



**Facing medical errors in medical studies**

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"And that's the first instinct...something's gone wrong. You know, hopefully the first thing is to correct it or save the person or whatever, but the second is cover your hide."

"Everything you read and everything that you're told says that you are supposed to tell what errors you make as soon as you can. Let them know what your thinking is, what you are going to do about it. And your chances of having an adverse litigation are less if you take that approach. Now, the question is, how many of us believe that?"

Gallagher, T. H., Waterman, A. D., Ebers, A. G., Fraser, V. J., & Levinson, W. (2003). Patients' and physicians attitudes regarding the disclosure of medical errors. *JAMA* 289 (8), 1001-1007.




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**To err is human...**

...but in the medical context, errors cause severe harm to patients and strain to those committing errors

➔ Necessity of a culture that understands errors as a chance for learning and reducing future errors through it and that supports (future) physicians in dealing with these experiences




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**Medical error** (a definition in progress)

The term "medical error" is used interchangeable with "medical mistake" and "medical failure" in order to describe an **adverse event** that **affects a patient** by **prolonging treatment** or **causing discomfort, disability or death**.

A medical error is understood as the **negative result of a deviation** from an **intended action** that would have lead to an expected or desired outcome.  
This action can be (i) **unnecessary or incorrectly performed** and thus would have been **avoidable** by an appropriate usage of existing information or (ii) not appropriate by **using a wrong plan** for achieving an aim. The result is an actual or potential **serious lack of quality in patient care** through health care professionals (Edmondson 2004).  
Medical errors generally have two origins: humans and technology.

As said by Roth (2003) the causes of the here focused human origin are (i) a **lack of attentivity**, (ii) **misjudgments** and/or (iii) **not following rules and standards**.



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**Questions**

How are medical errors faced in medical studies?

What is the current approach to facing errors?

What is a good approach to facing errors?

How can this be achieved?



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**Literature review**

2-step literature review

- 1) Review of health related journals, accessed via <http://pubmed.gov>
  - Published between January 2000 and March 2010
  - Focus on dealing with medical errors associated with the context of medical education and patient safety
  - concerning undergraduate medical students and junior doctors
  - keywords: error, error culture, medical error, learning from errors, medical education, patient safety, students' error
- 2) Review of the curricula of the German medical faculties

### Results I

- 67 articles were found and their relevance was again analyzed
- The reference lists of those articles were also explored and followed
- Finally, a total of 21 articles was incorporated into the literature review (6 literature reviews, 1 comment, 14 empirical studies)
- No further insights into the content of the medical curriculum in German faculties (only the structure available)

### Results II – Medical errors in medical studies

- Necessity of training concerning errors and patient safety
- Lack of teaching on dealing with errors, error disclosure and patient safety
- Errors are often not disclosed to patients and neither are discussed with colleagues/ supervisors
- However, first moves are noticeable (i.e. mortality and morbidity conferences)
- First 1-day-curricula for courses on patient safety and error disclosure were developed and were well accepted but their efficiency has not been evaluated yet

### Results III – Implications

- Need for more training on patient safety and error disclosure during medical studies and continuing medical education
- Implementation of an error culture and separation from the idea of the perfect physician necessary
- Working on all three levels necessary: individual, medical curriculum, faculty development

### Discussion

- Still, errors in the medical context are associated with blame and shame
  - Studies claim/demand learning from medical errors
- BUT:**
- There are only few learning from medical errors
  - Controversy about if and how is learned from errors
  - There are many factors inhibiting error disclosure and thus limit learning from errors (i.e. physicians' insurances, loose of respect, self-doubts, fear, society's ideal of physicians)

### Further questions to be followed

What is an appropriate dealing with errors in medical education?

How can this be achieved?

How and to what extent can medical education contribute to this?