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Identifying challenges in the safety observation process in Finnish case companies

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Background and introduction

- Unsafe conditions and acts
- Unplanned adverse events that could have but did not result in injury or damage to people, property, plant, materials or the environment (Gnoni & Lettera, 2012; Wincek, 2016)
- Potential to
  - provide information for accident prevention and safety management
  - increase company safety levels
  - maintain safety-related awareness
  - support employee participation in safety work (Cambraia et al., 2010; Gnoni et al., 2022; Gnoni & Saleh, 2017)

- Lack of established guidelines -> varying practices (Cambraia et al., 2010; Gnoni et al., 2022; Gnoni & Saleh, 2017; Oswald et al., 2018)
- Challenges related to
  - how to improve reporting activity (Gnoni & Saleh, 2017; Phimister et al., 2003; Winkler et al., 2019)
  - the quality of observations (Oswald et al., 2018; Van Der Schaaf & Kanse, 2004)
  - how to classify observations (Gnoni et al., 2022)
- Benefits of safety observations have been questioned (Oswald et al., 2018; Phimister et al., 2003; Winkler et al., 2019)

Aim: identify issues in safety observation processes in Finnish companies

Materials and Methods

A qualitative research approach with interviews

- 4 companies
- 32 interviews (average duration 50 minutes)
- 50 interviewees
  - employees and their health and safety representatives (n = 15), managers or supervisors (n = 22), and safety or security managers or specialists or other specialists (HR, system main users, consultants) (n = 13)
- Microsoft Teams or Google Meet applications (n = 17), face-to face interviews (n = 12) and hybrid interviews (n = 3)

A qualitative research approach with interviews

- Seven main themes related to safety observations: 1) definition and objectives, 2) guidance and instructions, 3) identification and reporting, 4) assessing safety observations, preventive and corrective measures, 5) dissemination and utilisation of information, 6) follow-up, and 7) encouragement and rewarding
- The data were categorised and summarised

Results

Phase of the safety observation process	Identified issue
Identification and reporting	Uncertainty of what to report Reporting activity
Assessment, preventive and corrective measures	Observation assessed too lightly Unresolved observations
Dissemination and utilisation of information	Varied levels of feedback
Follow-up	Use of numeric targets
Guidance and instructions	Need for training
Encouragement and rewarding	Rewarding practices

Discussion and conclusions

- Based on the results, the safety observation process needs to be improved
  - Employees need guidance on what is an acceptable safety observation
  - Employees need to see the benefits of making observations
  - Observations should be discussed more with staff and the information should be used more in safety management
  - Possible high numbers of observations bring challenges in making in-depth analyses and utilising the acquired information
  - A lack of resources may lead to a failure to recognise frequently reported safety observations

- Further studies are needed to recognise if there is a level when companies have enough safety observations and can the numeric targets hinder the usability of safety observations in some cases
- IT and AI may lighten the workload which should be further studied (Goh & Ubeynarayana, 2017; Woźniak & Hoła, 2024)

- Limitations of this study include
  - low number of participating companies
  - limited number of interviewees

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Thank you!