising, invading their privacy and autonomy. However, some participants suggested that a Facebook group set up specifically for professional purposes (separate from the ICU social content) might work. This would allow them to decide whether to join the group and when to access the information, thereby avoiding becoming involuntary recipients.

### Ensuring information

The study participants expected their employer to provide applicable platforms for information and communication and encouraged the use of social media to improve communication among personnel, as email was not perceived as a good tool due to its unavailability at home and as it contained long mail threads.

It was also argued that employers should be cautious about bombarding healthcare personnel with information 24/7, yet the availability of professional information outside the hospital was perceived as highly positive. The choice of Facebook as a platform was criticised, and more suitable platforms were suggested.

*"Slack" [a communication platform for work], for instance, or something like it... "Facebook workplace". Then the customer, the employer, registers you with the job e-mail address as username. Then it is connected to work, and not your private... and it is completely separate from the personal, so you cannot cross over'* (focus group-2)

*'It is a paradox, though, when you are not allowed to log in to Facebook when at work and still you provide information through Facebook.'* (focus group-1)

### Discussion

The ICU nurses and physicians expressed ambivalence towards the use of Facebook to improve guideline adherence. Although feedback on audited quality indicators was emphasised as important in increasing awareness and motivation to improve practice, the participants

suggested alternative hospital communication platforms to separate professional from social and private matters. Disfavouring Facebook, they further claimed that implementation depended on several factors and preferences, indicating that one platform does not fit all purposes or all healthcare personnel, abstracted in our findings as 'one size does not fit all'.

The participants in this study expressed motivation to improve practice through feedback on audited quality indicators, in line with the theoretical assumptions of audit and feedback (Ivers et al., 2012). Implementation strategies such as educational events and reminders were discussed as preferable in general terms in the focus groups, corresponding well to the recommended implementation strategies (Borger et al., 2015). The participants' conflicting experiences with the use of Facebook for professional purposes might be viewed as akin to 'matter out of place', which is the way that anthropologist Mary Douglas defines 'dirt' (Douglas, 2003). One exemplification is 'shoes', which are not dirty in themselves, but they *turn* dirty when being placed on the dinner table (Douglas, 2003). According to her conceptualisation, dirt offends order as it disorders pure and unclean. Hence, something may be considered pure in one context and unclean in another, and dirt depends on the eyes of the beholder (Douglas, 2003). The way some participants talked about being offended or provoked by content appearing where they felt it did not belong seemed to be triggered by their perception of disorder, as described by Douglas. This may indicate that choosing the right place and time for intervention requires careful consideration, also of "social rules" (McCormack et al., 2002; Skivington et al., 2021). However, such "social rules" may change over time, and the experience of inappropriateness may differ between contexts (Douglas, 2003).

Similar conflicting experiences and opinions regarding the use of social media for professional purposes have been reported among pharmacists, medical students, and health practitioners (Benetoli et al., 2016; Maloney et al., 2014; Tunnecliff et al., 2015). Healthcare workers expressed a need to separate their professional and personal lives, despite several positive features of social media, such as accessibility, convenience, and the ability to disseminate information quickly to a large audience (Maloney et al., 2014; Tunnecliff et al., 2015). It is noteworthy that these studies were all performed before the COVID-19 pandemic. During the pandemic, the use of digital communication, including social media, became more important because of impeded traditional educational sessions, congresses, and meetings, and healthcare workers might have more positive attitudes (Bourgault et al., 2022; Chan et al., 2020; Merchant and Lurie, 2020). The context is of general importance when attempting to understand people's experiences (McCormack et al., 2002; Skivington et al., 2021). In the pandemic context, healthcare personnel appeared more eager to access professional information through social media to learn about self-protection from COVID-19 (Dai et al., 2020; Newby et al., 2020; Vizheh et al., 2020) hence making social media more acceptable even for professional content. This is supported by Douglas' (2003) theoretical aspect of 'dirt' as highly context-dependent; the pandemic may have altered the view on the appropriateness of Facebook. During the pandemic, new Facebook groups were established to spread and exchange professional information and experiences with staff allocated from their original ICUs to work in temporary cohort ICUs.

Even though the focus groups revealed conflicting experiences concerning Facebook, the quality improvement intervention showed a positive impact on the documentation of pain, agitation/sedation, and delirium assessments, as well as mobilisation of patients (Hauff et al., 2023; Petosic et al., 2021). According to the focus groups, the audit and feedback of quality indicators were the active ingredients and not the platform used. However, the content of an intervention may only have an impact if it reaches the targeted population (Brownson et al., 2018; Johannsson and Selak, 2020; Ng et al., 2020; Skivington et al., 2021). The participants highlighted *reach* as a positive feature of Facebook, and the posts were already viewed by many within 24 h of posting (Petosic et al., 2021). This may indicate that social media may be useful, even if

some of the participants found it annoying. According to Perelman (2013), ‘content is king’, and people are usually interested in both news and gossip or both professional and social content. However, ‘distribution is queen’ (Perelman, 2013). According to the participants, professional content may be interesting, even when unintentionally accessed on social media. They also expressed the need for multiple interventions and communication strategies, which require information on several platforms.

Participants expressed concerns about the existing hospital platforms being inadequate and suggested the use of more appropriate social media platforms provided by the hospital. Today, hospital computers are frequently inaccessible with slow log-in processes (Chan et al., 2020; Johannsson and Selak, 2020) and organisation-imposed restrictions, which further limit access to social media platforms (Johannsson and Selak, 2020). The combination of strict regulations and limited resources in healthcare may hamper the effective dissemination and communication of guideline recommendations (Brownson et al., 2018; Johannsson and Selak, 2020). The participants’ reluctance to use Facebook was partly related to concerns about sharing of data and lack of privacy protection, similar to findings from a systematic review (Chan and Leung, 2018). Information security, including the main three components of *confidentiality*, *integrity* and *availability* (Nifakos et al., 2021; Wasserman and Wasserman, 2022), is required to counteract the growing threat of cyber security in hospitals (Jalali and Kaiser, 2018; Nifakos et al., 2021). A balance between security and availability is, thus, needed, as digitalisation may have significant potential benefits for care quality (Byrnes et al., 2021; Jalali et al., 2021; Rose et al., 2021; Wani et al., 2020). Again, this became particularly evident during the COVID-19 pandemic when numerous restrictions on communication apps were lifted in the US, allowing the use of video conferencing applications (Jalali et al., 2021). Several video platforms facilitated communication and virtual visits (Rose et al., 2021; Tabah et al., 2022), and the COVID-19 pandemic may have resulted in the long-lasting adoption of modern communication tools (Byrnes et al., 2021). The main reason for using Facebook as a central part of the quality improvement campaign was that most of our targeted population was already active on the platform. According to Johannsson and Selak (2020), mainstream media has adapted to customers’ needs to access information through social media platforms, and medical publishers and healthcare employers are encouraged to comply with this.

In the focus groups, the availability of social media was emphasised as an important positive feature, in contrast to traditional hospital communication platforms that are unavailable outside the hospital. Our participants called for a platform that supported a balance between work and leisure. Regulations of work and leisure time appear to be needed in the digital age, and some European Union countries provide legal regulations regarding the use of digital tools and working hours. The ‘right to disconnect’ movement in France emphasises the employees’ right not to take work-related calls or read e-mails during their time off, ensuring respect for personal and family life (Boring, 2017; Whelan, 2019). Long working hours may contribute to stress, burnout, and poor health (Whelan, 2019). When and where to access and read information should therefore be left for the individual to decide and not to be forced upon, as stated by the participants in this study.

### Strengths and limitations

The novelty of this study lies in the investigation of ICU nurses’ and physicians’ experiences with Facebook use in an intervention. We believe that sufficient information power was achieved, the study aim was relatively narrow, the sample was specific, and the exploratory analysis strategy aimed to uncover selected patterns relevant to the goal of the study rather than the full range of phenomena (Malterud et al., 2016).

We included experienced health personnel representing users throughout the intervention period in each ICU. We did not explore

differences between the two professions, sex and age. The physicians and nurses were mixed in the focus groups, which may have influenced the results because of the hierarchy between the two professional groups. In addition, acquaintance with the researchers and the presence of AP, who was responsible for the intervention, may also have influenced openness. Participants expressed both negative and positive experiences, suggesting that they were not inhibited by their acquaintance with the researchers or AP participating in the focus groups. Neutral interviewers may have revealed different results. However, the results correspond well with those of previous qualitative studies on the use of social media in other contexts.

Our findings are based on data from 2018. Considering the development and usage of social media is constantly changing, this is regarded as an additional limitation.

### Conclusion

Although audit and feedback on quality indicators on Facebook motivated improvements, professional content on Facebook was perceived as inappropriate. Hospital platforms with applicable features of social media, such as reach, availability, convenience, and comments, have been suggested to secure professional communication about recommended practices in ICUs.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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