



## Abstract

**Background:** The early warning system (EWS) is widely recognised as part of the early detection of patient deterioration. EWS has been studied to predict adverse outcomes in hospital patients who deteriorate in acute care wards. Since October 2018, the EWS has been implemented in UGM Academic Hospital in Special Region Yogyakarta, Indonesia. This study proposes to explore in what ways an Early Warning System contributes to nurses' clinical decisions around patient deterioration.

**Methods:** The research design for this study was mixed-method sequential explanatory. The research participants are nurses working in adult medical and surgical units. This one-year study analyses quantitative data from a questionnaire distributed to the adult unit nurses in phase one. In phase two, focus group discussions will be conducted in order to gather qualitative data.

**Result:** The total respondents for the quantitative data phase is 53 nurses, and in phase two, two Focus Group Discussions were held. 79% of nurses identified that they needed education about using the EWS and 92% indicated education on physiology and management of the deteriorating patient was required. Three themes were acquired from qualitative data. First is "the nurses' experience of EWS Implementation", second is "the impact of EWS implementation", and third is "Ameliorating the EWS Implementation". The participants showed that the EWS has been used for assessment, documentation and communication process in managing the deteriorating patient. However, the nurses faced challenging situations to implement the EWS effectively.

**Conclusions:** From the nurses' perspective, the EWS implementation is complex and needs an evaluation and support strategy from stakeholders to maintain and *improve* the purpose of EWS.

**Keywords:** clinical decision, early warning score, early warning score system, ews, nurse, nursing, perception