Vasa centralsjukhus
Vaasan keskussairaala

Study on in-hospital deaths may reveal patient safety threats

BACKGROUND

Finland's National Institute for Health and Welfare (THL) has estimated based on studies made in other countries that approximately 700-1700 die in Finland due to harm incidents in care. Professionals are used to report voluntary harm incident reports on medication and communication errors. Incidents that may have contributed to patients' death are not reported in the same manner due to lack of knowledge or poor safety culture. No prior study has evaluated the harm incidents role in patient deaths in Finland. In this study we report some preliminary results from the prospective ongoing study at Vaasa Central Hospital, Finland.

AIM

The aim of the study is to obtain information about hospital deaths in Finland:

- Find out the significance of adverse events as a causative or contributory factor to hospital deaths and their possible preventability.
- Produce a new patient safety method to analyze the harms that contribute to hospital deaths.
- Estimate the loss of expected life years in care-related hospital deaths.
- This poster presents results that indicate that hospital deaths may reveal possible patient safety threats. To promote patient safety even further new steps must be taken.

METHODS

Information was gathered extensively using divergent methods. All the patients who died in Vaasa central hospital in year 2017 were included in the study. The professionals that treated the patient before the decease gave an assessment of the fatality by answering a questionnaire. Mortality-analysis was conducted by research physicians in cases where patient's reason for admission was not palliative or terminal care.

Global Trigger Tool (GTT) was also used to collect data about fatalities. All patients who died in January-March 2017 were included in fatality GTT. Patient safety coordinators did a retrospective review of patient records using known triggers to identify possible adverse events. Three physicians confirmed the findings.

RESULTS

Assessments of the fatalities
According to the professionals assessments death was expected in more than one third of the admissions. In 40% of the admissions the death was not expected and in almost 20% the cases could not the professionals answer whether patient's death was anticipated or not.

The answers suggested that death was not avoidable in over 70% of the cases. On the other hand a few evaluated that some actions could have been taken to prevent death. The professionals could not take a stand to whether the death was preventable in 25% of the cases.

The possible contributing factors to deaths according to respondents were infections, fall occurring mainly outside the hospital before treatment and aspiration. Post-operative hemorrhage may have contributed to deaths as well as delays in the start of the treatment. The professionals mentioned in free text that patients are sent to hospital treatment at the end of their life, either due to a defective or total lack of explicit care line.

FatalityGTT
The findings from Fatality-GTT indicate that adverse events occurred in 50% of all admissions with lethal outcome, which were altogether 113 during the three months period. For comparison in normal GTT analysis done in 2012 the amount of adverse events was found in 15% of all the admissions with a sample size of 120. Approximately 20 % of all found triggers in Fatality-GTT were confirmed as adverse events. Of the found adverse events about 90 % were estimated to be preventable. One third of the confirmed adverse events were not compatible with known triggers. For example care limitations were not always documented in a correct way in patient records. One fifth of all the adverse events were pressure ulcers. As comparison no pressure ulcers were found in the normal GTT done in 2012. The confirmed adverse events in the fatality-GTT were found to be more severe than in normal GTT. For example in fatality-GTT six confirmed adverse events were found to be level I which means the death of the patient. In normal GTT no adverse events were classified so high.

CONCLUSION

Most of the respondents assessed that no factors within care contributed to death during care. The retrospective review of the hospital deaths nevertheless gave rise to concern at the organizational level, as inconsistencies in settings, processes and documentation were found. Unjustified transfer of patient in terminal stage to the hospital and unnecessary examinations cause additional harm to the patient and may increase the patient's suffering. GTT as a tool is too sensitive and is not suitable for assessing adverse events for the care of dying patients as such.

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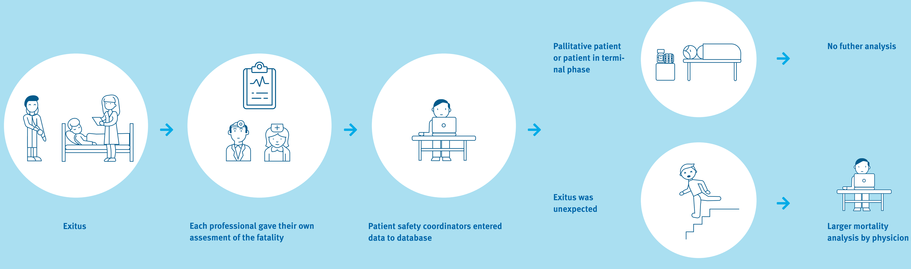

PICTURE1. Professionals gave their own assessment of patient's death.