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Recipients' perspective on breaking bad news: How you put it really makes a difference

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Abstract

Objective: The goal of this study was to show that physician communication style of breaking bad news affects how the physician is perceived, how satisfied recipients of bad news are with the consultation, and how they feel after the consultation.
Method: Female participants (students, $N = 159$) were asked to put themselves in the shoes of a patient receiving the bad news of a breast cancer diagnosis. Participants were randomly assigned to watch one of three prototypical physician communication styles of breaking bad news on videotape: patient-, disease-, or emotion-centered communication.
Results: Results showed that these three prototypical communication styles were perceived very differently and they determined how satisfied participants were with the consultation and how they felt after the consultation. Participants exposed to the patient-centered communication perceived the physician as most emotional, least dominant, most appropriate when it comes to conveying information, most available and most expressive of hope. Also, they reported to be most satisfied with the visit and they showed the least increase in negative emotions.
Conclusion: A patient-centered communication style has the most positive outcome for recipients of bad news on a cognitive, evaluative, and emotional level.
Practice implications: Results of this study provide guidelines to physicians on how to convey bad news.

Keywords: Breaking bad news; Physician–patient communication; Patient-centered communication; Breast cancer

1. Introduction

Breaking bad news to patients is part of physicians' clinical practice. Oncologists in particular are frequently the bearer of bad news for their patients. By and large, physicians agree upon the best practice of breaking bad news [1,2], a patient-centered communication style, characterized by dosing and timing the information provided according to the patients' needs, and by encouraging the patients to talk about their feelings and concerns [3–8]. Clinical practice, however, is often characterized by a lack of patient-centeredness in the physician communication of bad news [4,5,9] and physicians admit that they lack the necessary skills [10,11]. Obviously, there is a great need to train physicians in breaking bad news according to the patient-centered communication style. However, training efforts only pay off, if patients indeed profit from such a patient-centered interaction style when receiving bad news. As a consequence, instead of focusing on what physicians think their patients want, the patients' perspective should move to the forefront of research attention. The limited existing research applying a patient's perspective has almost exclusively focused on what kind of information patients want to receive [12] rather than on how patients want this information to be conveyed. Moreover, research addressing how patients want to receive the bad news is either non-empirical [13,14] or focuses on one aspect of patient outcome only (e.g., patient satisfaction) [15].

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Some studies have assessed how patients perceive their physician's communication style of breaking bad news and how it affects them in terms of satisfaction, quality of life, and well-being, to mention a few. For instance, breast cancer patients' assessment of the quality of the information provided by their physician when breaking the bad news was related to patients' subsequent well-being [16]. And, patients with skin cancer, who perceived the physician as emotional and partnership-oriented when breaking the bad news indicated higher satisfaction with the consultation and subsequently suffered less from depression and anxiety [17]. In these studies, however, the assessment of the physician communication style stems from patients' memory and can therefore be affected by distortion of memory as well as by factors, such as their actual health status, prognosis of survival, success of treatment, or coping strategies among others. To understand the effects of the physician communication style on patients, it is essential to objectively know how the physician communicated as well as to have patients' reports on how they perceived the physician's communication immediately after having received the bad news.

Physicians differ in how they deliver information and Brewin [18] describes three prototypical ways of breaking bad news. The first prototype is based on the reasoning that receiving bad news is such a negative and painful experience for the patient that the way the physician conveys the message does not matter at all. This prototype is labeled ''blunt and insensitive'' and is characterized by providing information without involving the patient. In the present article, this style is named ''disease-centered''. The second prototype is labeled ''kind and sad''. The physician insists on the sadness of the message and demonstrates an excess of empathy and sympathy. The physician avoids raising false hopes. We use the term ''emotion-centered'' to refer to this type of communication in the present article. The third prototype is labeled ''understanding and positive''. The physician conveys the information according to the patient's needs, checks for understanding of provided information, and shows empathy. This style is what we call ''patient-centered'' and it is the recommended communication style for breaking bad news [3–5,9]. But is it better than the disease- and emotion-centered communication style? To deserve to be called ''better'', the physician adopting a patient-centered communication style ought to be perceived as emotional (e.g., friendly, supportive), non-dominant (e.g., not assertive, not intimidating), providing appropriate information, available (e.g., not rushed in time), and conveying hope. And, patients ought to be more satisfied with the consultation. Moreover, patients ought to feel more positively (or less negatively) when confronted with the patient-centered communication of bad news.

The goal of the present research was to test how different physician communication styles of breaking bad news are perceived and how these communication styles affect satisfaction with the consultation and how recipients feel after the consultation.

2. Method

2.1. Participants

Participants were 159 female students from the University of Zurich majoring in different areas (age $M = 25.4$, range: 18–48). Participants were recruited in classes and were not remunerated for their participation.

2.2. Procedure

Participants were tested in groups of 2–23. Discussion among participants was prevented. They were randomly assigned to watch one of three video clips each featuring a physician breaking the bad news of a breast cancer diagnosis to a female patient. For each group session, which of the three video clips participants would watch was randomly determined in advance. The clips differed in the physician communication style (patient-centered: $N = 52$, disease-centered: $N = 50$, and emotion-centered: $N = 57$, described in more detail below). Upon arrival, participants were asked to fill in a questionnaire about their actual mood state (profile of mood states, POMS, described in more detail below). They were then instructed to put themselves in the shoes of the female patient in the video clip. After watching the entire consultation (varying between 8 and 11 min), participants completed the same mood state measure again together with other questionnaires assessing the participants' perception of the physician and how satisfied they would have been with the consultation as a patient. We used students imagining themselves in the role of a patient as participants instead of ''real'' patients who were diagnosed with breast cancer for two reasons. First, there are ethical considerations in that watching a physician conveying the same bad news one has received at an earlier point in time might bring back unpleasant memories to the patients. Second, there are methodological concerns because eliciting personal memories of a very similar event most likely affects how the physician in the video clip is perceived. Patients might respond to their memories of the consultation when they actually received the bad news rather to what is in the video clip.

2.3. Material

2.3.1. Video clips

We used three stimulus video clips of a physician–patient interaction of breaking bad news varying in physician communication style (patient-, disease-, and emotion-centered). Each video clip featured a male physician breaking the bad news of a breast cancer diagnosis to a female patient with subsequent talk about treatment steps including mastectomy and chemotherapy. The physician was a real physician who role-played different communication styles, and the patient was a trained actor. The same

female patient actor and the same male physician played all three versions.

The roles the physician played can be described as follows. Adopting a patient-centered communication style means to provide medical information and emotional support according to the patient's needs. Adopting a disease-centered communication aims at the informed patient wherein the amount of information given follows the physician's assumptions not the patient's needs. Furthermore, there is little emotional support. Emotion-centered communication follows the rule that bad news necessarily involves sadness and anxiety, which have to be dealt with primordially even at the expense of the exchange of information.

To control whether the three versions really differed in the intended way, we coded the physician's communication in all three video clips with the Roter method of interaction process analysis (RIAS) [19]. Some of the codes were collapsed to create larger categories: expression of positive affect (approve, agree, empathy, and concern), reassurance, partnership behavior (asking for understanding and opinion, checking understanding), giving instructions, providing medical information (medical and therapeutic information). For each RIAS category, the reliability ranged between $r = .85$ and .98, based on two trained coders. Table 1 shows that the amount of medical information provided by the physician was identical in all three videos. However, they differed in how the information was conveyed. The patient-centered communication style was characterized by partnership behavior (e.g., ''shall we talk about the next steps in treatment?''), reassurance (e.g., ''we can treat this type of cancer, and your chances of being cured are good''), and expressing positive affect (e.g., ''I can understand that this is difficult for you''). The disease-centered communication style was characterized by giving instructions (e.g., ''you should have the operation soon and I will make arrangements for you on Monday''), lack of partnership statements, and lack of expression of positive affect. The emotion-centered communication style was characterized by expression of positive affect (e.g., ''I now have very, very sad news to share with you''). All in all, this manipulation check confirmed that the physician actor implemented the three roles so that measurable behavioral differences emerged. The patient actor was instructed to react to the physician's communication as she would as a patient receiving the bad news of having breast cancer.

2.3.2. Profile of mood states

We used the German version of the POMS [20] that measures four mood dimensions: depression/dejection (14 items), vigor/activity (7 items), tension/anger (7 items), and fatigue/inertia (7 items). Participants are asked how much they experience a specific mood on a scale from 1 (not at all) to 5 (very much). Sample items for depression/dejection are sad, depressed, and discouraged. Sample items for vigor/activity are lively, active, and happy. Sample items for tension/anger are tense, irritable, and angry. Sample items for fatigue/inertia are exhausted, tired, and dull. Item scores for each dimension were averaged. Higher values indicate feeling more depressed, more active, tenser, and more tired, respectively. Participants filled in the POMS twice, once before watching the consultation and once after having watched the consultation. Reliabilities (Cronbach's alphas) were—for depression/dejection: .89 and .93; for vigor/activity: .86 and .89; for tension/anger: .84 and .90; for fatigue/inertia: .86 and .87 (before and after watching the consultation, respectively). Means and standard deviations are: depression/dejection, $M = 1.46$, S.D. = 0.47, $M = 2.12$, S.D. = 0.76; vigor/activity, $M = 3.02$, S.D. = 0.65, $M = 2.13$, S.D. = 0.79; tension/anger, $M = 1.51$, S.D. = 0.51, $M = 1.97$, S.D. = 0.86; fatigue/inertia, $M = 2.20$, S.D. = 0.67, $M = 2.09$, S.D. = 0.73 (before and after watching the consultation, respectively).

2.3.3. Perceived physician emotionality

Physician emotionality is understood as a communication style in which the physician expresses his/her own emotions by being supportive and empathic and explores how the patient feels about the disease. We assessed perceived physician emotionality with seven items (friendly, interested, respectful, attentive, empathic, nice) on a scale from 0 (not at all) to 9 (very much). Item scores were averaged ($M = 4.56$, S.D. = 2.20) and resulted in a reliable perceived physician emotionality measure (Cronbach's alpha = .95). Higher values indicate more perceived physician emotionality.

2.3.4. Perceived physician dominance

Physician dominance is understood as a communication style in which the physician clearly marks that he/she is the expert and treats the patient in a directive and condescending way. We assessed perceived physician dominance with four items (dominant, assertive, controlling, and intimidating) on

Table 1
Difference in physician communication behavior according to the three prototypical physician communication styles

Physician communication behavior	Physician communication style		
	Patient-centered	Disease-centered	Emotion-centered
Providing medical information	38	42	40
Partnership behavior	8	1	4
Reassurance	9	5	2
Expression of positive affect	25	10	33
Giving instructions	1	10	5

Note: Entries are frequencies of RIAS categories.

a scale from 0 (not at all) to 9 (very much). Item scores were averaged ($M = 4.05$, S.D. = 2.05) and resulted in a reliable perceived physician dominance measure (Cronbach's alpha = .78). Higher values indicate more perceived physician dominance.

2.3.5. Perceived appropriateness of providing information

To assess how appropriate participants perceived the physician's information giving, we created a measure with five items (one reversed scored). Sample items are "the physician provided the right amount of information to the patient" or "the physician explained the necessary treatment clearly." Participants indicated how much they agreed with each of the items on a scale from 0 (not at all) to 5 (very much). Item scores were averaged ($M = 2.00$, S.D. = 1.26) and resulted in a reliable perceived appropriateness of providing information measure (Cronbach's alpha = .87). Higher values indicate perceiving the physician's information provision as more appropriate.

2.3.6. Perceived availability of physician

To assess how available the physician was in the eyes of the participants, we created a measure with eight items (two reversed scored). Sample items are "the physician conveyed having enough time for the patient" or "the physician did not leave time for the patient to absorb the news" (reversed scored). Participants indicated how much they agreed with each of the items on a scale from 0 (not at all) to 5 (very much). Item scores were averaged ($M = 3.01$, S.D. = 1.38) and resulted in a reliable perceived availability of physician measure (Cronbach's alpha = .92). Higher values indicate perceiving the physician as more available.

2.3.7. Perceived physician's expression of hope

We created a measure to capture how much participants perceived that the physician expressed hope to the patient. Participants indicated how much they agreed with each of three items (two reversed scored) on a scale from 0 (not at all) to 5 (very much). Sample items are "the physician conveyed hope despite the bad news" or "the physician did not have much hope that the patient could get well" (reversed scored). Item scores were averaged ($M = 3.21$, S.D. = 1.16) and resulted in a reliable perceived physician's expression of hope measure (Cronbach's alpha = .71). Higher values indicate perceiving that the physician expressed more hope.

2.3.8. Patient satisfaction

Patient satisfaction was measured with a questionnaire encompassing 36 items (17 items were reversed scored). Items were based on existing measures of patient satisfaction [21]. Items were statements, such as, for instance, "I would recommend this physician to others," "I am satisfied with this physician," or "this physician did not understand me" (reversed scored). Participants indicated how much they agreed with each statement on a scale from 0 (not at all) to 5 (very much). Item scores were averaged ($M = 2.14$, S.D. = 1.15) and resulted in a reliable patient satisfaction measure (Cronbach's alpha = .98). Higher values indicate more satisfaction.

2.3.9. Control variables

We also assessed participants' age, health status (on a scale from 1 = very bad to 5 = very good), experience with life-threatening illness in oneself or in close others (0 = no experience, 1 = experience), frequency of physician visits during the past year, and self-reported experience with physicians (on a scale from 0 = not much experience to 5 = much experience). Additionally, we measured participants' reports of how well they could identify with the female patient in the video clip on a scale from 0 (not at all) to 5 (very much).

3. Results

For each dependent variable, we calculated an ANOVA with physician communication style (three levels) as a between factor. We repeated all analyses with participant age, health status, experience with life-threatening illness in oneself or in close others, frequency of physician visits during the past year, and self-reported experience with physicians as control variables to see whether they affected any of the results. Because this was not the case, we do not discuss these variables further. Significance testing of the differences between the means was performed by using Bonferroni post hoc tests.

It was important to ensure that the three versions of the consultation did not differ in how well the participants were able to identify with the patient. Results confirmed that regardless of physician communication style, there was no difference in ability to identify with the patient, $F(2, 156) = 1.75$, $p = .178$.

3.1. Effects of physician communication style on perception of physician

Participants' perception of the physician differed according to the physician communication style. As can be seen in Table 2, the patient-centered physician was perceived as most emotional, less dominant than the disease-centered physician, providing the most appropriate information, most available, and more expressing of hope than the emotion-centered physician. The disease-centered physician was perceived as less emotional than the patient-centered physician, most dominant, and least available. However, he conveyed the same amount of hope as the patient-centered physician. Although he was perceived as providing less appropriate information than the patient-centered physician, he still provided more appropriate information than the emotion-centered physician. The emotion-centered

Table 2
Means of perceived physician characteristics for each of the three prototypical physician communication styles

Perceived physician characteristics	Physician communication style			
	Patient-centered (*M*)	Disease-centered (*M*)	Emotion-centered (*M*)	*F*(2, 156)
Emotionality	6.08ab	3.46a	4.13b	26.10****
Dominance	2.73a	6.09ab	3.48b	67.18****
Appropriateness of information provision	2.63ab	2.03ac	1.41bc	15.27****
Availability	3.95ab	1.48ac	3.50bc	110.28****
Expression of hope	3.71a	3.67b	2.36ab	34.30****

Note: For each variable, statistically significant differences among two means are indicated by the same letters (a–c).
**** $p < .0001$.

physician was perceived as least expressive of hope and as least appropriate in information giving. For perceived emotionality, dominance, and availability, his scores were in between the other two.

3.2. Effects of physician communication style on satisfaction

Participant satisfaction was highest for the patient-centered physician ($M = 2.96$) and equally low for the disease-centered ($M = 1.74$) and the emotion-centered ($M = 1.73$) physician, $F(2, 156) = 26.16$, $p < .0001$.

3.3. Effects of physician communication style on emotions

Because we assessed the participants' mood before and after watching the consultation, we calculated mixed-model ANOVAs with physician communication style (three levels) before and after watching the consultation (two levels) as independent variables (the former as between-subjects and the latter as within-subjects factor) for each mood dimension of the POMS separately. To see whether physician communication style affected participants' mood differently, we were looking for significant interaction effects between communication style and time of assessment (before and after). Results showed that for vigor/activity and for fatigue/inertia, there were no significant effects (all main and interaction effects: $p > .31$). However, for tension/anger we found a significant communication style main effect, $F(2, 156) = 6.91$, $p = .001$, and, more importantly, a significant interaction effect, $F(2, 156) = 6.63$, $p = .002$. Fig. 1 shows that witnessing the patient-centered physician did not increase the participants' feelings of tension and anger (before: $M = 1.45$, after: $M = 1.58$; simple main effects: $t(51) = 1.27$, $p = .212$) whereas watching the disease- or emotion-centered physician significantly increased the participants; feelings of tension and anger (before: $M = 1.53$, after: $M = 2.24$, simple main effects: $t(49) = 5.80$, $p < .0001$; before: $M = 1.54$, after: $M = 2.09$, simple main effects: $t(56) = 4.69$, $p < .0001$; disease- and emotion-centered physician, respectively). Moreover, there was a non-significant trend regarding the interaction effect for depression/dejection, $F(2, 156) = 2.45$, $p = .09$, again indicating that participants who watched the patient-centered physician did not increase as much in their feelings of depression and dejection (before: $M = 1.43$, after: $M = 1.91$) as did participants who watched the disease- or the emotion-centered physician (before: $M = 1.48$, after: $M = 2.27$; before: $M = 1.48$, after: $M = 2.19$; disease- and emotion-centered physician, respectively).

4. Discussion and conclusion

4.1. Discussion

The present research aimed to test whether different types of physician communication in breaking bad news evoke different perceptions, different degrees of satisfaction, and different emotional states. Results showed that three prototypical ways of breaking bad news (patient-, disease-, and emotion-centered) led to clearly distinguishable reactions in the recipients. A patient-centered communication style of breaking bad news resulted in more positive outcomes in comparison with a disease- or emotion-centered communication style. In the patient-centered version, the physician was perceived as most emotional, least dominant, most

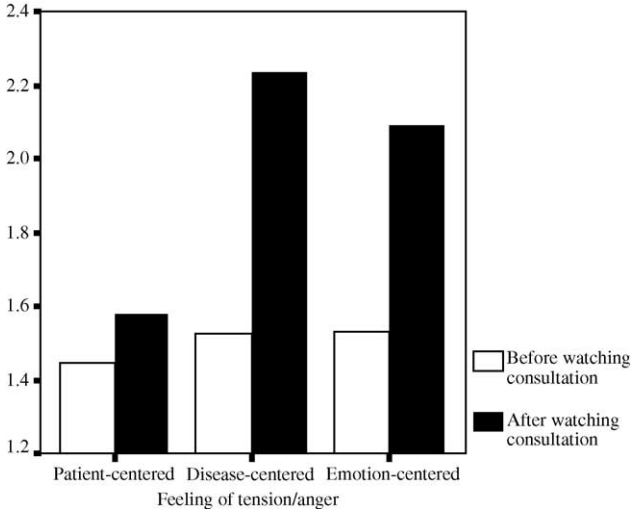

Fig. 1. Increase in feelings of tension/anger after watching the consultation separated by physician communication style.

appropriate in his ability to convey information, most available and most expressive of hope. Moreover, the different communication styles also determined how satisfied participants were with the consultation and how they felt after the consultation. A patient-centered communication of breaking bad news yielded the highest satisfaction scores, confirming existing findings in the literature [8,22]. Furthermore, the increase in tension/anger and depression/dejection (the latter non-significantly so) after watching the video was lowest in students who saw the patient-centered physician. These results corroborate the recommendations of physicians on how to break bad news. This is encouraging because we know that better communication skills can be taught [23–25].

Although the disease-centered communication style of breaking bad news was perceived and evaluated rather negatively in the present study, it is noteworthy that one major goal in communicating about a diagnosis of cancer was accomplished by the disease- and the patient-centered physician to a similar degree: the creation of hope in the recipient of the cancer diagnosis. This is to some extent contrary to the position of many researchers who strongly and almost exclusively recommend a patient-centered communication style because they assume that this is the best way to convey hope [26,27]. However, it supports the results from Wright et al. [28] who stressed the importance of the doctor's competence as opposed to communication skills for the patients' ability to build up trust.

It is intriguing that participants perceived the emotion-centered communication of bad news as the least appropriate style of information provision and as least expressive of hope. The latter is not so surprising because one of the characteristics of this style is the avoidance of raising false hopes [18], which probably translates into avoiding raising any hopes.

This research approaches an important aspect of research in giving bad news by not relying on experts' opinion only. However, the study is hampered by the fact that the recipients of bad news were not real patients but students, and that as a consequence we were unable to measure outcome variables like survival, compliance, quality of life, etc. The most stringent study on how to best break bad news would randomize real patients to three or more ways of receiving bad news and comparing their perception of the consultation. However, as the experts' consensus and the results from patient questionnaires speak strongly against a more disease-oriented communication such a study has to be rejected for ethical reasons. It is, nevertheless, important that real cancer patients are included in future research to broaden our understanding of optimal physician–patient communication from a patient's perspective. As an example, patients could view the video clips with all three prototypical communication styles and rate how close to each of the three styles the communication style they experienced (when they themselves received the bad news) was and how much they would have liked each of the three styles to have happened to them. The same set of dependent variables as in the present study could be included. Such research would make it possible to compare the present findings with the ones from real cancer patients and to control (up to a certain degree, at least) for the subjective experience of the cancer patients.

Another limitation of the present research is that the target audience of young women does not adequately represent the average age of most breast cancer patients. On the one hand, this limits the generalizability of the findings to women with breast cancer. On the other hand, one could argue that we found strong effects despite the fact that these targets might have been affected much less by witnessing a breast cancer diagnosis than older women or real breast cancer patients. We would expect to see even stronger effects with women in the appropriate age range or real breast cancer patients.

It would be interesting to see whether the pattern of results would replicate with male participants. Congruent with the male gender role [29], men might, as an example, be more satisfied with the disease-centered communication than were women. There are many other possible gender differences that future research could address.

The present research took existing research on breaking bad news a step further by also investigating the effects of the communication style on participants' feelings. Although the level of activation or tiredness was not affected, both the disease- and the emotion-centered communication resulted in a comparatively more pronounced increase of negative feelings, such as tension/anger and depression/dejection when compared to the patient-centered communication. This aspect is important because negative feelings have been found to be associated with many negative health outcomes [30].

Although this research assessed participants' perceptions, evaluations, and feelings and did not measure patient outcomes, the variables assessed are considered important for patient outcomes. For instance, hope is an important factor in the healing process [31,32] and patient satisfaction has been linked to positive health effects [33] and to patients' willingness to adhere to treatment plans [34]. Also, most cancer patients want to be fully informed about their disease, treatment options, and chances of survival [35]. However, information is not always provided in a way patients understand it. For instance, in women with breast cancer, research shows that much of the information content is not remembered correctly by patients [36]. The results of this study showed that a patient-centered communication style resulted in most appropriate information provision. Indeed, a patient-centered communication style has been linked to better information recall [37].

Our results showed that the presentation of physician–patient interactions on videotape offers a means to elicit differential responses to different ways of breaking bad news even in a population of individuals who do not suffer from

cancer themselves. In their view, a patient-centered approach to breaking bad news is most advantageous compared to a disease- or emotion-centered communication. It resulted in more positive outcomes on a cognitive (more perceived hope, appropriateness of information provision, physician availability, physician emotionality, and physician non-dominance), evaluative (more satisfaction with visit), and emotional level (less increase in tension/anger and depression/dejection). Given the strong effects we found, we recommend that future research addresses all three levels in real cancer patients including long-term effects, such as, for instance, survival, health status, and satisfaction with life.

4.2. Conclusion

How the bad news is put really makes a difference in the recipients on a perceptual, evaluative, and emotional level. Recipients of bad news are most favorably affected by a patient-centered communication style as compared to a disease- or emotion-centered style.

4.3. Practice implications

Results from this study can be used to refine existing guidelines on how to train physicians in breaking bad news because the results provide a more fine-grained picture of how different physician communication styles affect different aspects of the recipients. Based on our results, it seems, for instance, wise to avoid a very emotional communication when conveying bad news because it not only produces the least amount of hope in the recipients, it also hinders appropriate information exchange. It has to be kept in mind, however, that our results stem from an experimental study and that therefore, the transfer to the ''real'' world requires additional studies in which our results can be put to test in a more applied setting.

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