Transforming Communication and Relationships in Interdisciplinary Surgical Teams

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In surgical teams, in which the involved health professionals are highly interdependent it is vital that the interdisciplinary collaboration is well-functioning to secure high-quality treatment and patient safety. This necessity is shaped by the increasing fragmentation of health professionals that results from a very strong specialization tendency. Today, most surgical teams are established ad hoc, comprised by different team members from day to day. This fluid team structure challenges the team’s adaptive capacity and the interactive dynamics among team members. Highlighting the need to understand the interactions that occur between team members in fluid surgical teams more deeply. The application of relational coordination (RC) theory and methodology may be a key to understanding teamwork in surgical teams in search of successful collaboration, communication, and relationships. Few studies have explored how RC can be observed and improved at the micro level in this specialized context. This study explored surgical teams in selected operating rooms (OR) with the purpose to create new knowledge about how communication and relationships are practiced in interdisciplinary surgical teams in Denmark, as well as to offer recommendations on how best to improve the quality of collaboration in such teams in the future.

The study is a mixed methods study with a multiphase design. PHASE I, included an ethnographic field study where data are collected through observations (39 teams), semi-structured interviews (15), and focus group interviews (2) over a 10-month period in 2014 in two orthopedic surgical wards in a university hospital. A directed content analysis based on the theory of RC was used to transform the data to show different communication and relationship patterns in interdisciplinary surgical teams. PHASE II, focused on initiating, planning, implementing, and evaluating organizational interventions, inspired by the Relational Model of Organizational Change. In PHASE III relational coordination and patient safety culture were measured before, during and after implementation of interventions using the Relational Coordination Survey and the Safety Attitudes Questionnaire. Finally, in PHASE IV the findings were integrated.

Interdisciplinary collaboration in surgical teams was found to be challenged by uncertainties, the high degree of interdependency among team members, and the strong focus on time and capacity utilization. Four different communication and relationship patterns were identified in surgical teams. The interdisciplinary collaboration was found to be appropriately in some surgical teams, while collaboration in other surgical teams was found to be inappropriately and in need of transformation. RC measures showed non-reciprocal collaboration ties between surgeons and nurses, and across clinical specialties in the OR. Based on these findings and the baseline measures of RC an intervention program was developed. RC theory and methodology were found to be useful as framework for organizational change processes aimed at improving interdisciplinary collaboration and safety culture in surgical teams, leading to significant changes initially. In addition, correlation was found between relational coordination and safety climate.

Implementation of an intervention program based on measures of relational coordination may facilitate improvement of positive relationship in the surgical teams in the OR, thereby enhancing treatment quality and safety climate.

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