

# TO ASSESS VITAL SIGNS IN EMERGENCY

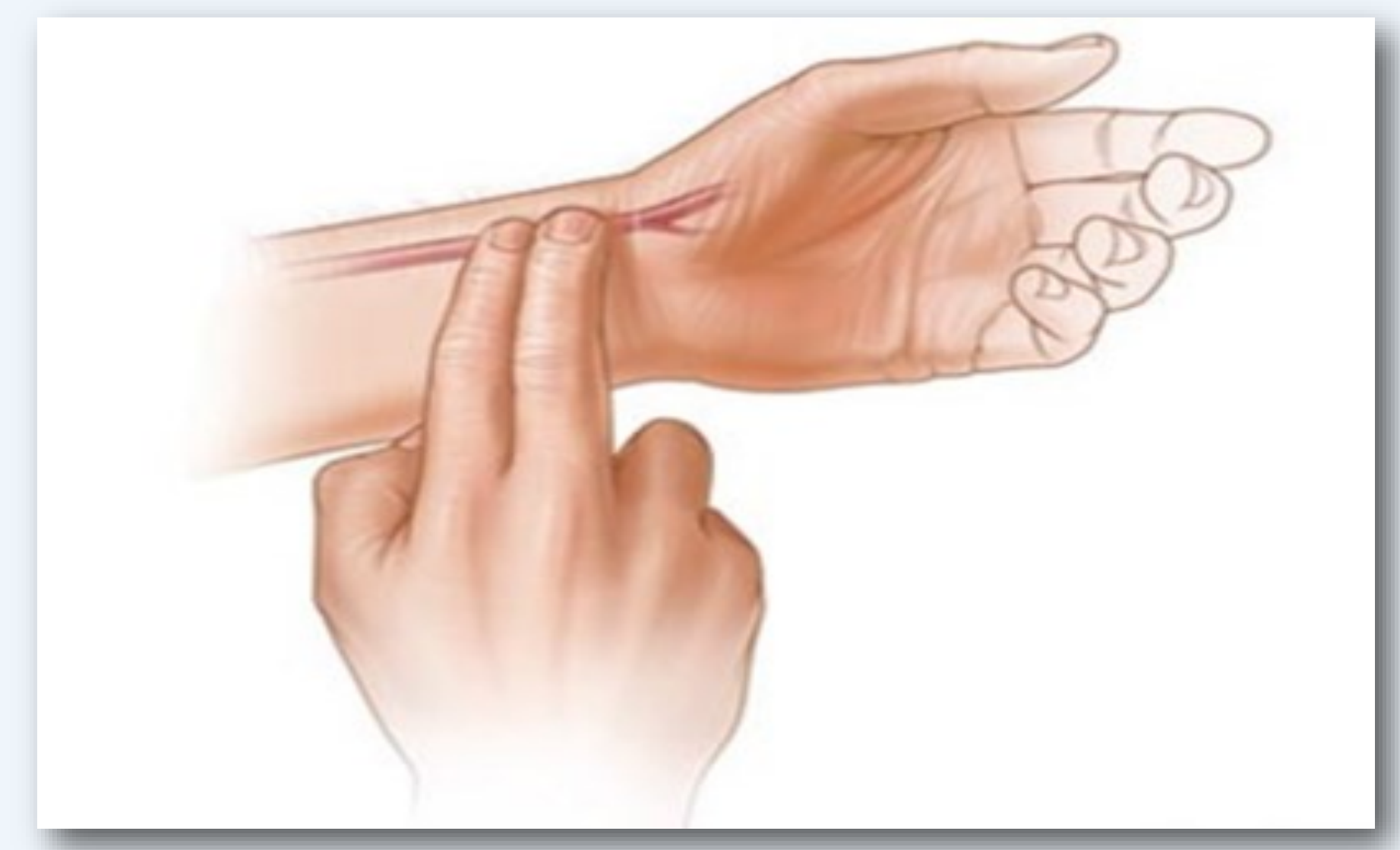
## - A quantitative survey of the nursing assessment

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### Background: Introduction

Fundamental to giving patients high quality care is to monitor, supervise, vital signs and report clinical changes to counter increased morbidity and mortality. Evidence exists that serious adverse events [SAEs] affects patients hospitalized and the majority of them could be avoided. Several studies show that SAEs are relatively common. The most serious events are preceded by warning signs that could identify those patients who need early intervention. In caring for the patient, the nurse's duty is to detect, identify changing or deteriorating vital signs, assess and report to the responsible physician, as early detection leads to reduced morbidity and mortality.



### Result

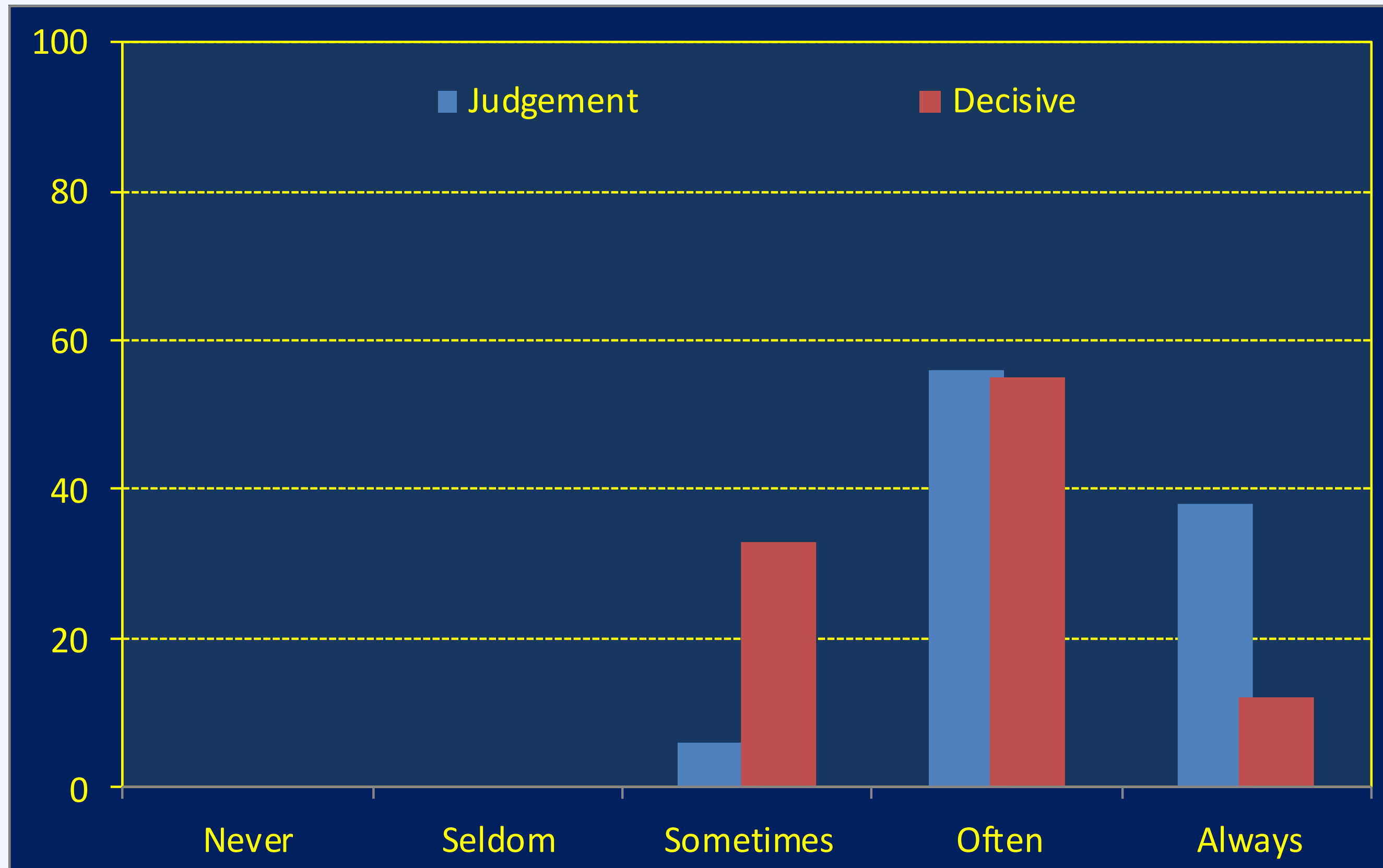


Figure 1. How often does the nurse use intuition / clinical gaze in case of deterioration of the patient's vital signs and how often has it been crucial.

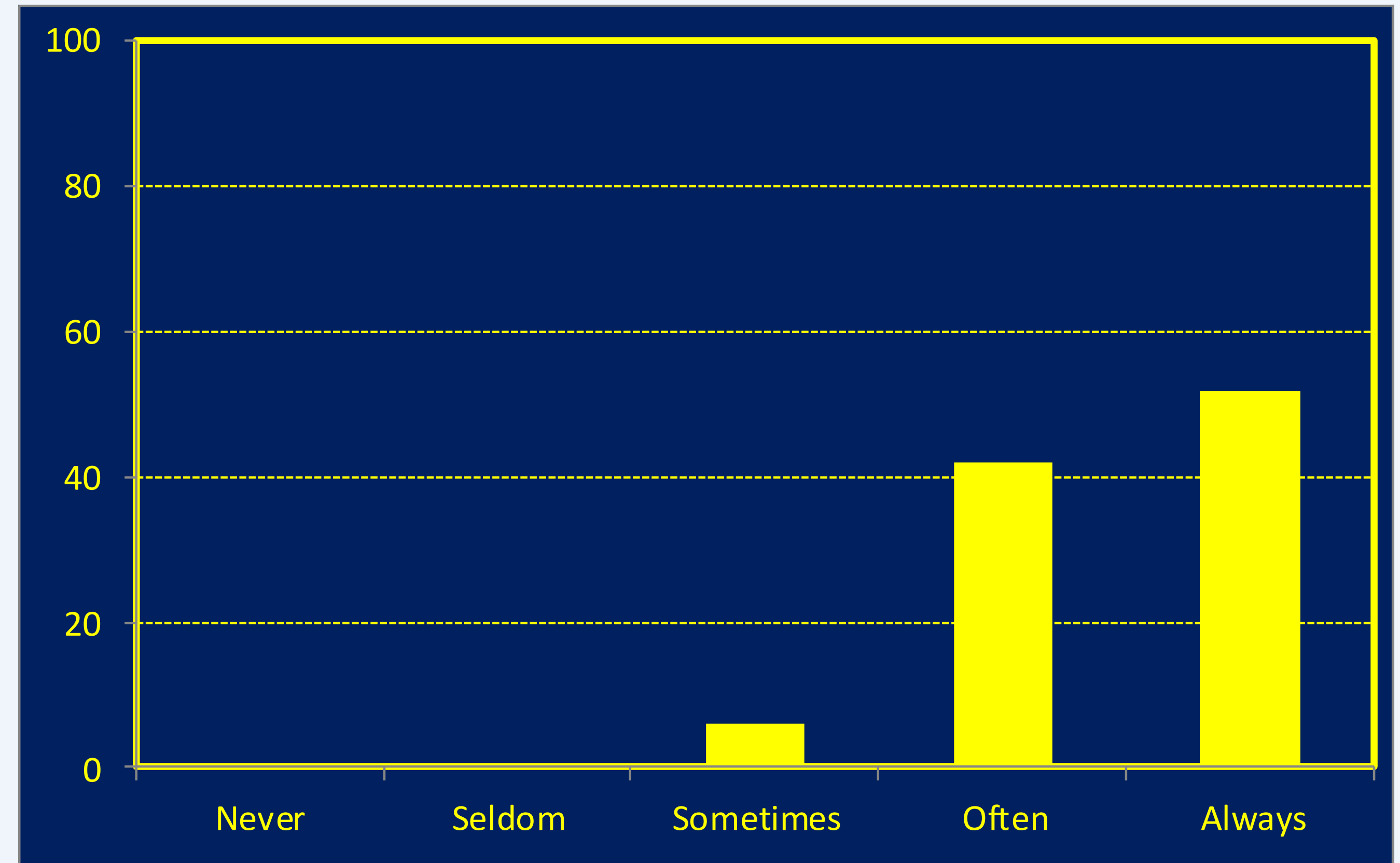


Figure 2. Assessment using medical technical equipment in case of deterioration of the patient's vital signs.

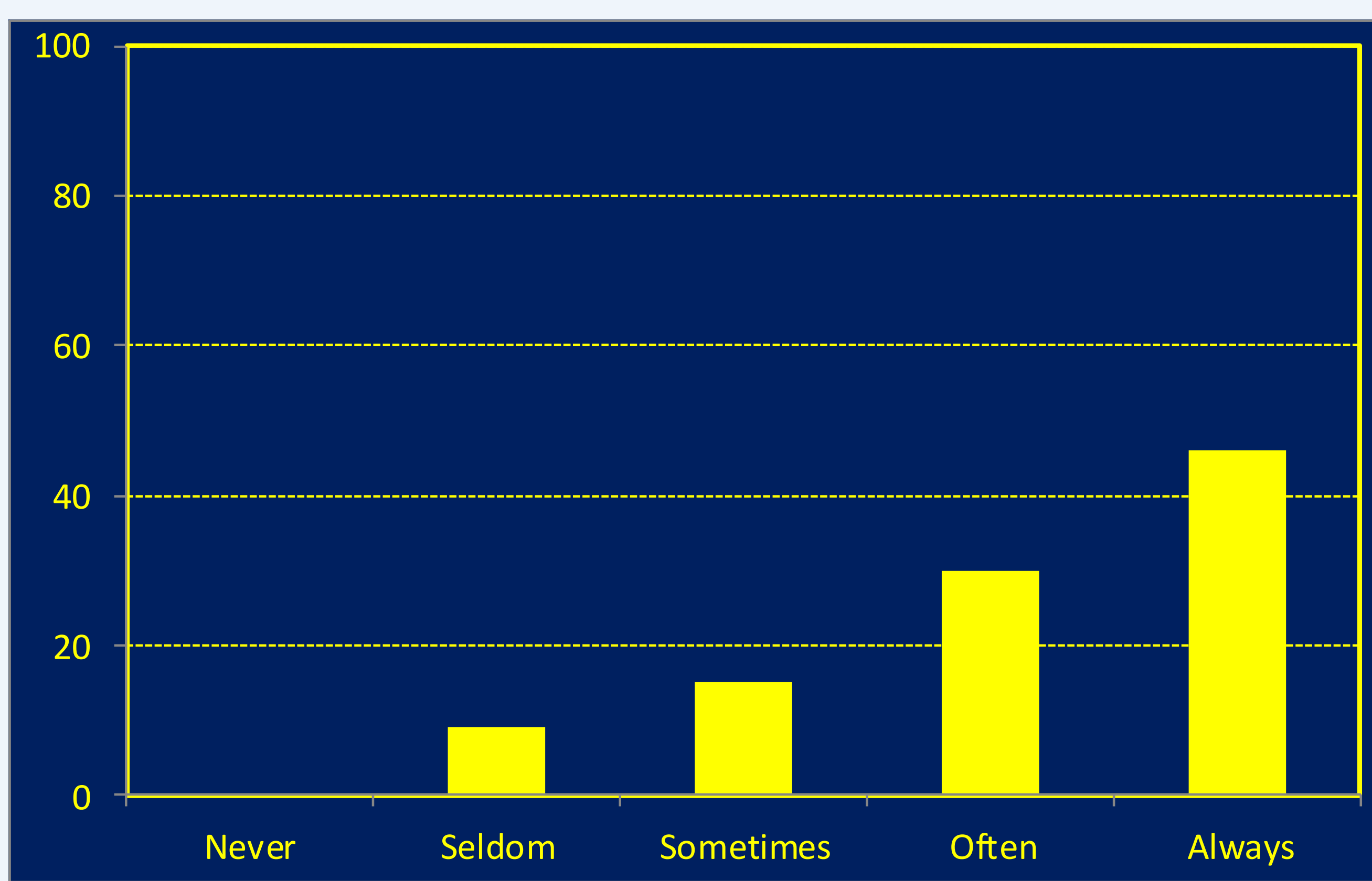


Figure 3. Nursing's use of manual methods for the assessment of deterioration of the patient's vital signs.

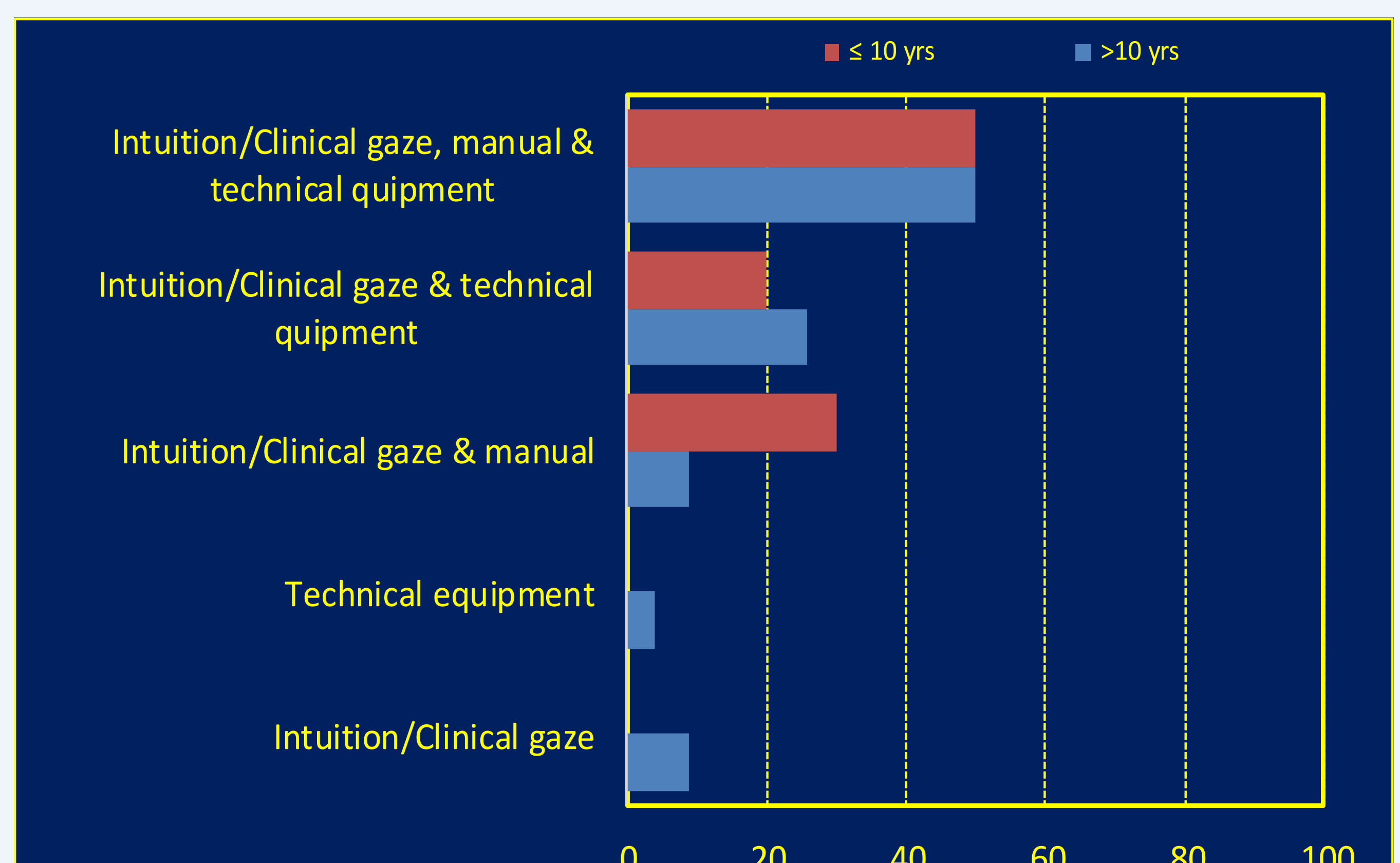


Figure 4. Nurse's basis for initial assessment in case of deterioration of the patient's vital signs.

### More Results

#### Parameters

Nurses were asked to describe what they considered to be vital parameters. The answers were largely in confirmed with the literature. However, no nurse raised age as a vital parameter to consider, although this is found to have a significant impact on mortality during hospitalization.

#### Ranking

The ranking of vital signs differs somewhat between what the literature describes as the most important and those which the majority of nurses considered to be the most important.

Consciousness, early sign of deterioration, ranks highest by 24 % of nurses but 30 % of the nurses placed consciousness in the eighth place in the ranking.

There was no clear ordering of the parameter breathing frequency in the ranking, between 12-18 % in place one to five. Although research has clearly shown that abnormal breathing is a predictor of potentially serious event.

Saturation was ranked relatively high, between 15-30 % in place one to four. It is therefore attributed to high reliability, which is not confirmed in the literature.

#### Medical devices

On the question of the extent to which the nurses based their assessment on the deterioration of the patient's vital signs on medical devices, a total of 94 % responded constantly or often. However, the use of medical equipment was surrounded by some uncertainty.

### Support in assessing vital parameters

On the question of what could be helpful in assessing the patient's vital signs, 69.7 percent of nurses answered more theoretical knowledge among the options that were available (Figure 5). The alternative *other* answered by nine out of 33 nurses, one of whom indicated that more *experience* would be helpful in assessing the deterioration of the patient's vital signs.

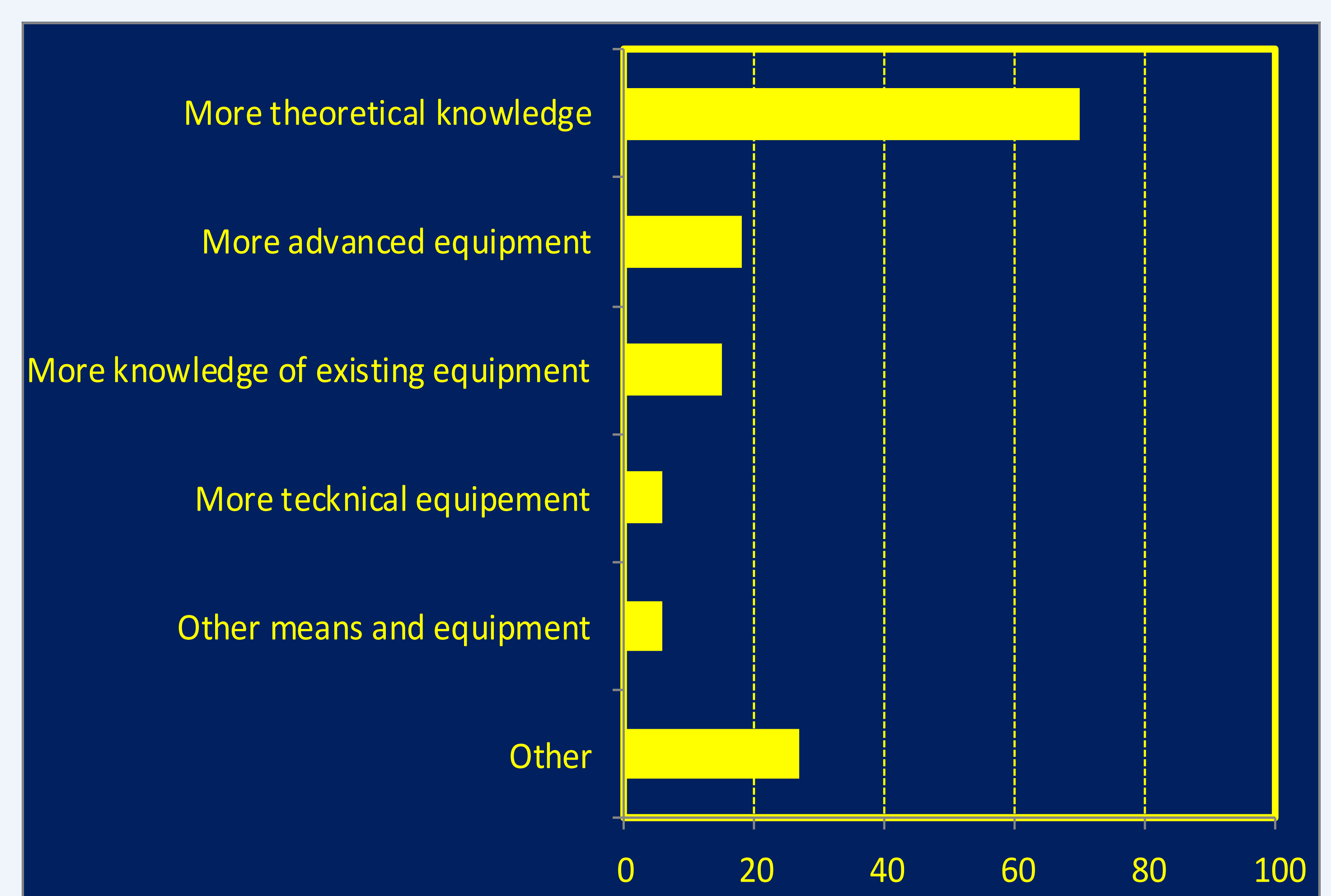


Figure 5. Distribution of what could be helpful for the assessment of deterioration of vital signs, for nurses. Respondents could answer several options.

### Objectives

The purpose was to describe the nurse's assessment at the deterioration of the patient's vital signs at an emergency hospital.

### Methods

The used method was based on quantitative survey with the collection of descriptive statistics and analysis of responses related to professional experience. The questionnaire consisted of 26 structured questions, five semi-structured questions and one open-ended question.

### Conclusion

Nurses at the acute care hospital uses a combination of intuition/clinical gaze, manual methods and monitoring with medical devices when the deterioration of the patient's vital signs occurs. A large part of the respondents estimated the use of intuition/clinical gaze high and equally so the use of medical devices. The result shows the need for more theoretical knowledge of new evidence regarding the importance of impaired vital parameter. There is a need to strengthen the nurse in identifying, evaluating, analyzing the patient's condition and appropriate response.