Understanding Patient Safety Culture: Measuring variability in Belgian acute hospitals

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BRIEF OUTLINE OF THE CONTEXT & PROBLEM

Recent research is drawing attention to the existence of differentiation, disintegration and fragmentation of safety culture resulting in multiple distinct subcultures within organizations. Clearly, there is a need to measure sources of variation in safety culture perceptions within an organization, relating to individual and hospital characteristics.

OBJECTIVES

Assuming that safety culture could exist on a sub-organizational level, the aim of this study was to measure differences in safety culture between work areas and professional groups in acute hospitals.

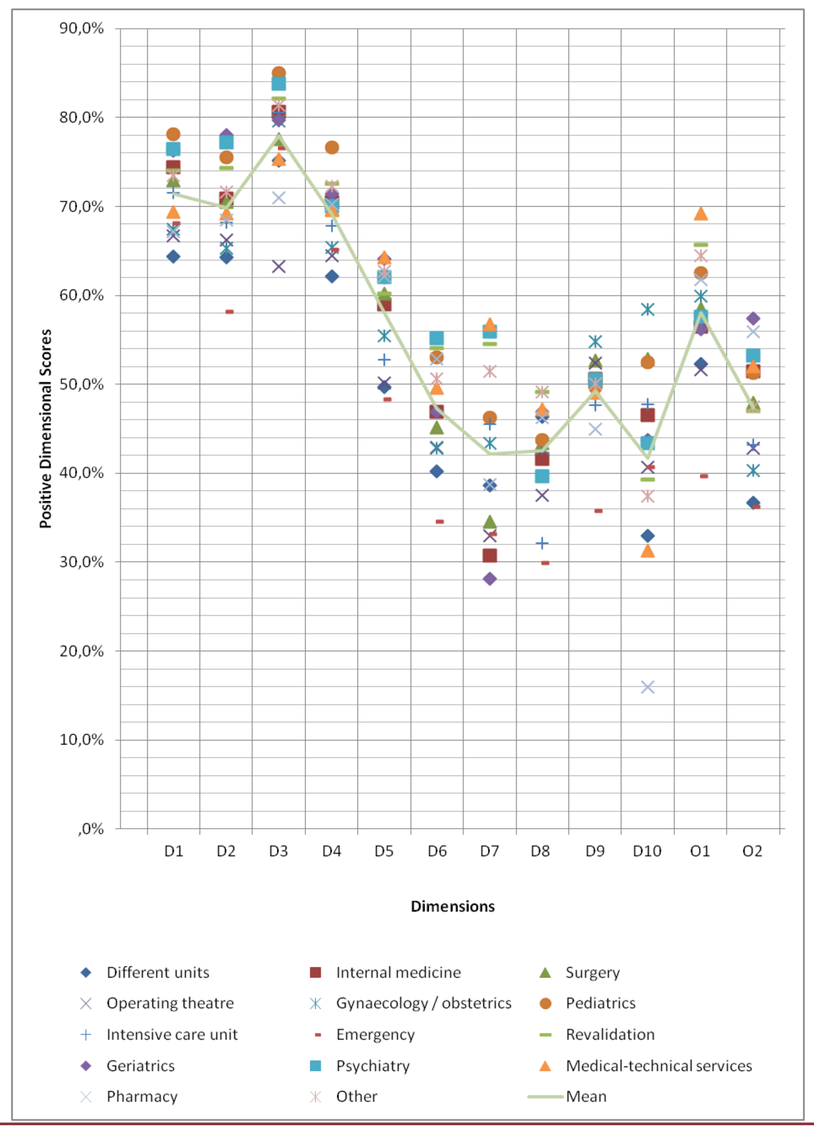
METHODS

The aggregated data of the Hospital Survey on Patient Safety Culture from 90 acute Belgian hospitals were used for quantitative analysis. A mean dimensional score (range 1-5) was calculated on the individual level. Dimensional scores were expressed as the percentage of positive answers towards patient safety and were calculated for work area and staff position.

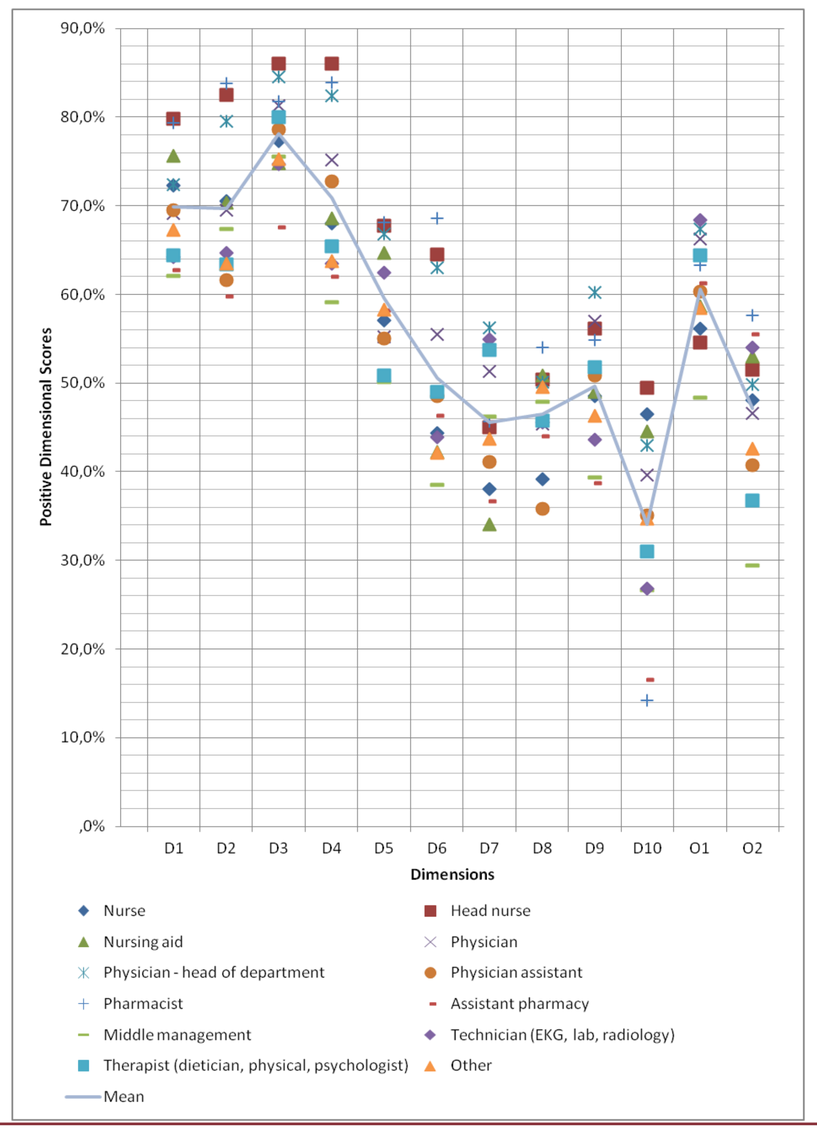
RESULTS

- 47635 respondents (51.9% overall response rate) were included in the analysis.
- Dutch speaking hospitals had a higher overall response rate (58%) than French speaking hospitals (41.3%).
- We found differences in response rates between medical staff (34.9%) and employees (55%).
- Missingness was more frequent in the predictor variables (5% or more), such as 18.4% for work area and 10% for staff function, as compared with missingness in the dimensional variables (<2%).
- Handoffs and transitions, Staffing and Management support for patient safety were identified as major problem dimensions and require to be an organization-wide priority. Positive dimensional scores were higher for members working in pediatrics, psychiatry and revalidation. Respondents working in the emergency department, operating theatre and multiple hospital units had lower dimensional scores.
- We found an important gap in perceptions of patient safety between leaders and assistants within disciplines. Administration and middle management had lower perceptions towards patient safety.

Positive Dimensional Scores for Work Area



Positive Dimensional Scores for Staff Position



Safety dimensions

D1 Supervisor/manager expectations and actions promoting safety

D2 Organizational learning/ continuous improvement

D3 Teamwork within units

D4 Communication openness

D5 Feedback and communication about error

D6 Nonpunitive response to error

D7 Staffing

D8 Management support for patient safety

D9 Teamwork across units

D10 Handoffs and transitions

Outcome dimensions

O1 Overall perceptions of patient safety

O2 Frequency of events reported

LESSONS LEARNT & MESSAGE FOR OTHERS

Language, work area and profession were identified as important safety culture predictors. We found statistically significant disparities in patient safety perceptions between work units and between and within disciplines. Ranges were larger for staff position than for work area, suggesting higher safety culture differences based on professional than work area. This approach of subgroup analysis on a large aggregated database provides the opportunity to identify problem areas. Future research should focus on work environment factors influencing safety culture and their impact on healthcare outcomes.

REFERENCE

Vlayen A, Hellings J, Claes N, Peleman H and Schrooten W. A nationwide Hospital Survey on Patient Safety Culture in Belgian hospitals: setting priorities at the launch of a 5-year patient safety plan. *BMJ Qual Saf.* 2011 Jul 18.

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