

Developing an interdisciplinary team training program to improve staff-staff communication

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TOPICS

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1. INTRODUCTION

In 2001 the Capital Region of Denmark (CR) established a confidential reporting system for health care staff on in-hospital adverse events. 2,3 pct. of the reports described sentinel events (death or major loss of function or risk of the same). Root cause analyses revealed staff-staff communication as a major root cause. Knowledge, skills and attitudes of staff-staff communication are rarely taught neither at the pre-graduate level nor to health care staff. A Danish program based on Crew Resource Management-principles to improve hospital interdisciplinary staff-staff communication was therefore developed. This abstract describes the process of the needs assessment and the following pilot testing.

2. METHOD

A thorough needs assessment and pilot testing-process took place before the intervention was tested in a controlled trial.

The needs assessment included:

- An analysis of 84 root cause analyses (RCA's) for their content of communication-root causes and these for the content of verbal staff-staff communication error (in opposition to written communication errors, staff-patient communication errors or staff-relative communication errors).
- An analysis of the scientific and grey literature on results of training health care staff in leadership, communication and teamwork without the use of high fidelity simulators.

- Four focus group interviews with interdisciplinary health care staff.
- Interviews with staff and leaders in other industries (air traffic control, pilots and a multinational fast food chain) on training staff-staff communication competencies.

The program was piloted at five different wards (a general medical, two paediatric, an anaesthetic and at obstetric and gynaecologic ward) at three different hospitals in three Danish hospital regions. The first pilot was focused on the content: What seemed relevant to the participants and who should the participants be. The second pilot tested if the reaction of the participants were more positive and content seemed more relevant if colleagues were trained as trainers and undertook the training. The third pilot focused on how to develop a relevant training program for three different wards with a frequent common procedure – here a C-section procedure.

3. RESULTS

The RCA-analysis revealed that 75 pct. of the RCA contained communication-root causes. Of these 67 pct. described verbal staff-staff communication errors (the details of the analysis is being published elsewhere).

The literature revealed the need for a thorough needs assessment [1], for providing the participants knowledge, letting them train their skills and discuss their attitudes within the course [2]. The literature also underscored the use of structured communication and checklists to enforce the use of the tools in clinical practice [3-7]. The analysis showed positive results regarding participant reaction and impact on safety and team culture [3, 4, 8-14]. But the majority of the trials had weak designs and few papers described results at the patient/clinical level [3, 4, 14, 15].

The focus group interviews revealed weaknesses in communication at patient hand over and between staff but no clear pattern of specific problems between professions. The interviews revealed a less strong interdisciplinary (doctor-nurse) hierarchy at Danish hospital wards than

described in literature from other parts of Europe and the US. This was surprising as this is not earlier clearly described in the health care-literature, but is described for aviation [16].

The experience from other industries and similar programs from the US (among others Michael Leonard's program from Kaiser Permanente, LifeWings, the team training program from the VA and TeamSTEPPS) [17–19] inspired to the use of DVD-instruction, check-lists and structured language.

A customizable interdisciplinary classroom-based one-day training program including a pocket guide, checklists, cases, an instructive DVD and a homepage was established [20].

The tools selected for the program were, among others:

- a Danish version of the SBAR,
- a checklist for patient handover,
- the read back/closed loop method for detailed orders and messages,
- A call out procedure for communication in teams,
- A description of team leader and team member competencies,
- a briefing, a re-evaluation and a debriefing tool
- suggestions for structured language and
- an 'emergency brake' for getting team members attention on patient safety issues

The end of course critique from the first pilot showed high relevance of the issues to the participants. All staff groups valued the interdisciplinary setting. The participants were junior and senior doctors, nurses, nurse aids, clerks and hospital porters. All staff groups asked for the program to be customised at specialty level (the examples and cases relevant for their daily work – no surgical cases for internal medical specialties). Staff also asked for all staff to get the same tools and training in order to be able to use the tools across units for patient hand over and inter-speciality procedures.

Following the logistic challenges of training a whole staff group at a 24/7-clinical ward, this highlighted the need for a train-the-trainer-model. Based on the evaluations the course was modified. The second pilot therefore took place in two steps: First, a small group of local doctors and nurses at leadership level was trained as trainers. Hereafter this group customized the program for their specialty and trained the staff group (N = 160). The end of course critique at ward level was very positive, but at trainer level only a few accepted to train all staff in an unfamiliar subject.

The third pilot was preliminary terminated after training the trainers due to shortness of staff and resources. This was a

valuable experience as this emphasized that an intervention including a full day course for all clinical staff is a question of priorities.

4. CONCLUSION

A thorough needs assessment and pilot testing must take place before roll out of training interventions. For the needs assessment we chose to look at four aspects: The patient safety issues described in root cause analyses, the staff aspect in focus group interviews, the literature and experiences from similar training in other industries. The following three pilot tests revealed strengths and weaknesses and the final intervention was modulated according to these experiences. The final intervention is now tested in a controlled trial and an evaluation is taking place according to Kirkpatrick's four levels for evaluating training interventions: reactions towards the course, actual learning, post-training behaviour and results at patient level.

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