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Communication and patient safety in anaesthesia and intensive care. Does implementation of SBAR make any differences?

Submission date
05/11/2012

Recruitment status
No longer recruiting

Registration date
08/11/2012

Overall study status
Completed

Last Edited
14/01/2016

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Several studies have shown that communication and collaboration problems are one of the most common causes of medical error. To make communication more effective and consistent, the communication tool SBAR (Situation, Background, Assessment, Recommendations) is used in high-risk organizations and it has also been introduced in health care. SBAR is thought to create conditions for correct exchange of information, encourage dialogue and is recommended for care by World Health Organization (WHO) for use in care to increase patient safety. The aim of the present study is to examine staff members communication, collaboration and safety attitudes in anaesthesia and intensive care before and after introduction of SBAR.

Who can participate?
Staff members (physicians, registered nurses and licensed practical nurses) in anaesthetic clinics at two hospitals in central Sweden.

What does the study involve?
The study involves one group in which the intervention SBAR is implemented (the anaesthetic department at one of the two hospitals) and one comparison group (the other hospitals anaesthetic department). The intervention includes an in-house training course (2.5 hours of lecture, role-play and a later follow-up) and information material describing SBAR. Data were collected before the implementation of SBAR and will be collected again after implementation of SBAR to measure the effect of the communication tool SBAR. Data collection is being performed using questionnaires and observations. Various questionnaires are used to study staffs perception of relationships and communication within the clinic, staffs safety attitudes, staffs perceptions of their psychological empowerment at work (meaning, competence, self-determination and impact). To study communication during handovers in the post anaesthesia care unit (PACU) a study protocol is being used during observations (based on earlier research) together with audio tape-recording of the handovers and the patients anaesthetic records. The handovers structure, content, omission of data, interruptions and the receivers retention of

information is being studied. At each handover the receiver is asked to reproduce the information during the verbal handover, and this is audio-taped. Interviews with staff will also be performed and incident reports will be examined.

What are the possible benefits and risks of participating?
The possible benefit is that the communication tool SBAR will ease verbal handovers and improve staff members perception of communication within and between different professions and collaboration. Furthermore it is possible that medical errors will decrease.
Observations and audio-taping of handovers, among other methods, are being used to collect data and there is a potential risk of participants experiencing discomfort.

Where is the study run from?
University of Gävle, Sweden and the County Council of Gävleborg, Sweden.

When is the study starting and how long is it expected to run for?
The study started in April 2011 and is expected to run until February 2013 (data collection).

Who is funding the study?
University of Gävle, County Council of Gävleborg, Patient Insurance LÖF (Landstingens Ömsesidiga Försäkringsbolag) and Swedish Society of Nursing (Svensk Sjuksköterskeförening).

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Study information

Scientific Title

Staff members perception of communication, safety attitudes and verbal handovers before and after implementation of SBAR in anaesthesia and intensive care: a quasi-experimental study

Study objectives
Implementation of the communication tool SBAR (Situation, Background, Assessment, Recommendations) will improve staff members perception of communication within and between different professions, safety attitudes as well as their perception of psychological empowerment. Furthermore, it will improve the structure of verbal handovers, decrease handover duration and increase retention of information among receivers of handovers.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The Regional Ethical Review Board in Uppsala, 9 March 2011, ref. No. 2011/061

Primary study design
Interventional

Study design
Quasi-experimental interventional study

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Anaesthetic clinics at two hospitals in central Sweden

Interventions
The study includes an intervention group in which SBAR is introduced and a control group.

The intervention includes an in-house training course (2.5 hours of lecture, role-play and a later follow-up) and implementation of the communication tool SBAR at one of the two anaesthetic clinics. Information material describing SBAR is distributed to all staff in the intervention group, who receive a plastic card describing the SBAR structure that is to be used during handovers. During the SBAR implementation period, measures are conducted to follow the implementation. Monthly structured telephone interviews with a random sample of ten staff are performed each month during the implementation period and the staff members perform observations of each others to measure whether and how SBAR is used. Results of these measures are used as feedback to the intervention group.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
1. Staff members perception of relationships and communication within the clinic including the factors within-group communication openness, between-group communication openness, within-

group communication accuracy, between-group communication accuracy and communication timeliness. Staff members safety attitudes in the clinic including the factors: teamwork climate, safety climate, job satisfaction, stress recognition, perceptions of management and working condition.
2. Percent memorized information sequences by the receiver of handover, duration and structure of the handovers in PACU.
3. In addition, staff members experiences of and reflections on communication within and between professions and collaboration during verbal handovers, the communication tool SBAR and their experiences of and reflection on patient safety in relation to verbal handovers will be investigated in a study using a qualitative approach.

Key secondary outcome(s)
1. Staff members perceptions of psychological empowerment including the factors meaning, competence, self-determination and impact.
2. Incident reports before and after implementation of SBAR

Completion date
01/02/2013

Eligibility

Key inclusion criteria
Staff members working at the two anaesthetic clinics (physicians, registered nurses and licensed practical nurses)

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
15/04/2011

Date of final enrolment
01/02/2013

Locations

Countries of recruitment
Sweden

Study participating centre
University of Gävle
Gävle
Sweden
SE-801 76

Sponsor information

Organisation
University of Gävle (Sweden)

ROR
https://ror.org/043fje207

Funder(s)

Funder type
University/education

Funder Name
University of Gävle (Sweden)

Funder Name
County Council of Gävleborg (Sweden)

Funder Name
Patient Insurance LÖF [Landstingens Ömsesidiga Försäkringsbolag] (Sweden)

Funder Name
Swedish Society of Nursing [Svensk Sjuksköterskeförening] (Sweden)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2016		Yes	No