**Review Article** 

# Medical training for communication of bad news: A literature review

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## ABSTRACT

In recent years, medical guidelines for communicating bad news to patients have been published. Training for this task was included in the curricula of undergraduate medical courses, specialization, and continuing medical education. The objective of this review is to evaluate the existing evidence in the literature on the effectiveness of such training. Only seven controlled trials were found, four of which were randomized, and these four indicate an improvement in the trainees. These findings suggest that training undergraduate and postgraduate doctors in skills for communicating bad news may be beneficial but there are important limitations to reach a definitive conclusion. These limitations are discussed in this article.

Key words: Bad news, communication skills, medical education, physician-patient relations

#### INTRODUCTION

Even though delivering bad news is something that occurs daily in most medical practice, the majority of clinicians has not received formal training for this essential and important communication, and would consider this as an extremely difficult task.<sup>[1]</sup> The term 'bad news' refers to any information transmitted to patients or their families that directly or indirectly involves a negative change in their lives. As breaking bad news is a stressful task, many physicians either avoid it or perform it inadequately because it "results in a cognitive, behavioral, or emotional deficit in the person receiving the news that persists for some time after the news is received."<sup>[2]</sup>

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Access this article online						
Quick Response Code:	Website: www.jehp.net					
	<b>DOI:</b> 10.4103/2277-9531.134737					

Physicians used to believe that disclosure of bad news would cause anguish, threatening to cripple the preservation of any hope for patients, justifying thus the concealment of bad news.<sup>[3]</sup> However, since the second half of the last century, patients, physicians, and the general public started to communicate the diagnostic and prognostic aspects with a more open and clearer approach.<sup>[4]</sup>

Interactions in which bad news is discussed are admittedly distressing for doctors, patients, and their families. The way the diagnosis of serious diseases, like cancer, is communicated can have a significant impact not only on the perceptions of patients about their disease, but also on the long-term relationship with their physician.<sup>[5]</sup>

When medical residents were evaluated using an instrument regarding the skills considered necessary for giving bad news in a caring and informative manner, they showed a general lack of competence in its delivery, representing barriers to interactions with patients. Part of this problem is associated with self-fears, lack of support from supervisors, and time constraint.<sup>[6]</sup> Another thing to note is that many fail because they do not consider the perspectives and expectations of the patient.<sup>[7,8]</sup>

Although the length of professional experience enhances medical fitness to communicate bad news,<sup>[9]</sup> a considerable proportion of experienced doctors still feel insufficiently instructed on how to perform this task.<sup>[10]</sup> Surveys show that

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This article may be cited as: Alelwani SM, Ahmed YA. Medical training for communication of bad news: A literature review. J Edu Health Promot 2014;3:51.

most medical experts believe that training programs are useful in this practice.<sup>[1,11]</sup>

To address this problem, researchers investigated the experiences and wishes of health professionals, patients, and their families,<sup>[12]</sup> and developed guidelines for interactions in the oncology setting.<sup>[13,14]</sup> These guidelines divide the interaction basically into three steps: (a) Preparation for communication of the news, establishing personal contact, and the degree of knowledge of the patients regarding the diagnosis and extent of the information they want to receive (b) the information itself, with appropriate language and rhythm, and (c) an empathic response to the reaction of the patient. Besides guidelines take into account the nonverbal impact of the quality of communication.<sup>[15]</sup>

Based on the premise that communication skills can be taught,<sup>[16]</sup> different educational strategies for medical students and physicians were developed.<sup>[17]</sup> These strategies include didactic lectures, small-group discussions, practical individual or group performance with simulated patients, and teaching moments during clinical care. Each of these modalities has potential advantages and disadvantages, as shown in Table 1.

A survey with hematology/oncology fellowship program directors in the United States showed that 63% of the program directors felt that extensive, formal training is important for skill development in delivering bad news, and 23% received moderate to extensive training.<sup>[18]</sup> Although this training will become a consistent part of medical education, there are

few data to demonstrate the effectiveness of such training programs.  $^{\left[ 19\right] }$ 

The objective of this review was to determine the existing evidence in the literature on the effectiveness of the training of doctors and medical students to communicate bad news.

# MATERIALS AND METHODS

We reviewed the databases PubMed, LILACS, and SciELO with the following: 'Medical education ' or 'medical oncology/ education' and 'physician-patient relations' or 'communication' and 'truth disclosure' or 'bad news' or 'diagnosis' or 'prognosis' or 'reveal' or 'revelation' or 'fatal' or 'death' or 'end of life' or 'unfavorable', using the limiter 'clinical trials'. The publication period was extended until August 30, 2011, with unlimited start date and no language restriction.

Based on this search, we selected for analysis only controlled trials on the training of medical students or doctors, specific to the communication of bad news, for the diagnoses of life-threatening diseases such as cancer or severely debilitating diseases like neurodegenerative diseases, or changing the prognosis from therapeutic to palliative care. Clinical trials evaluating the efficacy of medical training in communication in general were not considered for this analysis.

### RESULTS

Of the 85 trials identified, only seven matched the inclusion criteria defined for this review, all of which were published in the last 10 years. Their characteristics are shown in Table 2.<sup>[20-26]</sup>

Strategy	Advantages	Disadvantages		
Didactic approaches	Presents core concepts to large numbers of learners efficiently.	Little opportunity for discussion No opportunity for practice and feedback		
	Minimal faculty time and resources.			
	Learners are anonymous.			
	Opportunity for efficient use of skills demonstration and use of speaker panels can be done efficiently			
Small-group discussion	Opportunity to discuss issues, skills, and concerns	No opportunity for practice and feedback		
		Faculty time intensive		
Small-group, peer role-play	Opportunity to discuss issues, skills and concerns	Variable ability of learners to portray		
	Skills practice with feedback	patients		
	Insight into patient perspective	Faculty time intensive		
Small-group standardized patient role-play	Multiple scenarios show range of approaches and patient	Peer performance anxiety		
	responses Skills practice with feedback from faculty, peers, and	Standardized patients and faculty time intensive		
	standardized patients More realistic than peer role-play	Less realistic than one-to-one standardized		
	More realistic than peer role-play	patient encounter		
One-to-one standardized patient encounters	Skills practice with feedback from standardized patients or faculty More realistic than group encounters	No group discussion No exposure to different approaches and patient responses Faculty or standardized patient intensive		
Teachable moments in clinical settings	Actual context of patient care	Clinical time restraints		
	Observation, demonstration, and feedback	Patient privacy		

Table 1: Advantages and disadvantages of strategies for teaching communication of had nows for students and

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Table 2: Characteristics of trails   Authors Country Randomized N Subjects Intervention Evaluation									Р
Authors	Country	Randomized	N	Subjects	Intervention				
Colletti <i>et al.</i> 2001 <sup>[20]</sup>	United states	no	38	Medical students	Test: PS/SR Control: No	1-2 hours -	Analysis of content/skills in an interview with patient (s) sham (s)	Differences in Scores of content/ competencies favoring group test	<0,05
Amiel <i>,et al</i> . 2006 <sup>[21]</sup>	lsrael	no	34	Medical trainee	Test: PS/SR Control: No	14 x 1,5hours ND		Differences in Scores of content/ competencies favoring Group Test	<0,01
Lienard	Belgium	yes	57	Medical special	Test: AT	1h + 2,5 days	Analysis of	Reducing anxiety pre	0,28
<i>et al,</i> 2006 <sup>[22]</sup>					WC PT	$+ 6 \times 3h$	content/skills	and post interview	
					Control: AT PT	1h + 2,5 days	in an interview with patient (s) sham (s)	similar in the 2 groups	
Alexander <i>et al.</i> 2006 <sup>[23]</sup>	United states	no	56	Medical trainee	Test: AT GD PS/SR Control: No	2 days -	Analysis of content/skills in an interview with patient (s) sham (s)	Differences in Scores of content/ competencies favoring group test	0,04
Szmuilowicz <i>et al</i> , 2010 <sup>[24]</sup>	United states	yes	49	Medical trainee	Test: AT GD PS/SR Control: No	1 day -	Analysis of content/skills in an interview with patient (s) sham (s)	Differences in Scores of content/ competencies favoring test group 2, no significant	0,07
Daetwyler <i>et al</i> . 2010 <sup>[25]</sup>	United states	yes	52	Medical students	Test 1: Test 2 e-learning: e-learning PS/FB Control: No	ND ND	Analysis of content/skills in an interview with patient (s) sham (s)	Differences in Scores of content/ competencies favoring test group 2, no significant	0,053
Lienard <i>et</i> <i>al</i> . 2010 <sup>[26]</sup>	Belgium	yes	113	Medical trainee	Test: AT GD PS/SR Control: No	40 hours	Analysis of content/skills in an interview with patient (s) sham (s)	Differences in Scores of content/ competencies favoring group test	*

ND: Information not available, Subjects: Medical trinee (residents and fellows), Med . Special: Doctors specialists in professional activity. Interventions: AT: theoretical classes; GD: Groups discussion, PS / FB: Meeting with simulated patients and feedback / guidance, EN: "Basic Training Program"; WC: "Consolidation Workshops", e-learning training module by internet; \* content/competencies were evaluated separately, and were significant (P < 0.05) mostly

The methods of training conducted and the content, duration, and extension were considerably different in each study. Furthermore, in two studies,<sup>[21,22]</sup> the control groups were also interventional. One study<sup>[25]</sup> used Internet communication for training and assessment from a distance.

The questionnaires or scoring systems used to evaluate the performance of each research subject were unique to each study, constructed on different guidelines for reporting bad news based on existing and/or previous experience in each research group. Only in one study,<sup>[22]</sup> the outcome assessed was related to patient interviews (State Trait Anxiety Inventory before and after a consultation.

Concerning the aspect of evaluation, different strategies were used. In three studies,<sup>[20,21,25]</sup> simulated patients were responsible for filling out questionnaires evaluating content and skills of the interviewer. In two studies,<sup>[23,24]</sup> this task fell upon two external evaluators, and in another,<sup>[26]</sup> a software content analysis of the transcripts was used, powered by dictionaries built specifically for this purpose.

In all studies, the assessors were blinded as to the group each subject belonged to.

Four of the seven studies showed significant differences favoring groups that conducted the training (or had more extensive training in cases of interventional studies with controls). When only the randomized studies are considered, only one of four studies<sup>[26]</sup> revealed outcomes that favored the trained group. However, in two of them,<sup>[24,25]</sup> it was found that the test group showed a better performance close to statistical significance.

#### DISCUSSION

From the formulation and publication of guidelines for the communicating of bad news, various forms of training for this task became part of the curricula of various undergraduate courses in medicine, residency training, and continuing medical education. The training strategies are varied and often resource- and time-intensive for educators;<sup>[17]</sup> there are many models for teaching skills for delivering bad news, and

the choice depends on resources available in terms of faculty, Standerdized patients, and curricular time. The availability of new technologies based on the Internet can reduce cost and increase the applicability of these training programs.<sup>[25]</sup>

Although previous studies have shown that such training programs provided satisfaction to students and participating physicians and enhanced their confidence to communicate bad news,<sup>[27-29]</sup> this review shows that few studies were adequately designed to evaluate the effectiveness of these training programs.

Of the seven controlled trials, four groups showed willingness to undergo training. In two randomized trials, there was a nonsignificant trend in favor of the intervention group. As in the previous studies there was no formal calculation of sample size, it is possible that they did not have sufficient power to detect differences. variation in training methods and evaluation groups between studies also limits the analysis of data. Another limitation of existing studies is that analyzing the outcomes after the completion of training does not permit evaluation of the ability of physicians to retain the learning of long-term skills. Similar limitations occur when investigating the evidence on the effectiveness of general medical training in communication, as evidenced by systematic reviews.<sup>[30]</sup>

Although the focus of the guidelines for communicating bad news is ultimately to reduce anxiety and improve understanding and patient adherence,<sup>[24]</sup> all trials assessed here, with one exception-and most trials were not controlledhad as the main outcome, changes in behavior of medical students. The only randomized controlled trial that evaluated the reduction in anxiety score of the patients failed to show benefits of training.<sup>[21]</sup> The scarcity of trials evaluating outcomes related to patients is most likely related to the difficulties in planning and executing such trials.

# CONCLUSION

This review shows that there is concern about the quality of communication of bad news to the patient, but could not conclude unequivocally that training of medical students and resident physicians can be beneficial for them to acquire the skills deemed necessary.

Finally, one must consider that there are differences in the forms of verbal and nonverbal communication between different cultures and, therefore, conducting controlled studies at local, national, and international levels is highly encouraged.

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Source of Support: Nil, Conflict of Interest: None declared