Research Paper

Nurses' Experiences of Caring for Older Patients with Delirium in the Surgical Setting

Francelle Cassar (francelle.cassar.13@um.edu.mt)

Department of Nursing, Faculty of Health Sciences, University of Malta. **Michael Galea**

Department of Mental Health, Faculty of Health Sciences, University of Malta.

Abstract

Delirium is a prevalent complication among older patients. It affects a large proportion of adult patients in the surgical setting (Barr et al., 2013). Moreover, Malta's ageing population will very probably bring about an increased prevalence of delirium across the healthcare setting. Delirium has been linked to increased morbidity and mortality, long-term cognitive impairments, psychological distress, extended hospital stays, and increased hospital and health system costs. Nurses play central roles in the care of surgical older patients who are afflicted with this debilitating disease. This study aims to explore surgical nurses' experiences of caring for older patients with delirium, what facilitates and what hinders surgical nurses' caring for such patients, and provide concrete recommendations for further care of these patients.

A qualitative descriptive design was employed for the study. Thematic analysis developed by Clarke and Braun (2006) was selected as the method for data analysis

Correspondence to Michael Galea (michael.galea@um.edu.mt) Received: 18.11.2021 Revised: 02.05.22 Accepted: 20.05.2022; Published: 30.06.2022 © 2022, Malta Journal of Health Sciences to facilitate and lead this process. Accordingly, this technique recognises, evaluates and explains patterns of significance, known as 'themes' in qualitative data (Clarke & Braun, 2017). A total of eight participants, who work in a surgical setting at the local general hospital, were recruited by an intermediary to voluntarily participate in the study. Qualitative, semi-structured individual interviews were conducted, after all ethical clearance and permissions were granted.

Four themes emerged from the data, namely:

- a. hardships in providing optimal surgical care;
- b. importance of prioritizing the safety of patients and others;
- c. the relevance of including relatives in patient care; and
- d. the usefulness of focusing on nurses' experience when caring for these patients.

Surgical nurses find a way to keep the patients and others safe and help their families throughout this challenging and distressing experience. Nurses require a greater support and understanding of the management and physicians especially during night shifts. A variety of proposals might help to ease the experience of surgical nurses when caring for older patients with delirium that if successful may well have positive impacts on the healthcare system.

Keywords: thematic analysis, nurses, nursing care, older patients, delirium, surgical setting.

1. Introduction

Delirium is considered a significant public health issue (Barr et al., 2013). It has broad complications ranging from anxiety for both individuals and carers (Macullulich et al., 2013), to economic impact on healthcare costs (Leslie et al., 2008), besides the short and long-term psychological and emotional distress, long-term cognitive impairments, increased incidence of patient danger events, greater functional dependency after hospital discharge, increased hospital and healthcare system costs, and decreased quality of life (Pandharipande et al., 2013; Barr et al., 2013; Ouimet et al., 2007; Girard et al., 2010 and Skrobik et al., 2010).

According to Inouye, Westendorp and Saczynski (2014), delirium is characterised by impaired cognition, inattention, disturbance of consciousness, and psychomotor emotions and behaviour. These symptoms wax and wane throughout the illness. Although not confined only to the elderly, geriatric persons are most vulnerable to delirium (Baker, Taggart, Nivens & Tillman, 2015). It is a frequent complication in hospitalized individuals aged 65 onwards (Inouye, 2006). According to Steis and Fick (2012), it is a medical emergency. Francis & Kapoor (1990) argued that the incidence of delirium is increasing among hospitalized persons due to an increase of older and sicker patients in general, surgical and medical wards. Delirium offers difficulties for healthcare providers and could act as an indicator of quality care in an acute care environment (Inouye, Schlesinger & Lydon, 1999).

The present rapidly ageing population is unique in the history of humankind, and Malta is no exception *(National Strategic Policy for Active Ageing: Malta 2014– 2020)*. Yet, ageing encompasses an increased incidence of delirium (Banks et al., 2014). Many older adults already have or will develop this condition during their inpatient hospital stay.

Identifying delirium in surgical patients is challenging: patients may be suffering from altered mental status brought on by a wide range of causes, such as shock or the use of post-operative sedatives (Barr et al., 2013). Numerous studies (Schofield, Tolson, & Flemming, 2012; Lou & Dai, 2002; Rogers & Gibson, 2002; McDonnell & Timmins, 2012) established that nursing for delirious individuals in medical-surgical care settings has been linked with increased workload, emotional distress, feelings of uncertainty, high levels of nurse strain and mental conflicts. The situation becomes more complicated with postoperative delirium (POD), frequently observed in older patients in the first two to three days following a surgical procedure with anesthesia. This is a significant clinical problem in elderly surgical patients; morbidity and mortality rates are substantially higher in patients who develop delirium (Pappachan & Agrawal, 2019).

Research on delirium in general is voluminous, but minimal research has focused on nurses' experiences when caring for older patients with delirium in a surgical setting. Locally, there is no information available on this topic. Nurses' inability to care for these individuals in the best way possible can potentially result in adverse health outcomes for both patients and their families. Thus, timely study is essential to critically appraise both nursing personnel and the local healthcare organization.

A comprehensive literature search was completed via the HyDi platform registered through the University of Malta, of existing qualitative and quantitative research on the experiences of nurses caring for the older adult with delirium, using a set of keywords specific to the study topic. Eight studies were chosen for this study's literature review, which were all qualitative. Delirious patients were generally described as unpredictable, uncooperative and also at times aggressive, across the selected studies. The majority of nurse respondents expressed that caring for delirious patients was frustrating and stressful, as their care time-consuming (Brooke & Manneh, 2018; Kristiansent et al., 2019; Lou & Dai, 2002; Rogers & Gibson, 2002). Findings were then synthesized and analyzed using thematic analysis (Clarke & Braun, 2017). All categories and themes from the studies were then scanned, scrutinized and eventually, data reduced into categories. A synthesis of the conceptual knowledge that results from the literature review reveals feelings of discomfort and incomprehension, including moral distress and workload. Three themes resulted from the categories that were retrieved, namely: 1) Feelings of discomfort and incomprehension; 2) Care for a delirious patient is challenging; 3) Various goals and approaches to care.

2. Method

2.1. Aims and Objectives

Based on this literature review and due to missing practical and current information on the subject within a Maltese setting, timely study exploring both nursing personnel and the local healthcare organization is essential. Therefore, this research study aims to: (i) explore and gain a deeper understanding of caring for older patients with delirium by surgical nurses, (ii) outline the strengths and needs of surgical nurses within this realm and (iii) investigate contributing factors that may further improve the care of elderly patients with delirium by surgical nurses.

The specific research objectives for this study are to:

- Explore surgical nurses' experiences of caring for older patients with delirium
- Explore what facilitates surgical nurses' caring for patients with delirium
- Investigate what hinders surgical nurses' caring for patients with delirium
- Provide recommendations for further care of older patients with delirium

2.2. Participants and Data Collection

A total of 8 nurses were recruited by an intermediary, through a purposive sampling technique, from a target population of 67 general surgical nurses working at the state hospital, after meeting all innclusion criteria. Data collection for this research study was completed by conducting semi-structured individual interviews of around 1 hour, on a face-to-face basis. The interview consisted of a) a demographic section, and b) set of questions and prompts covering respondents' experiences of caring for such a population, respondents' own feelings and thoughts when working with these patients, and how they feel that such an experience impacts their work, what challenges were met, how relatives could contribute, and what could improve the nursing care delivery, including non-therapeutic assistance.

2.3. Data Analysis

A qualitative research design was chosen for this project as thorough information on the problem of interest was required. A qualitative approach is the most suited approach to explore meanings, essences, feelings, attributes (Miller, 2010). Thematic analysis developed by Clarke and Braun (2006) was selected as the method for data analysis to facilitate and lead this process. This is a technique for recognising, evaluating and explaining patterns of significance, known as 'themes' in qualitative data (Clarke & Braun, 2017). The six phases of thematic analysis are 1) familiarization with the data; 2) generation of initial codes; 3) search for themes; 4) review of themes; 5) definition and naming of themes; and 6) production of the report (Braun & Clarke, 2006). Once the research is finalized, conclusions and evidencebased recommendations for change in practice will be presented to the participants, nursing management and charge nurses to improve surgical nurse care of patients afflicted with delirium.

2.4. Ethical Approvals

This study had all approvals by the University of Malta Research Ethics Committee and all respective institutional permissions were granted. To ensure full confidentiality, pseudonyms were used throughout the study. No identifying information was requested from the participants. Transcripts were coded, and collected data were stored in a password protected computer, accessible only to the first author.

3. Results

The majority of participants' age ranged from 20-29 years old. Most participants' highest level of education was mostly a bachelor degree (n = 5). Years of employment as registered nurses ranged from 3 to 16 years, and years working in a surgical setting ranged from 2 to 12 years. Most of the participants consider their encounters with elderly patients afflicted with delirium as moderate.

Four core themes resulted from the findings:

- 1. Challenges of Care;
- 2. Patient and other-safety is a priority;
- 3. Integrating relatives in patient's care, and
- 4. Experience plays a substantial role.

	CORE THEME	SUB-THEME
1	Challenges of care	Constant challenges & Frustration Night shift challenges
2	Prioritising safety	Ensuring safety Consideration for everyone's well-being
3	Integrating relatives in patients' care	Involvement of relatives Need of more attention
4	Experience plays a key role	The relation of Knowledge and Experience Importance of individualized care

Table 1 summarizes these findings.

Table 1. Summary findings of the thematic analysis

Each of these themes had a number of sub-themes as discussed and detailed below.

The first core theme related to difficulties inherent in the provision of optimal surgical care to elderly patients with delirium. In this theme, nurses expressed how challenging caring is for a delirious patient. Two sub themes were elevated.

3.1. Constant challenges & Frustration

First, a sense of Frustration and Discomfort was identified. Most participants expressed that caring for a delirious patient was 'frustrating' and 'stressful' as these patients are time-consuming:

"so...apart from being time consuming, the fact that a particular patient is delirious keeps me on the go all the time and the patient is constantly on my mind...it is really stressful for me knowing that the patient has delirium." (Shaun).

Caring for a delirious elderly patient is a constant challenge. Because being described as unpredictable, uncooperative and also aggressive at times, their challenge becomes even more heightened, thus making caring stressful and frustrating. As Laura noted:

'Cooperation is a constant challenge...it's a challenge caring for these patients simply as they are not cooperative most of the time...Sometimes, it's a lot of hassle, too, even to simply give the treatment...'

3.2. Night shift challenges

The night shift is considered too challenging. All participants believed that night shift confounded and further frustrated their work, especially due to staff shortages. When the least demands are expected, and when most are naturally resting, it is then that emergencies often crop up. Moreover, staff shortage could further aggravate the situation, and nurses need to be both creative, quick and resourceful when challenged by such occurrences. As Rita stated:

"The night is worse obviously...we're less staff... for example, at the time you're going to give out treatment...you can't give that attention to the patient so, you have to juggle around whether...'

The second core-theme highlighted the priority of Patient and other-safety.

This second theme captures the participants' views that patient safety and protecting patients from harm was a primary priority. Two sub-themes follow.

3.3. Prioritising safety

First, ensuring safety of patients in their care and protecting others from harm was a central and pervasive concern to all participants. Participants noted that this could only be achieved by keeping a constant eye on the patient. Veronica expounded on the proximity element:

"Also a priority when caring for a delirious patient is to keep them close... so we can easily visualize them and keep a close eye on them, because with a delirious patient you have to keep in mind that they can easily get hurt or harm others or even try to escape from the ward."

3.4. Consideration for everyone's well-being

To ascertain and maintain safety, a number of issues were mentioned. However, the key emphasis was that constant watch remains a big help. It ensures the safety of both the patient with delirium and other patients, besides that of the care-givers. Julia agrees, noting that:

"Most of the time this affects my work routine because it... needs monitoring of the patient...you need to be there for the patient to assess him..."

Considering that very often, nurses are dealing with many patients at once in their respective wards, they have to adjust and tailor their attention accordingly. Safeguarding patients' interests may also mean protecting some patients from harm, should an emergency arise, besides attending to their normal daily needs. This means nurses also have to make sure to protect other patients, as well as themselves, from harm. As Melanie disclosed:

"we have to consider everyone's well being because sometimes they can be aggressive as well…'

Integrating relatives into patients' care was presented as the third core-theme.

The third theme depicts the involvement of family in the care of the patient. There were times also where caring for the family was also provided. Nurses explained that relatives are very "helpful" in providing better care for these patients whilst a good source of information. Caring for these patients' relatives comes 'part and parcel' with the patient. Jessica described: "...I mean...it is not an easy thing for us obviously... so you kind of feel empathy for the relatives because at times you get relatives who are very stressed out...' This third theme resulted in the following sub-themes.

Relatives were described as "beneficial" and a "resource of information". Patients do not always furnish the health care professionals with information sought, in order to get a clearer picture of the problem. Furthermore, patients' own information may also be tarnished by biases emanating from personal fears, doubts and anxiety surrounding an unpredictable future should their worst fears materialize. Shaun acknowledged that the presence and help of relatives made it easier for him to care for other patients. In his own words, relatives "definitely play a part in the care of these patients".

Secondly, relatives of patients with delirium require more attention and reassurance from nurses. It is often

the case that when a relative is in a delirious state, relatives normally request a lot of information for their queries. Such information helps mitigate their anxiety surrounding the condition of their loved ones in hospital.

The fourth and final core theme extracted was that experience plays a substantial role.

This goes to show how beneficial experience is when caring for older patients who develop delirium, even if each patient is unique. In their own words, caring for such patients is, at times, a matter of "trial and error". This theme resulted from the following subthemes.

First, knowledge is gained through experience. All participants noted how knowledge on caring for older patients with delirium is gained through personal clinical experience over time. In Rita's words, "personally, experience and knowledge (were gained) through the years...through my experience".

On the other hand, it was a common line of acceptance that inadequacy of knowledge helped only to increase uncertainty and ambiguity in the provided care, thus putting the holistic care and safety of patients in jeopardy. This could be the result of many factors, including a weak doctor-nurse working and professional relationship.

Secondly, such care needs to be individualized to each unique situation. Amy referred to this as trying to "tailor specific care to what the delirious patient needs". The participants provided many examples of such strategies, including: providing familiar objects, using calm music, recruiting family members, voice approach, and frequent verbal re-orientation and environment by modifying noise and light.

4. Discussion

Research consistently attests that nursing for delirious individuals in medical-surgical care settings is associated with increased workload, emotional distress, uncertainty, severe strain and mental conflicts (Schofield, Tolson, & Flemming, 2012; Lou & Dai, 2002; Rogers & Gibson, 2002; McDonnell & Timmins, 2012). To this effect, this study aimed at further clarifying the nurses' experiences of caring for older patients with delirium in surgical settings.

Four main themes emerged from this thematic analysis. In the first theme, the challenges inherent in the provision of optimal surgical care to elderly patients with delirium was clearly outlined. Delirious patients are frequently incompetent of participating in their own care; combative or uncooperative patients could be a hazard to themselves and to others. Nurses explained how their patience was challenged and irritability was commonplace when they had to repeatedly explain things and chase patients consumed by confusion and agitation. This finding matches research by Kristiansen et al. (2019) where nurses expressed feeling stressed when they had to regularly follow patients back to the department during night shift or to stop the patient from exiting the ward. On the other hand, others acknowledged and tolerated patients' aggressive behaviour. This demonstrates how nurses qualify aggression in a delirious patient as the "norm" and an "inevitable" behavioural aspect. This was reflected in the findings of Manneh and Brooke (2018) who noted a subsequent underreporting of aggressive behaviours. Frustration develops, partially due to the inability to complete tasks in a timely manner. This parallels Rogers and Gibson's (2002) findings. The study by Lou and Dai (2002) discussed that overload and stress due to increased responsibilities is associated with delirious patient care. Participants in this study also expressed feeling a heightened sense of responsibility, when compared to caring for a non-delirious surgical patient.

Psychological distress is prevalent in certain hospital units, not least in a surgical setting. A sense of moral distress was also expressed in this study, which could be due to a sense of uncontrollability. It is often the case that one's illness tarnishes a person's hope and faces them with an unpredictable future, which is then linked to the nurses' own control issues of the situation at work, and their own morale.

Nursing is defined by caring. Caring for patients promotes growth. According to Watson's caring theory (2008), caring for humanity is undivided. It begins with love. Only when nurses practice self-love, can they reach outwards and care truly to their patients. A caring environment does two things: a) accepts a person as they presently are; and b) taps into their potential of who they can become. Her nursing model aims at promotion of health, prevention of illness, caring for the sick and restoration of health. Thus, Watson's theory (2008) emphasizes that relational caring for oneself and others should be founded on both moral and ethical foundations.

Caring for elderly patients experiencing delirium posed numerous constant challenges for surgical nurses,

which may result from patients' inability to cooperate (Lou & Dai, 2002), time constraint (Kristiansen et al. 2018), certain delirious symptoms (eg. agitation, aggression), and diminished level of care. Results in this study pointed mainly at a) inadequacy of knowledge that increased uncertainty and ambiguity in care provided, and b) a somewhat weak doctor-nurse relationship. Kristiansen et al. (2018), too, found that, because of this, medical management was not issued in a timely manner. This issue could be ameliorated through better relationships between nurses and doctors, allowing the former to feel more comfortable articulating their worries and troubles.

Participants discussed how time constraints during night shift were especially more significant, especially because delirious behaviors can be worse at night (Kristiansen et al., 2019; Rogers & Gibson, 2002; Yevchak et al., 2012). Multiple studies show that nurses find the care of delirious patients to be time consuming and that the care of these individuals takes time away from other patients (Kristiansen et al., 2019; Dahlke & Phinney, 2008; Rogers & Gibson, 2002; Yevchak et al., 2012). Another issue which participants expounded on is that during the night, it's even harder to get help from doctors, especially if they are inexperienced in handling such situations, a finding that resonates with foreign research (Kristiansen et al., 2019). These were the highlighted challenges resulting from the provision of optimal surgical care to elderly patients with delirium.

The second core-theme emphasized the safety of patients and others. All participants in this study stated that they feel a constant need to protect patients from harm. This mirrors existing findings (Andersson et al., 2003; Brooke & Manneh, 2018; Dahlke & Phinney, 2008; Lou & Dai, 2002; Yevchak et al., 2012; Stenwall et al., 2007; Rogers & Gibson, 2002) where the authors described that patient safety was a primary goal. A prominent issue was the use of chemical and physical restraints in the prevention of harm. This was also reported in diverse literature (Dahlke & Phinney, 2008; Rogers & Gibson, 2002). In contrast to the study by Rogers and Gibson (2002), considering everyone's wellbeing was an issue afforded a lot of attention by the participants. Caring for others always starts with caring for oneself (Watson, 2008). Results confirmed that nurses felt the necessity to protect themselves, as found elsewhere (Yevchak et al., 2012). All subjects in this study shared that patients in delirium need constant surveillance to ensure the safety of both the patient and other patients. These findings parallel that of Rogers and Gibson (2002), Kristiansen

et al. (2019) and Yevchak et al. (2012): care was often passed on to health assistants or sitters to ensure patient safety. Thus, this second core-theme accentuated the importance of the safety of patients and others, when caring for these patients.

The third core-theme addressed the fact that relatives are part of patient care. Participants described how beneficial and helpful it is to involve relatives in patient care. This underlines participants' feelings on utilizing all help available when caring for delirious patients, especially when this comes from family. This is in accordance with Watson's theory (2009) which makes reference to the need to develop helping-trusting caring relationships, and the importance of developing helpful and trusting relationships with patients' families. Encouraging the involvement of relatives was also cited as a strategy to enhance patient safety (Yevchak et al., 2012; Rogers & Gibson, 2002). Rogers and Gibson (2002) pointed out that for those delirious patients whose behaviour was unmanageable, relatives were the preferred choice to constantly observe the patient. Our findings also support this observation. All participants agreed that relatives of delirious patients do need more attention: they are often frustrated and stressed, which can impact patient care. Relatives experience stress and shock during the delirium episode (Rogers & Gibson, 2002). Research on specific strategies, mainly on methods of communicating with family and providing information are beneficial. This is an understudied subject that warrants additional attention to build specific protocols, skills and strategies for use in practice (Brooke & Manneh, 2018). In conclusion, therefore, encouraging the involvement of relatives could be another key strategy to enhance patient safety.

The final core-theme stressed on the key role of experience in this population's care. There was general consensus among participants that knowledge is mostly gained through clinical 'experience over time' and through observing other nurses, reflected in research (Andersson et al., 2003; Brooke & Manneh, 2018); still, the need remains for ongoing training (Brooke & Manneh, 2018; Dahlke & Phinney, 2008). A transpersonal caring relationship was defined by Watson (2008) as a caring moment founded in a respectful "love" for the person, meaning honoring the uniqueness of their needs and wishes. There was general consensus among participants of the need for individualized care for each unique situation. This at times required tailor-made nonpharmacological techniques in order to offer a holistic treatment approach to the patient. Hence, experience

and knowledge are well related, and both help advance better care of older patients with dementia.

4.1. Relevance of results

This study offers valuable insight into the experiences of Maltese nurses caring for older delirious patients in the surgical setting. This study is the first local one to have explored these experiences. Primarily, it helps to clarify the means through which nurses who encounter delirious patients could be supported and helped in the practical setting. Secondly, it generates awareness within the hospital organization on which practices and policies aid surgical nurses in providing efficient and safe care to delirious patients and what factors hinder the delivery of care. Thirdly, it recognises gaps in existing knowledge and outlines where additional research is essential to illuminate additional problems with respect to surgical nurses' care of patients afflicted with delirium. Applicable to this study's subject, results highlight that nurses working in surgical settings require a greater support and understanding of the management and physicians especially during the night shift. Finally, it aids nursing educators to analyze the necessity for any amendments in the nursing education course that would help prepare nurses to provide better nursing care when they encounter these situations and perhaps try to bridge the theory-practice gap.

4.2. Strengths and Limitations of study

A number of strengths have been identified. Thematic analysis allowed the emergence of specific themes in a relatively unaddressed area with an unexplored local population. The researcher kept a reflexive journal in which own experiences, feelings and perceptions were noted (Polit & Beck, 2012). A number of limitations need to be also pointed out. The interviews were conducted only in the English language and thus, not all nurses may have felt comfortable enough to share their experiences and thoughts on the subject.

4.3. Recommendations and Contributions of the study

Participants in this research study acknowledged patients' safety as a priority besides a significant challenge. Consideration to re-evaluate the process and procedure on how patients are put under constant watch would be of great benefit to ensure constant surveillance, especially

throughout the night shifts when support is minimal. Another recommendation for practice concerns staffing allocation, whereby nursing allocation that facilitates constant surveillance of patients with delirium would be helpful. Furthermore, developing multi-component protocols that are flexible to permit nurses to use personal information while providing consistent, evidence-based care. Other recommendations include more support from management should be provided mainly during night shift by providing more staff as escalation of delirious behaviors. Findings pointed also towards more knowledge about delirium and delirium care. Training programmes or seminars should be compulsory to all nurses working within a surgical setting, and it should be planned, organized and delivered by competent professionals. Additional research designed explicitly at exploring nursing care of confused and agitated patients in the surgical setting would be beneficial to inform and lead the practice. Research on the role of experiential learning for nurses caring for delirious elderly patients is lacking.

5. Conclusion

This research has provided readers with an understanding of the experience of Maltese surgical nurses caring for elderly patients afflicted with the delirium, including their experiences, perceptions, thoughts, and challenges. Caring for older patients with delirium is not an easy task for surgical nurses, loaded with constant challenges. However, this study has shed light on nurses' various strategies, such as involving relatives, use of constant watch and past experience to still provide the optimal surgical care that the patients deserve whilst other patients are not neglected. Stakeholders necessitate understanding the challenges, frustrations and other feelings of discomfort surgical nurses experience when caring for these patients, which in turn have repercussions on the overall care system.

Acknowledgements

Sincere gratitude goes to all surgical nurses participants and all personnel who granted permission to conduct this study.

Funding

This research received no specific grant from any funding agency in the public, commercial or non-profit sectors.

Conflict of interest

The authors report no conflict of interest.

References

- American Psychiatric Association. (2011). *Diagnostic* and Statistical Manual of Mental Disorders. (4th ed.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic* and Statistical Manual of Mental Disorders. (5th ed.). Arlington, VA: American Psychiatric Association.
- Anderson, C. (2010). Presenting and Evaluating Qualitative Research. *The American Journal of Pharmaceutical Education*, 74(8), 1-7.
- Andersson, E. M., Hallberg, I. R., & Edberg, A. K. (2003). Nurses' experiences of the encounter with elderly patients in acute confusional state in orthopaedic care. *International journal of nursing studies*, 40(4), 437-448.
- Baker, N. D., Taggart, H. M., Nivens, A., & Tillman, P. (2015). Delirium: why are nurses confused?. *MEDSURG nursing*, 24(1), 15.
- Banks, P., Waugh, A., Henderson, J., Sharp, B., Brown, M., Oliver, J., & Marland, G. (2014). Enriching the care of patients with dementia in acute settings? *The Dementia Champions Programme in Scotland. Dementia*, 13(6), 717-736
- Barr, J., Fraser, G. L., Puntillo, K., Ely, E. W., Gélinas, C., Dasta, J. F.,... & Coursin, D. B. (2013). Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Critical care medicine*, 41(1), 263-306.
- Bernick, L. (2004). Caring for older adults: Practice guided by Watson's caring-healing model. *Nursing Science Quarterly*, 17(2), 128-134.
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global qualitative nursing research*, *4*, 1-8.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research* in psychology, 3(2), 77-101.
- Brooke, J., & Manneh, C. (2018). Caring for a patient with delirium in an acute hospital: The lived experience of

cardiology, elderly care, renal, and respiratory nurses. *International journal of nursing practice*, *24*(4), e12643.

- Burnard, P., Gill, P., Stewart, K., Treasure, E., & Chadwick,
 B. (2008). Analysing and presenting qualitative data.
 British Dental Journal, 204(8), 429-432. 7-298.
- Cachia, M. J., Mifsud, S. L., Mamo, D., Rapa, J., Scerri, M. A., & Schembri, M. T. (2019). National Commission for Active Ageing. Malta.
- Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': toward greater clarity in generic qualitative research. *International journal of qualitative methods*, *2*(2), 1-13.
- Cara, C. (2003). A pragmatic view of Jean Watson's caring theory. *International Journal of Human Caring*, 7(3), 51-62. DOI: 10.20467/1091-5710.7.3.51.
- Caruso, E. M., Cisar, N., & Pipe, T. (2008). Creating a healing environment: An innovative educational approach for adopting Jean Watson's theory of human caring. *Nursing Administration Quarterly*, *32*(2), 126-132.
- Clandinin, D. J., & Connelly, F. M. (1994). *Personal experience methods.* Thousand Oaks, CA, US: Sage Publications.
- Clark, C. (2016). Watson's human caring theory: Pertinent transpersonal and humanities concepts for educators. *Humanities*, *5*(2), 21.
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, *12*(3), 297-298. DOI: 10.1080/17439760.2016.1262613
- Collins, N., Blanchard, M. R., Tookman, A., & Sampson, E. L. (2010). Detection of delirium in the acute hospital. *Ageing*, *39*(1), 131-135. doi: 10.1093/ageing/afp2
- Cope, D.G. (2014). Methods and Meanings: Credibility and Trustworthiness of Qualitative Research. *Oncology Nursing Forum*, *41*(1), 89-91.
- Cresswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed method research*. 2nd Sage. Thousand Oaks, CA, 201.
- Dahlke, S., & Phinney, A. (2008). Caring for hospitalized older adults at risk for delirium: the silent, unspoken piece of nursing practice. *Journal of gerontological nursing*, *34*(6), 41-47.
- Ely, E. W. (2010). Delirium as a predictor of long-term cognitive impairment in survivors of critical illness. *Critical Care Medicine*, *38*(7), 1513-1520. doi: 10.1097/ CCM.ob013e3181e47be1
- Eubank, K. J., & Covinsky, K. E. (2014). Delirium severity in the hospitalized patient: time to pay attention. *Annals of internal medicine*, *160*(8), *57*4-*575*.

- Formosa, M. (2013). National strategic policy for active ageing: Malta 2014-2020.
- Francis, J., & Kapoor, W. N. (1990). Delirium in hospitalized elderly. *Journal of General Internal Medicine*, *5*(1), 65-79
- Girard, T. D., Jackson, J. C., Pandharipande, P. P., Pun, B. T., Thompson, J. L., Shintani, A. K.,..
- Gordon, S. J., Melillo, K. D., Nannini, A., & Lakatos, B. E. (2013). Bedside coaching to improve nurses' recognition of delirium. *Journal of Neuroscience nursing*, 45(5), 288-293.
- Hassan, Z. A., Schattner, P., & Mazza, D. (2006). Doing a pilot study: why is it essential?. *Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia*, 1(2-3), 70-73.
- Holloway, I., & Galvin, K. (2017) *Qualitative Research in Nursing and Healthcare.* (4th ed.). Chichester: John Wiley & Sons.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher, 20*(4), 12-17.
- Houser, J. (2008). Selecting an appropriate research design. *Nursing research: Reading, using and creating evidence*, (1st ed., pp.192). Sudbury, Massachusetts: Jones and Bartlett Publishers.
- Inouye, S. K. (2006). Delirium in older persons. *New England journal of medicine*, *354*(11), 1157-1165.
- Inouye, S. K., Schlesinger, M. J., & Lydon, T. J. (1999). Delirium: a symptom of how hospital care is failing older persons and a window to improve quality of hospital care. *The American journal of medicine*, 106(5), 565-573.
- Inouye, S. K., Westendorp, R. G., & Saczynski, J. S. (2014). Delirium in elderly people. *The Lancet*, *383*(9920), 911-922.
- International Council of Nurses. (2020). Nursing Definitions. Retrieved from https://www.icn.ch/ nursing-policy/nursing-definitions
- Isik, A. T., & Grossberg, G. T. (2017). Correction to: Delirium in Elderly Patients. *Delirium in Elderly Patients*.
- Koteswara, C. M., & Patnaik, P. (2014). Peri-operative dexamethasone therapy and post-operative psychosis in patients undergoing major oral and maxillofacial surgery. *Journal of Anaesthesiology, Clinical Pharmacology*, *30*(1), 94-96.
- Kristiansen, S., Konradsen, H., & Beck, M. (2019). Nurses' experiences of caring for older patients afflicted by

delirium in a neurological department. *Journal of clinical nursing*, *28*(5-6), 920-930.

- Lancaster, G. A., Dodd, S., & Williamson, P. R. (2004). Design and analysis of pilot studies: recommendations for good practice. *Journal of Evaluation in Clinical practice*, *10*(2), 307-312.
- Leslie, D. L., Marcantonio, E. R., Zhang, Y., Leo-Summers, L., & Inouye, S. K. (2008). One-year health care costs associated with delirium in the elderly population. *Archives of Internal Medicine*, *168*(1), 27-32.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage Publications.
- Loftus, C. A., & Wiesenfeld, L. A. (2017). Geriatric delirium care: using chart audits to target improvement strategies. *Canadian Geriatrics Journal*, *20*(4), *24*6.
- Lou, M. F., & Dai, Y. T. (2002). Nurses' experience of caring for delirious patients. *The journal of nursing research: JNR*, 10(4), 279-290.
- Maclullich, A. M., Anand, A., Davis, D. H., Jackson, T., Barugh, A. J., Hall, R. J., et al. (2013). New horizons in the pathogenesis, assessment and management of delirium. *Age and ageing*, *42*(6), 667-674.
- Marcantonio, E. R. (2017). Delirium in hospitalized older adults. *New England Journal of Medicine*, *377*(15), 1456-1466.
- Mardani, D., & Bigdelian, H. (2013). Prophylaxis of dexamethasone protects patients from further postoperative delirium after cardiac surgery: a randomized trial. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*, 18(2), 137-143.
- Mc Donnell, S. & Timmins, F. (2012). A quantitative exploration of the subjective burden experienced by nurses when caring for patients with delirium. *Journal of Clinical Nursing*, *21*(17), 2488-2498. doi: 10.1111/j.1365-2702.2012.04130.x
- McDonagh, M., Peterson, K., Raina, P., Chang, S., & Shekelle, P. (2013). Avoiding bias in selecting studies. In *Methods Guide for Effectiveness and Comparative Effectiveness Reviews*. Agency for Healthcare Research and Quality (US).
- Milbrandt, E. B., Kersten, A., Rahim, M. T., Dremsizov, T. T., Clermont, G., Cooper, L. M., et al. (2008). Growth of intensive care unit resource use and its estimated cost in Medicare. *Critical Care Medicine*, *36*(9), 2504-2510.
- Milisen, K., Foreman, M. D., Abraham, I. L., De Geest, S., Godderis, J., Vandermeulen, E.,... & Broos, P. L. (2001). A

nurse led interdisciplinary intervention program for delirium in elderly hip fracture patients. *Journal of the American Geriatrics Society*, 49(5), 523-532.

- Miller, W.R. (2010). Qualitative Research Findings as Evidence: Utility in Nursing Practice. *Clinical Nurse Specialist*, 24(4), 191-193.
- Mittal, V., Muralee, S., Williamson, D., McEnerney, N., Thomas, J., Cash, M., & Tampi, R. R. (2011). Delirium in the elderly: a comprehensive review. *American Journal* of Alzheimer's Disease & Other Dementias, 26(2), 97-109.
- Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal. pmed1000097
- National Research Council. (2001). *Preparing for an aging world: The case for cross-national research.* National Academies Press (US).
- Neergaard, M. A., Olesen, F., Andersen, R. S., & Sondergaard, J. (2009). Qualitative description-the poor cousin of health research?. *BMC medical research methodology*, *9*(1), 52.
- Neville, S. (2008). Older people with delirium: Worthless and childlike. *International Journal of Nursing Practice*, *14*(6), 463-469. Doi:10.1111/j.1440-172x.2008.00721.x
- Noble, H., & Smith, J. (2014). Qualitative data analysis: a practical example. *Evidence-Based Nursing*, *17*(1), 2-3.
- Opdenakker, R. (2006). Advantages and Disadvantages of Four Interview Techniques in Qualitative Research. *Forum: Qualitative Social Research*, 7(4), 1-15.
- Organization for Economic Co-operation and Development. OECD Health Data 2012. Organization for Economic Co-operation and Development. Paris; 2012.
- Orimo, H., Ito, H., Suzuki, T., Araki, A., Hosoi, T., & Sawabe, M. (2006). Reviewing the definition of "elderly". *Geriatrics & Gerontology International*, 6(3), 149-158.
- Ouimet, S., Kavanagh, B. P., Gottfried, S. B., & Skrobik, Y. (2007). Incidence, risk factors and consequences of ICU delirium. *Intensive Care Medicine*, *33*(1), p. 66-73.
- Pandharipande, P.P., Girard, T., Jackson, J., Morandi, A., Thompson, J., Pun, B....Ely, W. (2013). Long-term cognitive impairment after critical illness. *New England Journal of Medicine*, 369, 1306-16. doi: 10.1056/ NEJM0a1301372

- Pappachan, B., & Agrawal, R. (2019). Post-Operative Delirium. *Journal of Maxillofacial and Oral Surgery*, *18*(1), 157-158.
- Parahoo, K. (2014). *Nursing research principles, process and issues* (3rd ed.). Basingstoke, UK: Palgrave Macmillan.
- Parse, R. R. (2001). *Qualitative inquiry: The path of sciencing* (No. 14). Jones & Bartlett Learning.
- Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods.* (3rd ed.). Thousand Oaks: Sage Publications.
- Polit, D.F., & Tatano Beck, C. (2012). Nursing Research.
 Generating and Assessing Evidence for Nursing Practice.
 (9th ed.). China: Lippincott Williams & Wilkins.
- Prasad, S., Sung, B., & Aggarwal, B. B. (2012). Ageassociated chronic diseases require age-old medicine: role of chronic inflammation. *Preventive medicine*, 54,(Suppl), S29–S37. doi:10.1016/j.ypmed.2011.11.011.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*.
- Rabionet, S.E. (2011). How I Learned to Design and Conduct Semi-structured Interviews: An Ongoing and Continuous Journey. *The Qualitative Report, 16*(2), 563-566.
- Rice, K. L., Bennett, M., Gomez, M., Theall, K. P., Knight,
 M., & Foreman, M. D. (2011). Nurses' recognition of delirium in the hospitalized older adult. Clinical Nurse Specialist: *The Journal for Advanced Nursing Practice*, 25(6), 299-311. doi:10.1097/NUR.obo13e18234897b
- Rogers, A. C., & Gibson, C. H. (2002). Experiences of orthopaedic nurses caring for elderly patients with acute confusion. *Journal of Orthopaedic Nursing*, 6(1), 9-17.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of Advanced Nursing*, *53*(3), 304-310.
- Salluh, J. I., Wang, H., Schneider, E. B., Nagaraja, N., Yenokyan, G., Damjluhi, A., Serafim, R. B., & Stevens, R. D. (2015). Outcome of delirium in critically ill patients: Systematic review and meta-analysis. *British Medical Journal*, 350, h2538. p. 1-9. doi: 10.1136/bmj.h2538
- Sandelowski, M. (2000). Whatever happened to qualitative description?. *Research in nursing & health*, *23*(4), 334-340.
- Schenning, K. J., & Deiner, S. G. (2015). Postoperative delirium in the geriatric patient. *Anesthesiology Clinics*, *33*(3), 505-516.

- Schofield, I., Tolson, D., & Fleming, V. (2012). How nurses understand and care for older people with delirium in the acute hospital: A critical discourse analysis. *Nursing Inquiry*, 19(2), 165-176.
- Schubert, M., Schürch, R., Boettger, S., Nuñez, D. G., Schwarz, U., Bettex, D.,... & Rudiger, A. (2018). A hospital-wide evaluation of delirium prevalence and outcomes in acute care patients-a cohort study. BMC Health Services Research, 18(1), 550.
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2004), 63-75.
- Skrobik, Y., Ahern, S., Leblanc, M., Marquis, F., Awissi, D., & Kavanaugh, B. P. (2010). Protocolized intensive care unit management of analgesia, sedation, and delirium improves analgesia and subsyndromal delirium rates. *Anesthesia and Analgesia*, 111(2), 451-463
- Sofaer, S. (1999). Qualitative Methods: What are they and why use them?. *Health Services Research*, *34*(5), 1101-1118.
- Stake, R. (1995). *The art of case study research*. Thousand Oaks: Sage Publications.
- Steis, M. R., & Fick, D. M. (2012). Delirium superimposed on dementia: accuracy of nurse documentation. *Journal of gerontological nursing*, *38*(1), 32-42.
- Stenwall, E., Sandberg, J., Jönhagen, M. E., & Fagerberg, I. (2007). Encountering the older confused patient: Professional carers' experiences. *Scandinavian Journal* of Caring Sciences, 21(4), 515-522.
- Stransky, M., Schmidt, C., Ganslmeier, P., Grossmann, E., Haneya, A., Moritz, S., et al. (2011). Hypoactive delirium after cardiac surgery as an independent risk factor for prolonged mechanical ventilation. *Journal of Cardiothoracic and Vascular Anesthesia*, 25(6), 968-974. doi: 10.1053/j.jvca.2011.05.004 eerta
- Straus, S. E., Ball, C., Balcombe, N., Sheldon, J., & McAlister, F. A. (2005). Teaching evidence-based medicine skills can change practice in a community hospital. *Journal* of General Internal Medicine, 20(4), 340-343.
- Stuckey, H.L. (2014). The first step in Data Analysis: Transcribing and managing qualitative research data. *Journal of Social Health and Diabetes, 2*(1), 6-8.
- Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook*, *53*(3), 127-133.

- Teodorczuk, A., Reynish, E., & Milisen, K. (2012). Improving recognition of delirium in clinical practice: a call for action. *BMC Geriatrics*, *12*(1), 55.
- Uttley, L., & Montgomery, P. (2017). The influence of the team in conducting a systematic review. *Systematic Reviews*, *6*(149), 1-4.
- Van Manen, M. (1998). *Researching lived experience: Human science for an action sensitive pedagogy.* London, Ontario, Canada: The Althouse Press.
- Watson, J. (1988). New dimensions of human caring theory. *Nursing Science Quarterly*, 1(4), 175-181.
- Watson, J. (1999). *Postmodern nursing and beyond.* Toronto, Canada: Churchill Livingstone.
- Watson, J. (2001). *Theory of human caring.* En: Parker M. Nursing Theories and nursing practice. Philadelphia: Davis Company.
- Watson, J. (2007). Watson's theory of human caring and subjective living experiences: carative factors/caritas processes as a disciplinary guide to the professional nursing practice. *Texto & Contexto-Enfermagem*, *16*(1), 129-135.
- Watson, J. (Ed.). (2008). Assessing and measuring caring in nursing and health science. Springer Publishing Company.
- World Health Organization Regional Office for Europe. European hospital morbidity database. World Health Organization. Copenhagen; 2012.
- Yevchak, A., Steis, M., Diehl, T., Hill, N., Kolanowski, A., & Fick, D. (2012). Managing delirium in the acute care setting: a pilot focus group study. *International journal of Older People Nursing*, 7(2), 152-162.