

## 1) Context

Study 1 was performed on second year undergraduate medical students and Study 2 on third year students. Research was done in a university setting.

## 2) Problem

Negative attitudes about Patient Safety (PS) are hard to change. Therefore it seems desirable to involve PS in the early stages of the medical curriculum. However very little is known about the PS related attitudes of undergraduate students.

## 3) Assessment of problem and analysis of its causes:

Question 1 of this study: are medical students sensitive to PS interventions: do they have an opinion about PS? Do they care?

Question 2: what should a PS curriculum implementation in medical educations look like, given that in the current curricula there is very little space left for PS? Also, PS should be integrated in the existing curricula. So, what should the ideal introductory lecture on PS look like?

## 4) Strategy for change

Study 1: In order to answer question 1 a priming study was performed. In year 1 all spontaneous incident reports in the student reports of a two-week nursing internship were coded using the WHO-ICPS taxonomy. In year 2 a priming was given in the form of a single one hour lecture on PS, immediately before their internship.

Study 2: The use of vignettes (factorial survey design) possibly offers an answer for question 2. Eight vignettes were constructed for incident identification, reporting and disclosure. Four vignettes related to a medical setting, four to a nursing setting.

## 5) Measurement of improvement:

Study 1: measures used were: the number and type of spontaneous reports of incidents, the percentage of students reporting, and the proportion of multiple reports.

Study 2: Factors integrated in the vignettes were: whether you performed the action yourself or not, whether there were witnesses or not, and the incident types (near miss, no harm or harm). Measures of change were the questions asked after every vignette: 'Is it an error?', 'Would you discuss it with a colleague?', 'Would you tell it to your superior?', 'Would you discuss it with the patient?' and 'Would you report it in the hospital error reporting system?'.

## 6) Effects of changes:

Study 1: The one hour lecture significantly increased the number of spontaneous reports (double!), the proportion of students reporting incidents, the number of multiple reports and the number of incidence types reported.

Study 2: Variation in incident identification, reporting & disclosure strongly depended on the incident types described. Both near misses and no harm incidents would go underreported by the students, even though they frequently identified such incidents as an error.

Whether there were witnesses, or whether they performed the action themselves did -surprisingly- not have a strong impact on the results.

#### 7) Lessons learnt:

Our medical school will continue to shape its PS lectures using vignette studies.

Our PS research group will develop vignette-based measurement for other interventions as well.

#### 8) Message for others:

PS-related attitudes are already strongly present in undergraduate students without a lot of clinical experience and can be influenced greatly by a well-designed lecture. This approach could improve patient safety culture in our future medical professionals.