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Wound assessment and decision-making process of nurses encountering suspected infected wounds

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Introduction

The identification of subtle signs of wound infection promotes timely intervention, thus enabling improved patient outcomes. When making decisions in wound care, nurses must consider numerous and even potentially competing factors to best meet the patients' needs. Gillespie, Chaboyer, St John, Morley, & Nieuwenhoven (2015) suggested that the decision-making process of health professionals must be centred on balancing practice-based knowledge with evidence-based knowledge. Since the assessment and decision-making process of nurses encountering suspected infected wounds is complex, it demands the need to explore nurses perceptions and experiences in this area. This study explores the following research questions:

- What are nurses' perception of wound assessment in the detection and identification of a suspected infected wound?
- What are the factors that will influence nurses to act when encountering a suspected infected wound?
- When encountering a suspected infected wound, what is the decision-making process that nurses employ?

Methodology

This study used a qualitative descriptive design to holistically explore the perception of nurses encountering suspected infected wounds, in an acute tertiary hospital setting. Convenience sampling was used to recruit study participants. Using Morse (2000) as a guide, the study team projected to recruit about 15-20 nurses. All nurses from a wide variety of disciplines and backgrounds were recruited, except for nurses who are part of the wound team. This study only recruited nurses who had more than 6 months of working experience and above.

Individual semi-structured face-to-face interviews were conducted. An interview guide was formulated based on this study's research objectives and current literature. The interview guide was also revised judiciously, where additional questions and prompters were added, with the research objectives in mind (Holloway & Wheeler, 2010).

Findings

Data was collected from 28th August 2019 to 30th November 2019, after ethics approval from the Centralized Institutional Review Board (CIRB). Data saturation was reached at the 17th interview when no new information was expected to surface (Holloway & Wheeler, 2010). Two more participants were recruited to identify any new information. No new information surfaced thus data saturation was confirmed at the 19th participant. Following are the four categories and their respective subcategories that emerged from content analysis. The number of years of work experience of the participant is reflected with their respective pseudonyms in the quotes below.

1. Senses that detect

Participants utilized sensory stimulations to assess wound and determine if it would be infected. Physical sensory stimulations such as sight, hearing and smell allowed participants to suspect if a wound would be infected.

Seeing the wound

"So, if we were to just look at the wound itself, usually an infected wound would have slough. I think that's a very obvious sign lah, slough can be yellowish colour..." (Seasons/1 year)

Smelling it

"The smell, make you, will remember it .... you don't even need to open your eyes, you smell it, you know already." (P/4 years)

Hearing from the patient

"Patient might verbalize where there is pain, sometimes no pain, so.... it's part of the assessment." (Zee/13 years)

2. Having a sense of intuition

Innate intuition enabled participants to suspect the likelihood of wound infection. The ability to subconsciously deduce possible wound infection based on distinctive patient characteristics were highlighted by eight participants. Seven participants expressed that it was typical of patients from a certain background, - ie. nursing home residents - would likely to have wounds which are infected, even before any confirmatory test or diagnosis was performed.

Having a hunch

"If let's say patient is in nursing home, got pressure injury, we already know ya, this one will be having wound infection." (Grace/5.5 years)

Suspecting contamination

"Near the sacral site, very easy to get infected because patient... once pass urine or pass motion, the things will dirty the wounds." (May/11 years)

3. Detection begets action

The detection of the suspected wound infection prompts the nurse to take action. In this segment, nurses described the different courses of action they would take when encountering a suspected infected wound.

Experience guides action

"Based on experience I would say. We always use this dressing product for this kind of wound." (Ee/14 years)

Knowledge determines action

"I feel, your own knowledge is important, but then again like, reading up is just only so much. You really need like judgement and real exposure to different kinds of wounds." (Seasons/1 year)

Weighing between cost and effectiveness

"Actually, cost do factor in, but at the end of the day is for the patient. I just like, oh, this is good right- then automatically I will do it for the patient." (P/4 years)

4. The Nursing Ethos

The nursing ethos, illustrates the collective narrative of the nurses' beliefs during their encounter with suspected infected wounds.

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Knowledge seeking behaviour

"For our ward, we work well with the vascular and the wound team, so they always come here, and then sometimes when we have difficult wounds or what they will always share their knowledge. And that's where we learn new things." (Stacey/13 years)

Positive mindset in patient care

"Attitude on how to do the proper dressing, and then the wound will recover. when you doing the dressing, is not just like anyhow! The technique is very important." (Marga/15 years)

"Sometimes if I really lazy to do for example, 'oh nevermind, I just do like this' but what is the consequence? ... wound is getting worse, then who is going to suffer? The patient." (Amy/2 years)

Conclusion

While wound infection holds an objective definition, nurses are constantly using subjective measurements in their assessment and decision-making processes when approaching suspected infected wounds. Findings from this study brings attention to the sensory perception and intuition in nurses' experience with suspected infected wounds, and the need to balance evidence-based practice with knowledge-based practice in wound care. This study underscores the need to consider steps to take in terms of wound care education, propagation of a healthy working and learning environment in the ward, and the development of protocols which serves to bridge the wound non-expert with the wound expert, along with the regular update of evidence-based practice. Moreover, this study foregrounds, yet again, the importance of the nurses' attitude toward nursing care practice. It is thus pertinent to build a working culture that encourages and celebrates good clinical practice. There is a need to encourage a culture among the nurses where evidence-based practice translates into actual practice as it will increase efficiency and provide an effective care delivery.

References

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