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THE EFFECTIVENESS OF ENHANCING PRE-OPERATIVE ASSESSMENT WITH INFORMATION SYSTEM INTERVENTION

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INTRODUCTION

Surgery is often the most important and urgent treatment. A mistake in the preparation of a surgical procedure may result in endangering the patient's life. Given this, complete pre-operative preparation is vital. In the hospital, the pre-operative checklist written by nursing staff often causes incomplete shift handover and delays in surgery time. We hope to reduce the time spent on writing with the aid of an information system, improving work efficiency and satisfaction while ensuring patient safety standards.

AIM

reduce the time spent on writing with the aid of an information system, improving work efficiency and satisfaction while ensuring patient safety standards.

RESULTS

With this information system, the time spent by nursing staff on records shortened by 120 seconds and there were no omissions on the form, an accuracy rate of 100%. 2 sessions of education and training on pre-operative checklists were held, attended by 18 seeds from 18 nursing units, with attendance rate of 100% and an after-class satisfaction rate of 100%.



pre-operative checklist

mistake-proofing mechanism

ISBAR shift model

METHOD

A task force was established from March 1 to July 31, 2022. The average time taken by nursing staff to fill in a form for 1 case was 180 seconds timed with a stopwatch. The task force further inquired the reason behind this and found that filling in the pre-operative checklist was time-consuming and there was no system in the nursing practice to help with duplicate information. A strategy to improve this was to establish information on medical system integration -setting up an electronic form using the ISBAR shift model to reduce duplicate checking and inputting, achieving the accuracy of nursing records. To avoid omissions, the e-form is equipped with a mistake-proofing mechanism which raises an alert if the items are not checked thoroughly, establishing pre-operative preparation education and training(picture1-4).

CONCLUSIONS

Through information system intervention, the ISBAR model was adopted to effectively shorten the time to fill in patient forms. With ISBAR, not only is pre-operative preparation information of a patient confirmed on the system, the mistake-proofing mechanism helps nursing staff quickly check the form to avoid mistakes, enhancing both accuracy and completeness before an operation takes place. In the future, various e-forms will be developed for real-time transmission of online information, boosting operational efficiency and promoting patient safety under a safer medical environment.

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