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Exploring the use of ageing simulation to enable nurses to gain insight into what it is like to be an older person

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Exploring the use of ageing simulation to enable nurses to gain insight into what it is like to be an older person

Abstract

Aim and objectives To explore the thoughts and experiences of aged care nurses following participation in an ageing-suit simulation intervention. **Background** Globally, people are living longer, and for nurses, there are increasing challenges to meet the needs of the higher numbers of older people in hospital. Educating nurses to understand the ageing process and the experiences of older people in hospital is crucial to addressing these challenges. Ageing-suits were identified as a possible approach to assist with these educational needs. **Design** This study adopted a qualitative descriptive design. **Method** A convenience sample of nurses (n = 15) were selected from a single aged care ward. Volunteered nurses participated in a four-hour ageing-suit simulation session. Their immediate thoughts and experiences were explored via postsimulation debriefs, and three 30-to 50-min follow-up focus groups were conducted at 3 months to explore perceptions on the impact of their experience on clinical practices. The data were analysed with the Braun and Clarke's six-step thematic analysis method. To ensure quality reporting of this study, the COREQ checklist was utilised (see Appendix S1). **Results** Data analysis generated three main themes. Nurses in the study highlighted that the experience of the ageing-suit resulted in "it feels real" (theme 1) and helped them in "enhancing understanding" (theme 2) about older people and their practices and supported a process of "changing me" (theme 3). **Conclusion** Ageing-suits are emerging as a promising innovative educational approach for aged care nurses to gain insight into the challenges of ageing and subsequently making changes to themselves and their individualised practices towards older people. Future research is required to determine whether this educational approach is useful for a broader population of healthcare professionals. **Relevance to clinical practice** Ageing-suits were identified as a worthwhile educational approach for aged care nurses to improve their specialised clinical practices with older people.

Keywords

gain, insight, into, like, be, exploring, older, ageing, simulation, enable, nurses, person

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Conclusion: Ageing-suits are emerging as a promising innovative educational approach for aged care nurses to gain insight into the challenges of ageing and subsequently making changes to themselves and their individualised practices toward older people. Future research is required to determine if this educational approach is useful for a broader population of healthcare professionals.

Relevance to clinical practice: Ageing-suits were identified as a worthwhile educational approach for aged care nurses to improve their specialised clinical practices with older people.

Key words: Older people, Aged Care, Nursing Education, Nursing Practice, Experiences, Gerontology, Professional Development, Simulation

What does this paper contribute to the wider global community?

- Aged care nurses find this educational approach engaging and extremely beneficial.
- The ageing-suit experience developed insight into identifying the individual needs of older people.
- Ageing-suits transfer learning outcomes from the simulation environment into positive changes in clinical practices of aged care nurses caring for older people.

Globally, the population of older people 65 years or older is increasing at an exponential rate. In 2019, people 65 years or older accounted for 1 in 11 people (9%) worldwide, this is predicted to rise steadily over the coming decades and by 2050 one in six people in the world will be over the age of 65 years old (16%) (United Nations, 2019). In light of these predictions, there is a necessity for healthcare systems to ensure their nursing workforces adequately prepared to deliver specialised care to older people (Baumbusch et al., 2017; Chen et al., 2015; Ross et al., 2013). To ensure this, nurses need adequate knowledge and understanding of the ageing process and insight into the perspectives of older people (Dutra de Abreu et al., 2017; Ross et al., 2013).

Despite receiving specific aged care education in their pre-qualification courses, practising nurses still find it challenging to care for older people in hospital and there remains a gap between the care delivered to older people and the expected standards (Chen et al., 2015; Commonwealth of Australia, 2019; Dickinson et al., 2014). There are gaps identified in practising nurses knowledge and skills regarding aged care, empathy and about attitudes towards older people (Chen et al., 2015; Dickson et al.,

2014). These gaps are attributed to a range of reasons: pre-qualification aged care education is inconsistently delivered across courses internationally and the education delivered is inadequate (Koskinsen et al., 2015). Once nurses are qualified and working in areas where they care for hospitalised older people there is considerable value in providing workplace continuing educational opportunities that allow qualified nurses to continue to enhance their specialised skills for older people (Baumbusch et al., 2017; Levett-Jones, 2005). A range of different educational approaches address this gap. Educators are finding success in educational approaches that actively engage participants in their learning, such as simulation (Baumbusch et al., 2017; Chen et al., 2015; Ross et al., 2013).

Background

Simulation is an immersive, interactive experience, and a useful platform to assist in educating nurses and improving care standards (Chen et al., 2015; Ross et al., 2013). Simulation can improve insight into ageing and the experiences of older people, specifically knowledge, awareness, empathy and positive attitudes for and about older people among nurses (Chen et al., 2015; Dutra de Abreu et al., 2017; Grams & Dinsmore, 2019; Pacala et al., 2005; Ross et al., 2013). Simulation-based education is increasingly more common and recognised as a practical educational approach for nurses (Harder, 2009; Yuan et al., 2012). Underpinned by experiential learning (Kolb, 2015; Poore et al., 2014), simulation is described as an immersive experience where learners undertake activities that replicate 'real-world' scenarios in the safety of a controlled environment (Hegland et al., 2017; Meyer et al., 2014).

Simulation-based education is generally divided into three key components: a pre-brief, the scenario exercise and a guided debrief (Roh et al., 2018). It is the unique combination of these three key elements that makes simulation an effective educational approach for acquiring knowledge and skills, challenging current attitudes and enhancing critical thinking through reflective practice (Meyer et al., 2014; Roh et al., 2018). Educators implement a wide range of simulation modalities, for example standardised patients (actors), part-task trainers or full-body mannequins (Hegland et al., 2017; Meyer et al., 2014). The healthcare sector uses more advanced simulation

modalities because they take advantage of the new technologies, particularly ageing-suits (Evans et al., 2005; Halpin, 2015; Lavalliere et al., 2017).

Ageing-suits are emerging as a promising addition to the simulation family because they have the unique ability to situate the learner as the 'older person' and not just as the healthcare professional (Lavalliere et al., 2017). Ageing-suits are constructed to simulate the experience of the ageing process and can be broadly divided into two categories: basic and complex. 'Basic ageing-suits' are usually a single component and designed to focus on only one aspect of the body, such as glasses that simulate glaucoma (Lavalliere et al., 2017). 'Complex ageing-suits' are a combination of different individual components and when assembled create a full-body experience of ageing for the wearer (Lavalliere et al., 2017; Wolfgang Moll, 2020). Different types of ageing-suits are available internationally. Despite their different outward appearance, all brands of ageing-suits aim to simulate varying degrees of sensory changes associated with ageing: hearing loss, vision impairment, muscle fatigue, dexterity and mobility restrictions (Lavalliere et al., 2017).

Existing research on ageing-suits is restricted to higher educational institutes, emphasising on pre-qualification students (Kada & Booth, 2016; Dickinson et al., 2014; Lucchetti et al., 2017; Pacala et al., 2006). The most cited use of ageing-suits is *The Aging Game* or similar adaptations (Chen et al., 2015; Pacala et al., 2006; Varkey et al., 2006). During the game, participants experience the ageing process by acquiring different physical, sensory and cognitive changes (ageing-suit components) as the participants rotate around different activity stations (Pacala et al., 2006). Evaluations of *The Aging Game* showed it was a useful approach in enabling students to gain insights into ageing and caring for older people (Pacala et al., 2006). The success was linked to the program's experiential nature and facilitated self-reflective debriefs (Pacala et al., 2006).

Within Australia, the only known ageing-suit study published is a program running in rural New South Wales with pre-qualification healthcare students utilising the PAUL suit[®] (Bennett et al., 2015). It consists of a one day program in which healthcare students participate in activities within the local community, for

example completing a shopping list at the grocery store, to increase their knowledge and understanding of the ageing process (Bennett et al., 2015). Students who wore the suits improved their positive attitudes, empathy and understanding of the needs of older people. Little is known about the use of ageing-suits for qualified healthcare professionals, especially nurses. There are no published studies exploring the use of ageing-suits among nurses in Australian hospitals. To address this gap, the authors undertook this study to explore the use of ageing-suits with nurses of an aged care hospital in Australia.

Aim

The overall aim of this study was to explore the introduction of a new ageing-suit educational program for aged care nurses. The specific objectives of this study were to:

- A. explore the thoughts and experiences of aged care nurses following their participation in the ageing-suit simulation intervention, and
- B. explore perceptions among aged care nurses about the impact of the ageing-suit simulation intervention on clinical care practices for older people.

The purpose of this paper is to report the study design and findings of phase one of a more extensive research study (phase two) in progress. Study design and findings of phase two are not reported in this article. Phase one study design and findings influenced the changes to the method design for phase two. Phase two study findings will be reported in a subsequent publication.

Method

Design

Ageing simulation research related to qualified nurses is in its infancy. Limited evidence is available on ageing simulation utilisation and its effectiveness within a hospital setting. As a result, the initial exploration of this phenomena warranted a straightforward descriptive approach to develop a global understanding (Sandelowski, 2000). This study adopted a qualitative descriptive research design (Sandelowski, 2000; Sandelowski, 2010). Data collection was from March to June 2018. Qualitative data were collected via immediate post-

intervention debrief discussions and three-month follow-up focus groups (Liamputtong, 2011) and analysed using thematic analysis (Braun & Clarke, 2006).

Theoretical Underpinnings

This study was underpinned by Kolb's experiential learning theory which, in its simplest of terms, describes how people learn best through experience (Kolb, 2015). Additionally, the conceptual design, development and delivery of the simulation sessions were modelled on the NLN Jeffries Simulation Framework (Jeffries, 2005). Detailed consideration was given to how the educational simulation program incorporated all five framework components: facilitator, participant, educational practices, outcomes and simulation design characteristics (Jeffries, 2005).

Intervention – *The In My Shoes Program (TIMSP)*

This study utilised a 'complex ageing-suit', known as the GERontological Test Suit (GERT Suit)[®] (Wolfgang Moll, 2020). It is a compartment-based suit in which the user is able to wear individual components that simulate different sensory aspects of the ageing process. Sight impairments are simulated through different goggles designed to mimic eye diseases such as cataracts, hearing impairments via ear protection or electronic earphones playing common tinnitus sounds, muscle fatigue is simulated by a weighted vest on the torso, wrists and ankles, mobility and dexterity restrictions are simulated by wearing gloves, a soft cervical collar, overshoes, elbow and knee pads (Wolfgang Moll, 2020).

The intervention process involved a four-hour ageing-suit simulation session, consisting of a pre-brief, scenarios and debrief discussions (Table 1). Learning outcomes were designed to reflect the sensory elements of the ageing-suit which the participants experienced (Appendix 1). Each scenario was designed to incorporate 'typical' daily activities (communicating, reading, mobilising, going to the toilet, making a hot drink, writing, following instructions and taking tablets) older people carry out while in the hospital. This ensured the suit wearer experienced all sensory elements restricted by the ageing-suit. For example, the 'BLUE Scenario' had the ageing-suit wearer complete four activities: 1) verbally communicating with the 'healthcare professional helper' throughout the scenario (hearing and sight restrictions); 2) complete

questions on a mini-mental patient assessment form (sight, hearing, and dexterity restrictions); 3) mobilise in/out of bed (mobility restrictions, muscle fatigue, and sight impairments) and; 4) mobilise to the bathroom and sit on the toilet (muscle fatigue, mobility and sight restrictions). Participants took between 7 to 15 minutes to complete all the activities which made up each scenario.

Ethical Approval

Ethical approval was obtained through the joint local health district and university Human Research Ethics Committee. Written and verbal information about the study were given to all participants. The participants gave their informed consent to participate in the simulation intervention and complete data collection activities.

Sample and Setting

A convenience sample was used to recruit potential participants from a single inpatient ward within a regional aged care hospital in New South Wales, Australia. Participants were: Registered Nurses (RN), Enrolled Nurses (EN), and Assistants in Nursing (AIN). In Australia, nurses gain their qualification as an RN, EN or AIN by completing varying levels of pre-qualification courses ranging from one to three years through a tertiary educational institution or registered training organisation. Potential participants were excluded if they worked permanent nights, were on extended leave, or it were unsafe for them to wear the ageing-suit as per manufacturing guidelines, for example being pregnant (Wolfgang Moll, 2020). To recruit participants, 'expressions of interest' posters were placed prominently in busy staff areas, such as the break room and nursing station. Emails were also sent via a proxy on behalf of the research team inviting potential participants to attend onsite study information sessions where participant information sheets and consent forms were distributed.

Data Collection

A total of sixteen debrief discussions were undertaken throughout the four ageing-suit intervention sessions. Structured with the aid of emotional touchpoint cards (Dewar et al., 2009), the debrief discussions had two purposes: 1) explore immediate emotional reactions and self-reflections of participants wearing the ageing-

suit and; 2) explore learning outcomes they could potentially transfer into their clinical practices (Study Aim A). Debrief Prompt questions were developed from the literature using a modified plus-delta debriefing technique and Gibbs' reflective cycle (Hall & Tori, 2017; Huseobo et al., 2015; Kaur Dusaj, 2014). See Appendix 2 for examples of debrief prompt questions.

To account for various shift work schedules, three follow-up focus groups were conducted with twelve of the fifteen participants to capture the impact of the ageing-suitexperience on clinical practices and program recommendations (Study Aim B). Focus group prompt questions were developed using supporting literature from previous studies, participant insights from the debriefs and the study aims. The questions were reviewed following the first focus group and adjusted as required for subsequent focus groups. For example, "Can you still describe how it felt to be in the suit?" was reworded to "Take yourself back to your simulation day, describe your experience?", this modification created a more in-depth discussion among participants than the original question. See Appendix 2 for examples of focus group prompt questions.

The debrief discussions and focus groups were semi-structured, ran for approximately 20-50 minutes and audio-recorded. They were conducted in a private meeting room at the hospital site and facilitated by the lead researcher who is appropriately trained in both simulation and debriefing techniques. All participants completed a demographic questionnaire. The data generated from this phase were used to plan phase two of this study. For example, phase two was designed as a mixed-method study to include quantitative survey data to enrich the findings further.

Data Analysis

The audio-recorded debrief discussions and focus groups were transcribed verbatim by the lead researcher and participants were de-identified using a pseudonym. The research team used a six-step deductive thematic analysis method to analyse the data (Braun & Clarke, 2006). Transcripts were read several times and initial ideas noted down to familiarise the researcher with the data (step one), initial coding was undertaken across all data sets (step two) and codes were then collated into potential

themes (step three). Potential themes were reviewed by developing thematic mind-maps (step four), these preliminary themes were discussed by the research team to define and name (step five) finalised themes were reported on with selected participant extracts and reviewed and refined until consensus was reached amongst the research team (step six) (Braun & Clarke, 2006).

Rigour and Reflexivity

Rigour was built into the research process through the adoption of a range of strategies. In this study, the researchers used the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist to guide the design, collection, analysis and reporting of this study (Tong et al., 2007). The lead researcher convened a research advisory group of specialised research and aged care representatives who provided advice on study methodology and methods. A range of consultation activities were undertaken to develop simulation scripts that accurately reflect the hospital experience of older people: advisory group members and a consumer representative provided feedback on draft simulation scenarios and an advisory group member wore the suit to test the appropriateness of the scenarios. To offset potential bias and improve researcher reflexivity (Shaw, 2016), the ageing-suit was not worn by the research team. Therefore, the data collection and analysis processes were potentially undertaken with greater objectivity because team members were not influenced by their own experiences. Participant validation was undertaken. Study participants were given the opportunity to review the themes generated from the analysis to ensure their experiences resonated within the theme continuum. The participants reported back to the lead researcher that the findings made sense to them and no changes were required.

Results

Participant Demographics

In total, fifteen nurses participated in the ageing-suit simulation program. Over 50% of participants were Registered Nurses, 20% Enrolled Nurses and over 25% were Assistants in Nursing, representing a 'typical' sample of a nursing workforce skill mix from an Australian aged care hospital inpatient ward (Table 2).

Main Findings

The two data sets (debriefs and focus groups) were combined during the data analysis process. The thematic analysis generated three interrelated themes and subthemes, exploring the nurses' experience of how the ageing-suit program impacted them and how they deliver care to older people (Figure 1). Quotes are reported using participant pseudonyms and codes (DB = debrief and FG = focus group).

“It feels real”

The first theme outlined the feelings of the participants about wearing the ageing-suit. Participants reported their initial uncertainties about the program due to the ‘computer gamer look’ in the appearance of the suit. However, immediately following seeing the suit ‘in action’, participants enthusiastically discussed the concept of ageing-suits and the authenticity of their experience. They were generally impressed that the ageing-suit was able to realistically simulate what older people looked like and the ‘feeling’ of being older. Participants also described their observational perceptions and compared colleagues wearing the ageing-suit with what they considered to be the general appearance of older people:

I couldn't believe she actually looked elderly[sic], hunched over, different gait.

Knowing Raylene is young, fit and healthy in everyday life and then the suit really did make her look elderly[sic]. (Wendy - DB).

Notably, participants not only observed each other as looking ‘aged’ but individuals expressed how their experience in the ageing-suit also made them feel ‘aged’. James depicted his time in the suit as creating “that real patient feel” (James - DB).

Evoking a Range of Emotions. Participants reported experiencing a range of emotions during their simulation scenario while experiencing the simulated ageing changes, such as vision loss, hearing impairments and mobility restrictions. Participants expressed negative emotions such as ‘frustration’, ‘anxiety’, ‘unsafe’, ‘helpless’, ‘afraid’ and ‘vulnerable’. They recalled how they felt completing the scenario activities:

That was really frustrating as I could see the different colours, which were obviously the different sections I had to read but ... I couldn't see anything and that was really frustrating getting me to read a form that I couldn't read. (Amanda - DB)

Participants reflected on how these emotions amplified considerably when completing activities such as mobilising: "I got so nervous when walking to the toilet, especially because with those glasses I could hardly see" (Vanessa - DB). There was a consensus among participants that mobilising led to significant frustrations and exhaustion; they were relieved when able to sit down again or go back to bed. Some participants expressed a sense of fear when walking in the ageing-suit. Belinda described the negative emotions she experienced when walking to the toilet and her inability to converse with the 'nurse' helping her at the time:

You feel very cut off by the experience and I was very aware of the fact that I was putting one foot in front of the other and I was having to look at the ground... I couldn't do anything else but just focus on one step at a time... (Belinda - DB).

The emotional experience of the participants in the ageing-suit was so profound that they easily recalled their feelings three months following participating in the program, as shown in the quote below:

I think how exhausting it was and the effort involved in a simple activity like going to the bathroom...that really had a big impact on me ... how frail and vulnerable I felt in the suit, that heightened sense of absolute dependence on the staff and their kindness. (Taryn - FG).

Learning through Experience. All participants acknowledged the value of the ageing-suits, excitedly recalling their level of engagement in the day and how this experience held greater educational worth than other traditional programs they have attended:

...to actually experience an emotion, is far more profound than reading or watching it on PowerPoint presentation... I think it's a much better educational tool from that perspective.(Taryn - FG).

Having an emotive learning experience improved their understanding of older people and the ageing process, not just from a theoretical perspective but more importantly, from a practical perspective as well. Wendy expressed this theory to experience transition:

We are not just book smart; we are street smart. We are aged care street smart. (Wendy -FG).

Compared to traditional forms of education, learning by experience and engaging with emotions proved to be a meaningful learning experience with participants highlighting the fact that it "feels real".

Enhancing Understanding

Participants expressed changes in their knowledge and understanding of the ageing process and older person perspective. This theme explored two interrelated sub-themes: developing insight and everyone should try this.

Developing Insight. Participants highlighted how time in the ageing-suit enhanced their insight into the perspective of older people on ageing. Raylene shared "It gives you an understanding" (Raylene - DB) while Taryn explained, "I definitely think that it has given me the genuine insight into how challenging it is for our elderly[sic] patients..." (Taryn - FG). Earlier, participants expressed fatigue in the ageing-suit when completing activities and were able to relate this to the fatigue experienced by older people:

When they even say to us that it's hard to do (activities), they get very tired, very quickly. So being in the suit, you can understand more where they are coming from, and it's hard.(Joanne - DB)

Belinda described her increased insight into older people as an interpretation of a youthful mind trapped in an ageing body which gave it a powerful message:

You were captive in the suit...you were captive inside the old age if you like and there must be a lot of little old twigs out there that are just very much are captive in their own bodies and their inability to do things. (Belinda - DB)

Everyone Should Try This. Overwhelmingly participants recommended using the ageing-suits for a diverse range of staff as they felt from their increased insight that this educational initiative was invaluable. Everyone agreed with Amanda that, “It should be mandatory” for all healthcare professionals and introduced into hospital orientation programs. James described how he wholeheartedly spread the word of the program to other colleagues:

I have certainly talked to people about it and said my experience and how profound it was and how it has assisted my insight into the aged person. (James - FG)

Thinking creatively, participants reflected on the potential impact of the ageing-suit experience on other non-clinical parties such as health management teams and family members:

I think another good point would be having family members in the suits to get them to understand what their family members are going through. (Margaret - FG).

Changing me

Self-reported changes to individuals and practices were evident in participant discussions as a result of taking part in the simulation program. This theme is divided into three sub-themes: growing in empathy, changes in practices and future me.

Growing in Empathy. As an impact of their experiences, participants described self-growth through changes in their empathy, as highlighted by James:

...obviously increased empathy for the people that you are looking after...I found that I have been doing this for a long time but I have never been able to get as close to in their shoes... we think we are in their shoes all the time, we are right close to them, doing the

most personal things with them, but we never really experience that, what they are experiencing, so I thought the suit was brilliant for that. (James - FG)

Others agreed with James and described how their ageing-suit experiences awakened their empathy, Taryn believed she was “More empathetic” after the experience and Wendy contributed, “I thought I was empathetic before...I thought I understood...and after the suit...I feel I can understand better...It changes the empathy...you have for your patients”(Wendy – FG).

Several participants noted how their self-growth impacted on their attitude towards older people and how they managed their frustration as Ruby explained:

You still might get frustrated, but you pull it back, you can pull it back much easier. It's like oh that's right, you did that, you know what that feels like. (Ruby - FG)

Collectively, participants reported these changes as ‘genuine’ as they became second nature in the workplace. As a result, a sense of work satisfaction increased as outlined by Belinda and Wendy, “You are much more willing to go that extra mile if you are aware of what is going on inside them” (Belinda - FG) and “It does make you feel good at the end of a shift when you know you have addressed certain things that you might not have before” (Wendy - FG).

Changes in Practices. Participants’ self-reported potential and actual changes in practices, realising that they needed to revise their practices to ensure they focus on older people as individuals, “We can't just put everyone in one box” (Ruby - DB). Participants described how the ageing-suit experience promoted patience, reassurance, assistance with daily living activities, communication changes, falls awareness and patient engagement. The impact of the participants’ experiences on potential changes was immediately evident following removal of the ageing-suits, as they engaged excitedly in the post-simulation debriefs. As reflected by Tilly:

To give them more time... time to assess the situation...give them more time to answer me when I am asking them a question and just being more patient with them. (Tilly - DB).

These intentions were translated into revisions in practices to ensure the focus was on the person, not the task:

I think I spend more time now. I stop myself now on toilet trips, when you know you are really busy and where you would previously would have gone Oh for god sake can we just hurry up,... you stop yourself, and you go there is no hurrying this up...this is it. (Hayley - FG)

Participants had a range of views on how their communication had changed and described an increased use of non-verbal communication techniques, such as touch to help guide and provide reassurance, changes to the volume of their voice and positioning when talking with older people. Additionally, participants described specific changes to their verbal dialogue. As illustrated:

Making sure I am very clear and concise and making sure that the patient knows that I am speaking to them. (Boston - DB)

Several participants highlighted changes to their perceptions of safety, explicitly falls management as James explained:

So my experience in the suit really sort of opened that up a little bit for me and back on the ward it is sort of like now oh I can see now why you are more at risk of falling...I am having to be there more with them, the person that I might have let walk to the toilet on their own before I am probably not letting them walk to the toilet on their own now. (James - FG)

Participants connected their perceived changes in practices to improved patient engagement:

There is a lot more gratitude, a lot more connection. They remember who you are; they light up when they see you... they are more engaged in their nursing care, and they are more receptive to you assisting them with tasks where they may previously have been resistant to. (Hayley - FG)

Future Me. Wearing the ageing-suit enhanced awareness of their own ageing process. Participants indicated that their experience changed their thinking, directing their thoughts to their future selves. Kane shared his fears of getting older “For me it was overwhelming knowing that when you get to that point, experiencing with that suit, it kind of scares me...I will be in that situation in the future” (Kane – FG).

The experiences were so profound that it positively impacted the choices participants are making within their lives. Hayley explained how the experience was so insightful that it illuminated the future implications of her current health status. It compelled her to make active lifestyle changes, resulting in self-reported positive outcomes:

Really made me think about...ageing...I have lost weight since the suit...I’ve been more active and fit and going to the gym...I eat light and easy now instead of burgers since the suit because of the impact it had on me with the mobility...and seeing into the future. (Hayley - FG)

Discussion

Overall, the study aims were met. The qualitative findings supported the successful introduction of this new ageing-suit simulation program for aged care nurses, with the nurses agreeing the ageing-suit is a beneficial educational approach that enhanced their insight into the ageing process and understanding about the hospital experience of older people. These participant outcomes are comparable with similar studies that described improvements in knowledge, understanding, empathy and positive attitudes towards older people following participating in an ageing-suit program (Bennett et al. 2015; Chen et al., 2015; Lucchetti et al., 2017; Sari et

al., 2020). Notably, participants in this study linked these outcomes to the experiential nature of the ageing-suits.

Nurses reported this innovative ageing-suit program was highly engaging and was an improved way of learning when compared to traditional educational approaches, such as PowerPoint presentations because the ageing-suit “It feels real”. In previous studies, they too likened the success of their interventions, in part to the experiential nature of the ageing-suits when complemented with reflective debriefs (Bennett et al., 2015; Pascala et al., 2006). However, with very few studies including follow-up data and mixed findings (Diachun et al., 2006; Kada & Booth, 2016), it remains unclear if this type of educational approach promotes long term translation of learning into practice. This study yielded overwhelming promising qualitative findings, including evidence of retention of learner outcomes at the three-month follow-up.

The ageing-suit program was successful in increasing insight, awareness and understanding of the older person among the nurses, as described by participants in the ‘enhancing understanding’ theme. These enhanced insights created a ripple effect; participants described how these insights influenced changes to their perceptions towards older people in the second theme of the findings ‘changing me’. Individually, participants felt like they “walked in the shoes” of older people from their ageing-suit experience and as a result they can connect more empathetically with the people they are caring for. There is wide recognition that empathy is considered an essential component in compassionate care and it features as an essential element in person-centred care (McCormack & McCance, 2017; Yu & Chen, 2012; Yu & Kirk, 2009; Yu & Kirk, 2008). Despite this, there are many interpretations of the definition of empathy (Dohrenwend, 2018). Historically, empathy is seen as the ability of individuals to understand the perspective of another as if it were their own, without losing the ‘as if’ quality (Rogers, 1957). Over time, this definition has evolved and is now considered a multifaceted construct, including affective, cognitive and behavioural elements (Levett-Jones et al., 2018). Empathy is perceived as a personal trait, therapeutic tool, professional state,

communication process and even on a continuum (Levett-Jones & Cant, 2020; Yu & Kirk, 2008). There is also a debate of about whether empathy can be taught and has a long, complicated history (Yu & Kirk, 2008).

Previous studies of simulation using ageing-suits reported enhancements in empathy among learners who experienced the ageing process (Chen et al., 2015; Henry et al., 2011; Sari et al., 2020). The findings from the current study support this perspective, that ageing-suits can increase empathy, extending the evidence to include qualified nurses already caring for older people. These self-reported findings are encouraging and worth investigating further in conjunction with quantitative survey data to explore empathy changes more robustly. The authors considered these implications in the next phase of the study and introduced an empathy scoring survey for exploration among participants.

As the ripple effect continued, participants self-reported improvements to their attitudes towards older people, including the ability to “pull back” their frustrations and how these changes promoted an increased willingness to care for the older person as described noticeably by one participant, “You are much more willing to go the extra mile.” It is widely documented that nursing attitudes play a significant role in influencing the quality of care older people receive (Eymard & Douglass, 2012). This study showed an improvement in the attitudes of nurses towards older people. By wearing the ageing-suit participants found it easier to identify as well as reduce their frustrations them because they were given a “window” into the lived experiences of older people. These findings are evident in other published studies. Varkey et al. (2006) used the Aging Semantic Differential (ASD) survey and the Modified Maxwell-Sullivan survey (empathy and attitudes toward caring for older people) to emphasise improvements in attitudes of medical students’ towards caring following participation in *The Ageing Game*. A strength of this current study, unlike Varkey et al. (2006), is that following completing the program participants described changes in their attitudes in the context of real clinical experiences.

Another noteworthy finding, is that participants reported positive changes in their clinical practices as a result of this study. Participants described an increased insight and changes to self following wearing the ageing-suit. This ultimately led to enhancing the personalised care they delivered to older people while in hospital. Participants described specific examples of changes to communication, physical assistance and the emotional support they provided to individuals. Although not explicitly stated in the original study aims, the essence of these changes in practices described by participants can retrospectively be aligned with all five key domains of the person-centred practice framework (PCPF): the macro context; prerequisites for person-centred practice; the care environment; person-centred processes; and person-centred outcomes (McCormack & McCance, 2017).

Staff education and training contribute significantly to improvements within a workforce. *The In My Shoes Program* achieved workforce development (PCPF macro context domain) through the application of a highly engaging educational approach which utilised ageing-suits. This is described enthusiastically by participants in theme one of the findings 'It feels real'. Participant outcomes, as expressed in the 'changes in practices' sub-theme, included enhanced communication techniques, interpersonal connections and increased work satisfaction (PCPF prerequisites domain). Outlined in the 'enhancing understanding' theme, participants explained an improved knowledge, attitudes and understanding of the ageing process from the older person perspective (PCPF person-centred processes domain). In the 'changes in practices' sub-theme, participants shared how their fear of falling while wearing the ageing-suits increased their safety risk awareness when supporting older people to mobilise within their workplace (PCPF care environment domain). Lastly, participants described how changes in their individualised care practices ('changes in practices' sub-theme) increased their connection with the older people they care for (PCPF person-centred outcomes domain) (McCormack & McCance, 2017).

This is a thought provoking alignment between the person-centred practice framework and the study outcomes. Further investigation into this connection would be

worthwhile in phase two of this study. Overall, this study is valuable because it forged evidence that previous studies suggested only as a possibility (Macaden et al., 2017). This study showed the impact of an ageing-suit experience on improved quality of care for older people delivered by aged care nurses.

Limitations

Although this study provides valuable insights into the use of ageing-suits with aged care nurses, it is not without limitations. Nurses volunteered to participate in this study, leading to a risk of selection bias. Potentially, these nurses might have higher motivation levels or positive attitudes towards older people than colleagues who chose not to volunteer. Findings were generated from a small sample of nurses (n=15) in a single ward which could restrict their translation to other contexts. Also, the findings from this study merely 'scratched the surface' of this emerging education approach and its impact on clinical practices. A greater 'in-depth' approach is needed in future studies to explore ageing simulation in more depth.

Although the goal of qualitative research is not to generalise findings, exploration of ageing-suit usage outside the aged care sector warrants further investigation. The sample was nurses only, in practice the care of older people is not restricted to only nurses and therefore the inclusion of other frontline healthcare professionals such as physiotherapists and occupational therapists in future studies requires consideration. In phase two of this study, limitations will be addressed by broadening the range of clinical settings and healthcare professionals recruited to participate, including multiple hospital facilities and non-specialised adult inpatient units. Lastly, the lead researcher was known to the participants, and therefore this might have compelled them to participate. However, it could also be argued this relationship aided in deeper discussions because mutual trust was already established (Liamputtong, 2011).

Conclusion

Aged care nurses continue to face challenges when caring for older people, despite education received in pre-qualification courses. The need to provide

continuing workplace educational opportunities for nurses caring for hospitalised older people is evident. This study successfully implemented a new ageing-suit program in an aged care hospital. The qualitative findings indicated that ageing-suit simulation is not only suitable but had the potential to revolutionise the way education is delivered to assist nurses with these challenges. Ageing-suit experiences described by the aged care nurses showed increased insights into the ageing process, with an evident ripple effect from these increased insights to changes to self and practices, resulting in greater individualised care for older people. The findings of this study justified phase two of this research. In phase two a combination of quantitative and qualitative methods will be used to test the effectiveness of the ageing-suit simulation approach across multiple hospital facilities, as well as in a broader group of qualified nurses beyond the aged care speciality.

Implications for practice

The ongoing professional development of aged care nurses within the workplace is critical to providing specialised care to hospitalised older people (Baumbusch et al., 2017; Chen et al., 2015; Ross et al., 2013). This study takes a proactive, creative educational approach using ageing-suits to improving nurses' understanding of the ageing process and the older persons' hospital experience. Promising findings of this study have shown an improvement in participants' insight, empathy and positive attitudes towards older people with vivid 'real-life' examples of changed practices shared by the aged care nurses. These findings are demonstrating a transference of learning outcomes from the simulation environment into clinical practices. Ageing-suits are providing an alternative approach to facilitating education for aged care nurses about older people. Further research is required to explore how this innovative approach could potentially support the educational needs of the wider healthcare professional workforce.

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