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Explaining the unexplainable – the impact of physicians' attitude towards litigation on their incident disclosure behaviour

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Abstract

Rationale, aims and objectives This study aims to provide in-depth insight into the emotions and thoughts of physicians towards malpractice litigation, and how these relate to their incident disclosure behaviour.
Methods Thirty-one Dutch physicians were interviewed and completed short questionnaires regarding malpractice litigation. We used hierarchical cluster analysis to identify physician clusters. Additional qualitative data were analysed.
Results Physicians vary largely in their attitude towards malpractice litigation, and their attitude is not straightforward related to their disclosure behaviour. Based on their responses physicians could be divided into two clusters: one with a positive and one with a negative attitude. Physicians with a *negative* attitude showed often, but also 6 out of 15 not, a reluctance to disclose, whereas the majority in the *positive* attitude cluster (12 out of 16) showed no reluctance. If, what and how physicians disclose incidents depends on a complex interplay of their emotions and thoughts regarding litigation, and not only on their fear of litigation as many studies assume.
Conclusions Due to the variation among physicians in their litigation attitude and behaviour in terms of incident disclosure the oft-heard call for 'openness' about medical incidents will not be easy to achieve. A coaching system in which physicians can share and discuss their differing attitudes and disclosure principles, teaching medical students and junior physicians about disclosure, and explaining how to organize emotional and legal support for oneself in case of litigation could decrease stress feelings and support open disclosure behaviour.

Introduction

The disclosure of medical incidents to patients can be seen as a way of acknowledging human dignity and respecting patients' rights and therefore as an ethical and legal obligation for all health care workers [1]. When an incident occurs, patients expect health care workers to disclose them [2] in a patient-centred, respectful and responsive dialogue [3]. Physicians sometimes hesitate to disclose incidents to patients [4]. Physicians' barriers to disclosure have been studied [5], and an important barrier is the fear of malpractice litigation and the possible legal consequences thereof [6]. However, current research indicates that disclosing medical incidents to patients actually reduces the likelihood of physicians being sued [7,8]. To understand this paradox we need to know how physicians experience the risk of malpractice litigation in their daily work and how this relates to their incident disclosure behaviour. This study aims to contribute to this understanding. We investigate physicians' emotions and thoughts regarding malpractice litigation and see how these relate to disclosure behaviour. To the best of our knowledge, this issue has not been investigated in depth.

In the medical context, the term 'incident disclosure' refers to informing a patient about an unanticipated outcome and offering an explanation for it [4]. If an incident occurs, disclosure is an important aspect of the coping process for both patient and physician [4]. Patients want to know what has happened [3] and disclosure provides them with information needed to take informed decisions about follow-up treatment [9] and to deal with the emotional trauma [10]. Disclosing an incident is important to the physicians involved as they are the 'second victims' of an incident [11]. Incidents can evoke feelings of failure and even a desire to give up medicine. Further, disclosure can be considered as an important aspect of strengthening the doctor–patient relationship [6].

A perceived risk of malpractice litigation is seen as one of the most important barriers to disclosure [6,12]. Studies tend to assume that litigation risk only leads to emotions such as fear and anxiety, but give little attention to the relationship between litigation risk and disclosure behaviour. Some researchers report that if health care providers perceive legal protection from disclosure laws as inadequate [13] or if they are uncertain as to the cover provided by their liability insurance [5], they may choose not to disclose all the information requested by their patients. One study does note that if physicians believe disclosure makes patients less likely to sue then they are more likely to strongly endorse disclosure [14].

In this study, we want to extend knowledge on the relationship between attitude and disclosure behaviour. Research shows that perceived risk is influenced by attitude [15,16]. Our working hypothesis was that, besides fear, also thoughts about the possible consequences of litigation and additional emotions such as worry, anger and stress regarding malpractice litigation would affect physicians' behaviour in disclosing medical incidents. More specifically, we want to investigate if physicians vary in their attitudes towards malpractice litigation and, if so, is this related to their disclosure behaviour. This knowledge would be useful to hospital managers and politicians in defining and implementing disclosure policies that can affect physicians' behaviour and the information that patients receive.

Theoretical background

The disclosure of an incident occurs in the relationship and communication between physician and patient. To increase our understanding of the disclosure of information within this encounter we refer to communication privacy management (CPM) theory [17,18]. CPM theory is relationship centred and has been especially developed in order to understand the process of concealing and disclosing 'private' information. According to Petronio [18], people view private information as something that belongs to them. Then, because people believe they own this information, they feel they have the right to control it. They control the information through 'privacy rules'. These are principles of disclosure behaviour about how and to whom certain information is shared with others beyond their own privacy boundaries. These principles are based on cultural values [19], gender, motivation [18], situational criteria and risk–benefit calculations. People want to control the flow of private information beyond their boundaries because there are risks in disclosing it to others. They apply risk–benefit calculations in deciding on the disclosure of information to others. A person who receives disclosed information becomes its co-owner. The original owner and the new co-owner then have collective private boundaries [20].

Health care researchers have shown the usefulness of CPM theory to explore communication between patients and health care providers [21,22]. Drawing on this CPM theory as expounded by Petronio, we would expect physicians not only to disclose incidents to their patients but also to make a risk–benefit calculation regarding the disclosure. Malpractice litigation, as a possible consequence of disclosure, evokes emotions in a physician. We would expect strongly negative emotions towards malpractice litigation to reduce a physician's intrinsic motivation to disclose, and this to lead to a reluctance to disclose incidents. According to Petronio [23], 'emotions may serve as a mediating factor in the kind of privacy rules used in certain situations'. Although emotions are recognized within CPM theory, their role has been little studied.

Methods

Data collection

Originally, the boards of directors of 12 hospitals were asked if we could approach their physicians to take part in this study. Hospitals were purposely selected to ensure a mix of academic and general hospitals, urban as well as peripheral hospitals, and geographically spread across the Netherlands. Three hospitals declined and declared either that they found the subject too sensitive or that their staff were too busy. One hospital did not respond. Eight hospitals agreed to participate and after approval from the heads of medical staff, either the heads of medical staff, the head of the quality department or the board of directors approached the identified potential participants to see if they were willing to be interviewed. We conducted interviews with physicians from five different disciplines, that is, anaesthesiology, gynaecology, surgery, internal medicine and neurology. The Dutch Law on Medical Research Involving Human Subjects (WMO) did not require us to seek ethical approval as the research did not contribute to clinical medical knowledge and no participation of patients or use of patients' data was involved.

Participants were selected to ensure a broad range in terms of gender, medical experience, specialization, experience with litigation and having a specific task related to patient safety. Participation was voluntary and participants were informed in advance of the topic of the interview. Fifty-four physicians were asked if they were willing to be interviewed and 32 accepted the invitation. Seventeen declined and five did not respond despite several calls. One interview was cancelled because the physician required remuneration for the interview time. The characteristics of the 31 physicians that were interviewed are shown in Table 1. The specializations and work places for each physician are included in the Appendix.

Table 1 Social and work characteristics of the physicians interviewed (*n* = 31)

Characteristics	Category	*N*
Gender	Male	21
	Female	10
Years of experience	Less than 11	9
	11–20	13
	More than 20	9
Specialization	Anaesthesiology	7
	Gynaecology	7
	Surgery	4
	Internal medicine	7
	Neurology	6
Disciplinary litigation experience	Yes	18
	No	13
Special patient safety task	Yes	12
	No	19
Hospital type	General hospital	24
	Academic hospital	7

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The three researchers have a professional background in economics and business, particularly in health care management. They based their work on the impact of malpractice litigation risk on physicians' behaviour regarding patient safety [24]. The in-depth interviews were conducted by one of the researchers (ER) within the period from March to December 2011. The interviewer followed a specific training course in scientific interview techniques. The interviews followed a structured interview guide (available from the authors), which had previously been checked by a physician and then used in two test interviews with physicians. The interviews began by asking physicians about their knowledge of litigation, and the emotions and thoughts that litigation evokes. Following these open questions, the interviewees were invited to score 12 statements on a 4-point Likert scale (1 strongly disagree, 2 disagree, 3 agree, 4 strongly agree). Six of these items related to emotions and six to thoughts that could be evoked by litigation [25–27].

Subsequently, the physicians were asked about their disclosure behaviour, seeking their reasons for disclosing an incident or not, whether litigation plays a role in disclosure and whether they could give an example to illustrate this. The interviews, which lasted from 35 to 120 minutes with an average of 75 minutes, were recorded, transcribed and checked for accuracy by one of the researchers.

Data analysis

We analysed the quantitative attitude scores using hierarchical cluster analysis to trace differences in the attitudes of physicians towards malpractice litigation. First, outliers were detected using the single linkage method. Following this, Ward's method was used to determine the initial clustering of participants. Based on mean cluster calculations, the *K*-means were used to assign participants to the final clusters. The optimal cluster solution was determined by calculating the pseudo-f of the cluster solutions [28]. Mean variable scores were compared using an independent sample *t*-test.

Following this, the interview transcripts were analysed to identify thematic categories corresponding with the topics investigated. Other emergent themes were derived using an inductive approach. Here, the first three interviews were analysed using the grounded theory methods of Glaser and Strauss [29], from which additional thematic categories could be defined. These were then added to the transcript analysis of the subsequent interviews. The themes originally expected such as attitude and experience with malpractice litigation, incident disclosure behaviour and its possible relation with litigation were covered as well as new themes such as physician behaviour to reduce the likelihood of litigation and perceived irresponsible behaviour by patients. The first five interviews were coded by at least two researchers separately. After two iterative coding rounds an inter-rater reliability of 88% was reached, which was considered acceptable. The rest of the interviews were then coded by one researcher based on the agreed codes.

Results

Attitude towards malpractice litigation in relation to disclosure behaviour

The first step was to study whether physicians vary in their attitudes to malpractice litigation risk. The hierarchical cluster analysis based on thoughts and emotions towards the potential consequences of litigation revealed two distinct clusters of participants (see Table 2).

The two-cluster solution was validated using pair-wise independent *t*-tests to examine the differences in emotions and thoughts between the two clusters. The first cluster consists of 15 participants who strongly agree with the idea that litigation has personal consequences such as damaging reputation and harming self-confidence, and that it evokes emotions of worry, anger, stress, being personally attacked and fear. Those in this cluster seem to be relatively concerned by the risk of malpractice litigation and have negative thoughts regarding the litigation system: we label this the 'negative' cluster. The fear of malpractice litigation affects participants of this cluster as illustrated by the following quote:

> [What emotions do the potential personal consequences of an accusation evoke?] . . . if I am personally confronted, than it causes great fear. I become, well, then I think, yes, well I become horrified that I did something wrong. And then, well, that makes me very nervous. I immediately check if I did it well and if I have my files in order, and if I perhaps did not make a mistake. I am particularly looking at my own functioning. Yes. (Participant 15)

The second cluster consists of 16 participants whose mean scores are significantly lower on the negative emotions regarding litigation and higher for thinking that it improves quality and evokes a sense of justice. These participants seem to be relatively less bothered by litigation risk and positive thoughts dominate regarding the litigation system: we label this the 'positive' cluster. Members of this cluster claimed to be little affected by the risk of litigation in their attitudes and behaviour as described by one of the participants:

> You have to make a distinction between two things. Content-wise, purely technical, what is the complaint about – the

Table 2 Physicians' attitude towards the risk of malpractice litigation

	Negative cluster *n* = 15 (relatively more concerned and more negative thoughts)	Positive cluster *n* = 16 (relatively less bothered and more positive thoughts)
Emotions	Mean cluster scores	Mean cluster scores
Worry*	3.9	2.5
Anger*	2.9	1.8
Stress*	3.8	2.4
Personal attack*	3.5	2.0
Justice*	2.1	2.8
Fear*	3.3	2.2
Thoughts		
Improves quality*	1.8	2.8
Evokes suing	2.1	1.7
Is fair	2.4	2.6
Damages reputation	3.2	2.8
Harms self-confidence*	3.6	2.7
Harms health care	1.7	1.7

**P*-value < 0.05, scale 1–4.

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Table 3 Disclosure behaviour and principles for disclosure of the physicians interviewed (*n* = 31)

Cluster	Disclosure behaviour	Principles for disclosure
Negative (*n* = 15)	• No reluctance to disclose (*n* = 6)	• Disclosure can prevent patients from filing a complaint or starting a legal case • It is the patient's right to know about an incident • Physicians have the obligation to discuss an incident with the patient as part of the treatment
	• Reluctance to disclose (*n* = 9)	• Disclosure can lead to being blamed for an incident • The legal position of a physician in the event of an incident is unclear • Most of the time incidents are rather complications for which one is not responsible • Disclosure can upset the patient unnecessarily • Former experience with litigation can lead to less honest disclosure • Looking young with an assumed inexperience complicates disclosure
Positive (*n* = 16)	• No reluctance to disclose (*n* = 12)	• Disclosure can prevent patients from filing a complaint or starting a legal case • Litigation fear does not affect disclosure behaviour • Disclosure is part of the process of providing good care to patients • Complaining is normal and happens often • Litigation is part of how the accountability system works • Disclosure can prevent patients from getting wrong ideas about what happened
	• Reluctance to disclose (*n* = 4)	• The threat of a complaint can lead to trivializing an incident • There's no obligation to cooperate in one's own conviction • Disclosure can upset the patient unnecessarily

> medical content – is it valid or not in your eyes? And the emotion: given that a complaint is against you personally as a doctor, it evokes a certain emotion. This can vary between disbelief and anger, or evoke fear of possible measures. . . . What I have learnt is that you should always try to initially park this emotion and to focus on how to resolve the complaint, with the help of others, as professionally as possible. (Participant 29)

Subsequently, the disclosure behaviour of both groups was analysed. We looked for principles that physicians used regarding the disclosure of incidents, and how risk calculations, motivation or other factors influence the principle creation process (see Table 3). Nine participants (3, 4, 6, 7, 8, 11, 21, 30 and 31) of the negative cluster showed reluctance in their disclosure behaviour (see Table 3). Seven participants of this group (participants 3, 4, 6, 7, 8, 11 and 31) declared they would not disclose an incident if it had caused no harm.

They mentioned several factors in explaining their disclosure behaviour. Two participants (6 and 11) said they would not admit to having made a 'mistake' because they were worried about being blamed and about their legal position if admitting blame. As one surgeon put it:

> What also plays a role is that I always think that there's a certain lack of clarity, and that I am always aware that I should not immediately say that I'm guilty or something – that it can be blamed on me. I describe what happened and say it's a complication, but there's no more to it, that's how it is. So I will not say 'What happened is my fault' . . . I know insurance-wise that's not allowed. (Participant 11)

According to two participants (8 and 11) another reason for not admitting a possible fault is that most of the time these are better described as complications for which they do not feel responsible:

> Complications are often thought (by patients) to be an error but they are not. You want to make clear to the patient that these things happen and that it was not your fault. So both the patient and the doctor cannot be objective. (Participant 8)

Six of the 15 participants from the negative cluster (participants 13, 14, 15, 18, 23 and 24) declared that they were not reluctant to disclose and to discuss all incidents with patients (see Table 3). All these six participants mentioned that by disclosing incidents to patients they believe they can avoid patients filing complaints or starting a legal case:

> I think, it's not science, but I think that patients are less inclined to file a complaint if you immediately put your cards on the table. [And why is that?] It's a feeling. I can't prove it . . . but I think it's true, that patients appreciate it when you immediately open up and tell them 'I did something wrong', or 'something went wrong, my apologies'. (Participant 13)

> I think you can prevent 90% of complaints. I think that by showing engagement and not walking away from problems, that you can prevent a lot of trouble . . . namely the road to complaints and cases, and also with the patient, I think, frustration . . . (Participant 15)

The participants of the positive cluster were less varied in their disclosure behaviour. Twelve of the 16 participants in this cluster (1, 2, 5, 9, 10, 16, 19, 22, 25, 27, 28 and 29) showed no reluctance to disclose, and most of them would discuss any incident with the patient. The participants in this cluster claimed that risk of litigation did not affect their disclosure behaviour and that disclosure is part of the care process, as the following quote illustrates:

> As soon as something goes wrong, we discuss it with the patient . . . and we note it in the file . . . [Do thoughts and emotions regarding personal consequences following a complaint or a claim play a role?] Well, maybe yes, but that is not an argument not to do it. We are convinced that part of caring for people is to discuss it like it is . . . It's about care, not about the duty to care, not about fear. (Participant 16)

Four participants (1, 27, 28 and 29) believed, like some participants in the *negative* cluster, that disclosing incidents to patients

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could prevent litigation. One physician explained that disclosure prevented patients getting the wrong idea about what happened:

> Patients are not stupid. If you think that, then you should seek another profession. They do sense it when things go differently than expected. If they don't get an explanation for this, then their thoughts can fly all over the place. Then you no longer control it and the strangest things could happen. If you just say, this is what happened, because of this and that reason . . . maybe you have to explain it five times, but then it is clear. Even if they do not agree with you, at least you have prevented their thoughts flying all over the place and that is worth something. (Participant 28)

Four participants of the *positive* cluster admitted being reluctant to disclose. Two of them (12 and 17) said that the threat of a complaint could lead to trivializing an incident. Participant 20 declared that there was 'no obligation to cooperate in one's own conviction'. Participant 26 said that he did not disclose things that had not caused harm to the patient because he did not want to upset the patient unnecessarily.

The impact of a patient's response on the physician's disclosure behaviour

Although it was not the aim of this study to investigate the impact of a patient's response on the physician's disclosure behaviour, in the interviews several physicians mentioned that the responses of patients influenced their disclosure behaviour. Seven participants in the negative cluster and three in the positive cluster mentioned that when it came to disclosing incidents that they judged the likelihood of being sued by the specific patient. This evaluation depended on either the behaviour of the patient or the physician's perception of the patient's future behaviour. Various physicians associated patients with a higher litigation risk if they showed aggressiveness, weighed up each word of the physician, suddenly changed their attitude towards them, wanted to profit financially, did not show up for appointments, were dissatisfied with their diagnosis, were perceived as asocial, had a juridical background or threatened the physician. If physicians lack trust in their patients, they are also more reluctant to disclose. With respect to patients' aggressive behaviour, one physician commented:

> The patient. Well, if it's a jerk then it's much more difficult than when there is a nice personality. . . . If someone approaches you with 'You did a bad job' and immediately attacks you, you are a lot more defensive than when someone says 'Well, I cannot judge but I would like to be informed about what happened' . . . I think it's very hard . . . when there's a threat of a complaint to always fully approach the truth. (Participant 12)

One internist (3) thought litigation was more likely with patients who weighed each word you said because with such patients 'whatever you do, it is never right'. A surgeon (8) commented that there are also patients who can suddenly change their attitude towards their physician and then sue them. This physician referred to a patient who had been excessively positive about his treatment but 2 years later, all of a sudden, filed a charge against the physician.

Another internist explained how a lack of trust and reluctance to disclose can be caused by patients that fail to show up for appointments:

> There was a man who missed his regular checks for whom I had prescribed prednisone. . . . When he returned after four or five weeks he blamed me for not ordering him back. . . . I no longer trust that man. . . . Now he asks for all kinds of information about his blood values in the past and how I came to the decision to give him prednisone. . . . He gets the things he asks for, but I am not going to expose myself. . . . I find what is happening at the moment very frightening, with that man seeking all kinds of information. I think this is just the start and then, all of a sudden, bang, he has all the information in his hands and I can only watch. (Participant 21)

In terms of perceptions of a patient's future behaviour, physicians mentioned that there is a 'certain type of patient' that every physician knows will start litigation in the event of an incident. One neurologist referred to this type of patient as follows:

> Sometimes you know, upfront, that it will go all right with a patient, because it's a no-nonsense type who will understand it. But there are of course also patients that you know, upfront, will lead to trouble and claims. Nevertheless, you still have to honestly discuss (what happened). (Participant 29)

More specifically, another physician referred to feeling intimidated by the family of a patient who had died following a colon perforation during surgery. The family's behaviour was perceived as being asocial.

> [Did this result in a charge since the case was investigated by the Health Inspectorate?] No, it did not become a legal case. But I do remember sitting there, together . . . with this family. They were an asocial family. They sat there, and when I went in I thought: 'Oh dear, I hope I will survive this'. It was a very threatening atmosphere. I even wondered whether I should drink the coffee I had been given. (Participant 11)

Another participant mentioned a reluctance to disclose to patients or families of patients with juridical backgrounds:

> . . . and again, as with that disciplinary case, with his sister and a good friend of hers who was a personal injury lawyer. Yes, that certainly makes a difference at a certain moment. (Participant 21)

Another physician explained how he prevented litigation through disclosure to a patient who had threatened action:

> Well, yes, we have had addicted people who request a certain medicine. (There was one patient) who wanted the well-known benzodiazepine, because of his epilepsy. That's a medicine that makes you high, and I told this man that I would not prescribe this. Then he started to be very unfriendly . . . to threaten. Then I said to our complaints officer: 'You have to talk with these people'. I do want to treat this man, but only under certain conditions – and this is the reason why. That was discussed with the man and he disappeared from the scene. So the man did not file an accusation; it did not go further. Otherwise he would definitely have filed a law case. (Participant 24)

Discussion

The findings of our study show that physicians' attitudes regarding litigation play a significant role in the disclosure of incidents to patients. First, we found that physicians vary in their attitude regarding risk of malpractice litigation. Besides the level of fear,

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they differ most strongly in the amount of worry, stress, anger and feeling of being personally attacked caused by litigation risk. These are the same emotions as reported by second victims after being involved in a health care incident [30]. In contrast to many studies that speak of a general fear of litigation among physicians [5,14,31–33], our analysis reveals that there are essentially two groups of physicians. One group worries about litigation, knowing that it will likely happen during their career. They refer to the negative impacts of stress, paperwork, sleepless nights and the possibility of an unexpected outcome to a lawsuit. The second group worries much less about litigation, they take litigation less personally than the other group and regard litigation risk as part of their profession and part of the system.

A second finding of our study is that if, what and how physicians disclose incidents depends on a complex interplay of their emotions and thoughts regarding litigation, and not only on their fear of litigation as other studies suggest [4,12,31,34]. Nearly two-thirds of the participants in our negative cluster admitted a reluctance to disclose incidents and this indicates that most physicians who suffer fear, worry, anger, stress or feelings of being personally attacked by the thought of litigation are likely to see these emotions as a barrier to disclosure. This attitude resulted in self-generated disclosure principles that disclosure could lead to being blamed, to seeing incidents as complications and to not wanting to upset patients unnecessarily. Physicians with strongly negative feelings about litigation were only happy to disclose incidents if they applied the principle that disclosure reduces the likelihood of being sued. This finding is in line with research by Gallagher [14]. Disclosure can help second victims of health care incidents to heal and learn from the incident [35]. But a negative attitude towards the risk of malpractice litigation complicates this process as this raises a barrier to disclose. The majority of the positive cluster scored significantly lower on the negative emotions that the possibility of litigation could generate. This was translated into disclosure principles that saw complaining as normal and litigation as part of providing good care and accountability, and also that disclosure can prevent litigation. The application of these principles results in a low reluctance to disclose incidents. As such, stimulating a more positive attitude towards the risk of malpractice litigation could help second victims to deal with incidents.

The third important result of our study is that certain patient behaviour towards a physician is perceived as aggressive or irresponsible, and reduces the likelihood that that patient will receive full disclosure about an incident. Other research on the impact of patient aggression reports emotions of anger and anxiety in health care workers and an intention to perform professional duties in a different way and to move to another place of work [36]. Our results are in line with these findings and show that patients showing aggressive behaviour, and patients who weigh every word the physician says, increase the reluctance to disclose incidents. Patients characterized as asocial, addicted and those with a juridical background also led to reluctance to disclose. Many physicians seem to be sensitive to this, although not all to the same extent. This suggests a need to further investigate which patient characterizations physicians identify, and on what basis.

The fourth result of this study is in its contribution to the CPM theory of disclosure. The role of emotions in CPM theory has hardly been studied, and our research shows that emotions influence the principles that people apply in controlling and disclosing information. When physicians need to inform patients about sub-standard care, emotions of stress, worry and fear about the possible consequences for themselves lead for half of the physicians to applying a risk strategy and creating other disclosure principles.

Another contribution of our study to CPM theory is on how patient emotions are translated into situational principles and play a role in the disclosure process. Several physicians weighed the potential emotional impact of disclosing information to the patient and included this as a criterion in deciding whether to disclose.

Our study has several limitations. Although we followed a careful selection process, the participants all participated voluntarily in our study on this sensitive subject, and this could result in response bias. As such, we may have included only physicians that wanted to tell their story because they feared the system (making up the negative cluster) or because they could handle the system well (the positive cluster). Second, our study is self-reflective and participants may have been inclined to give what they thought were socially desirable answers about their attitudes and behaviour. We tried to prevent participants from giving socially desirable answers by probing to elaborate and asking for real-life examples. Observing or filming behaviour during disclosure is another method that could partially overcome social desirability but permission for this is unlikely given the sensitivity of the topic. Four hospitals and 22 physicians we approached either declined or did not respond to our request to take part in this research. Reasons for not responding or declining were often not given. However, during the talks to get approval for the interviews, it became clear that some hospitals and physicians found it risky to share information about incidents and litigation with outsiders. To create trust and to get approval the researchers invested a lot of time in explaining their research to the heads of medical staff, the head of the quality department and the board of directors. Keeping names of the participating hospitals and physicians anonymous was crucial for their agreement to participate. We also did not consider the influence of the severity of an incident, and several physicians referred to this in their interview. Minor incidents are less likely to be disclosed than severe incidents, and it may be that litigation following a small incident is seen as less fair than following severe incidents and that this might evoke stronger emotions. Future research could investigate the influence of this aspect.

Our study took place in the Netherlands, with physicians who were all working under Dutch law and disciplinary rules. In the Netherlands, there are no formal disclosure or apology laws, and indemnity payments are relatively low and claims often settled out of court through the liability insurer. Some countries including the United States and Australia have apology and disclosure laws, and indemnity payments are much higher and more often settled through a court case. These factors might affect physicians' attitudes towards malpractice litigation and their disclosure behaviour. The effect of such regulations within the disclosure context could be a fruitful subject for future research.

Our study might have several implications. Our most important finding is the variation among physicians in their litigation attitude and behaviour in terms of incident disclosure. The oft-heard call for 'openness' about medical incidents will not be easy to achieve and more than one-third of the physicians in our study felt impeded by the possibility of litigation. However, one should not forget that health care providers are the second victims of an adverse event and are threatened with litigation. Given that our

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study identified the importance of litigation attitude on disclosure behaviour, emphasizing their trust and not condemning physicians in the event of litigation, may be of importance when supervisors want to support physicians to disclose. Supervisors should be aware of and make use of differences in attitudes among physicians. Organizing peer groups to discuss disclosure and litigation could facilitate learning and could help to remove the stigma of litigation. These recommendations could be included in 'Employee Assistance Programmes' for frontline staff in response to adverse events [37]. Removing the stigma of litigation and stimulating disclosure should start at universities and training institutes. By teaching that disclosure helps the patient and physician in dealing with an adverse event, the disclosure intention of medical students and junior physicians could be stimulated. Explaining how to organize emotional and legal support for oneself in case of litigation might help to reduce negative emotions towards the risk of litigation.

The negative thoughts and emotions identified in this study suggest that managers and administrators should handle adverse events, complaints and legal cases against physicians in such a way that physicians feel safe in reporting such events. By arranging juridical and emotional assistance in the event of complaints and legal cases, they could show their support and reassure the professionals over the need for their abilities in the organization.

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Appendix

Participants' specialization ($n = 31$)

Participant number	Specialization
Participant 1	Anaesthesiologist
Participant 2	Gynaecologist
Participant 3	Internist
Participant 4	Internist
Participant 5	Internist
Participant 6	Neurologist
Participant 7	Surgeon
Participant 8	Surgeon
Participant 9	Gynaecologist
Participant 10	Neurologist
Participant 11	Internist
Participant 12	Anaesthesiologist
Participant 13	Internist
Participant 14	Gynaecologist
Participant 15	Anaesthesiologist
Participant 16	Anaesthesiologist
Participant 17	Internist
Participant 18	Anaesthesiologist
Participant 19	Anaesthesiologist
Participant 20	Gynaecologist
Participant 21	Internist
Participant 22	Surgeon
Participant 23	Neurologist
Participant 24	Neurologist
Participant 25	Neurologist
Participant 26	Gynaecologist
Participant 27	Anaesthesiologist
Participant 28	Gynaecologist
Participant 29	Neurologist
Participant 30	Gynaecologist
Participant 31	Surgeon

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