

# Development of a questionnaire assessing nurses' situational awareness to miss care

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## Background & Aims

Situational awareness is a cognitive process encompassing three levels: perception, comprehension, and projection. It is essential for making effective decisions and crucial for ensuring patient safety and delivering high-quality nursing care, notably in reducing instances of missed nursing care. There is currently no tool available to measure situational awareness specifically among nurses concerning missed nursing care.

The aim of this study was to develop and validate the Situational Nursing Awareness Probe – Missed Nursing Care Edition (SNAP-MNC) questionnaire, focusing on assessing nurses' individual situational awareness within the hospital context, focusing on factors that interfere with nursing care.

## Methodology

The study followed a five-phased evidence based developmental process:

(1) Developing an items pool based on research review; (2) Content and face validation by 20 experts; (3) Pilot by ten nurses to test feasibility and reliability; (4) Structure validation by 190 nurses; and (5) Criterion validation against the validated MISSCARE survey by 190 nurses.

The new questionnaire – the SNAP-MNC consists 5 questions, representing perception (scored dichotomously as yes or no), comprehension and projection (assigned codes 0, 0.5, or 1 to represent no, partial, or full). The overall situational awareness score ranges between 0 and 1 (Figure 1).

Figure 1. The SANP-MNC

The factors	The cause of delaying or missing nursing care	How do you think it affected nursing care performance and/or completion?	What do you think the impact will be on the patient, the nurse, and/or the ward's function?	In practice, how did you deal with this factor?	How do you think this factor could have been handled better/more effectively?
1 <sup>st</sup> factor					
2 <sup>nd</sup> factor					
...					

## Results

- The scale content validity index yielded an excellent value of 0.9
- Cronbach's alpha indicated acceptable reliabilities (0.88 to 0.89) across different shifts
- Confirmatory factor analysis displayed an excellent fit to a one-dimensional model
- The correlation between the mean SNAP-MNC and MISSCARE survey was significant ( $r = -0.15$ ,  $p < 0.05$ ), confirming criterion validity
- The mean score of situational awareness scores was low: 0.11 (SD = 0.1)

## Conclusion

- The SNAP-MNC assess personal situational awareness among hospital nurses, specifically regarding factors influencing missed nursing care
- The low situational awareness scores among nurses are concerning and highlight the need for strategies to actively support and improve their situational awareness



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