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DR. HELEN ANNE NOLAN (Orcid ID : 0000-0001-9796-0646)

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Medical Educators' views and experiences of trigger warnings in teaching sensitive content

Authors:

Nolan, Helen Anne

Corresponding Author -- h.nolan@warwick.ac.uk

University of Warwick - Warwick Medical School

Gibbet Hill Campus , Coventry CV47AL

United Kingdom of Great Britain and Northern Ireland

Roberts, Lesley

University of Warwick Ringgold standard institution - Medical School

Coventry, West Midlands

United Kingdom of Great Britain and Northern Ireland

Abstract

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Background

Trigger warnings - prior notification of topics so recipients may prepare for ensuing distress - are encountered widely in contemporary culture. Students at some universities have expressed expectations for trigger warnings. Medical education routinely exposes students to numerous potentially distressing topics. However, this topic remains understudied in medical education. Little is understood about educators' views or practice relating to warnings in the context of medical education.

Methods

Twenty medical educators from a medical degree programme in the UK participated in a semi-structured qualitative interview study, exploring medical educators' views and experiences of managing distressing situations and, specifically, their use of warnings. We analysed interview transcripts by thematic coding and identified themes.

Results

Analysis identified themes relating to educators' conceptualisation of trigger warnings and rationale for use, concerns about the use of warnings and the critical purpose of medical school in ensuring preparedness for clinical practice.

Participants shared that warnings were given to empower students in approaching distressing topics and to enable engagement with learning. Warnings acknowledged that some experiences would be distressing and normalised and signalled acceptability of emotional responses. Decisions to use warnings were influenced by the nature of content and, reactively, in response to experiences of student distress. Terminology regarding trigger warnings was interpreted varyingly by participants. A broad variety of topics were identified as potentially sensitive. A number of concerns were noted regarding the use of warnings.

Discussion

Warnings alone did not fulfil educators' responsibility in supporting students' professional development, but may be a useful adjunct, signalling that self-care is valued and should be prioritised. Despite frequent use of warnings, individual educator practice was shaped by varying rationale. A framework that addresses competing tensions of preventing distress while supporting professional development is needed as part of a trauma-informed approach to medical education.

Introduction

Trigger warnings are now encountered widely across contemporary culture (1) in mainstream and social media (2). The practice, generally defined as offering prior notification of content so recipients may prepare for or avoid ensuing distress, originated in feminist blog culture (3). As a recent and evolving entity, there remains a lack of consensus on the definition and purpose of trigger warnings (4, 5). While originally used to forewarn about “triggers” of clinical symptoms of post-traumatic stress disorder (PTSD) or other mental health conditions, their use has now become more widespread and can include forewarnings about contentious or sensitive topics such as race, inequality, and suicide (4, 6). In recent times students have at some institutions expressed a desire and expectation for trigger warnings in university classrooms before distressing material or topics are explored (7) and, although the extent is unknown, the practice has been adopted by some university educators (3, 8). The practice has brought much debate about the appropriateness of trigger warnings, particularly in American universities, with strongly held views on both sides of the argument (3, 5).

One concern regarding trigger warnings centres around threats to academic freedom. Where there is an expectation for warnings, this may necessitate topics being avoided or discussions constrained. Students could be permitted to be selective regarding content studied. The purpose of education – challenge and growth (9) – becomes undermined. Yet proponents of warnings perceive the opposite; by warning students,

they can be prepared and supported in engaging with troubling content. Student requests for warnings are often not “opt outs” but a request for help to participate (5, 10).

The original rationale for trigger warnings is that they may avoid hyperarousal which would otherwise interfere with students’ ability to learn and therefore their use is a reasonable accommodation (4). There is limited literature on the role of emotion in health professional learning and it may be overlooked in the learning environment (11). Emotional states influence what students learn (11, 12) with safety in the learning environment being an established foundation for effective learning (13). While negative experiences and those associated with emotional arousal are more readily remembered, the learner is less likely to make broader connections, and therefore less able to transfer that learning to the clinical setting (12, 14).

Evidence in relation to the efficacy of trigger warnings in reducing hyperarousal in classrooms has been sought; this remains limited and lacks generalizability. One experimental study on their efficacy suggested that trigger warnings affect some domains of resilience but not others (1). Limitations of this study include use of self-report measures of hyperarousal (instead of physiological measures) and participants only being recruited from non-traumatised populations. Another experimental study measured effects of trigger warnings on participants’ ratings of negative material and their symptoms of distress (15). “Mini meta-analyses” revealed warnings had trivial effects. Again, limitations were noted; participants were recruited from non-traumatised populations, self-report measures were used and possible “nontrivial effects” of warnings were not assessed. These results paint a mixed picture about their utility and are difficult to apply to the needs of current healthcare students and clinical education contexts.

There is increasing diversity amongst cohorts of medical students, with significant increases in numbers of students from educationally and socially-disadvantaged backgrounds (16, 17). Widened access to studying medicine has foregrounded discussions regarding inequalities (16). Sensitive or contentious topics may have direct, personal relevance to students from marginalised groups (18). In addition to prevalent pre-existing trauma among medical students (19), practices and environments in medical education risk exposing students to traumatic experiences (20, 21). It has been demonstrated that these negative experiences can affect students, regardless of their previous experience of trauma (22, 23). Experiences in medical education are well recognised as contributors to mental health morbidity among medical students (21) with medical students experiencing higher rates of anxiety, depression, and burnout than general and other student populations (24-28).

In preparing doctors for societal expectations of their role, the range of topics included in modern medical curricula that may be considered controversial or sensitive, has expanded to include racial bias, inequality, discrimination, abuse and gender identity issues (18, 29). Despite this and the risks of medical student traumatisation or retraumatisation, trauma-informed practice in medical education, which recommends integration of trauma-informed principles throughout education to support professional development, has not yet been widely adopted (30). Trigger warnings could promote accessibility by making reasonable accommodations for students with trauma histories or mental health difficulties (6). Others view trigger warnings as an ethical consideration towards their students (3, 31).

Previous research has explored medical students views of trigger warnings in preclinical education (32) and psychology educator's practice and views (33) but despite the prevalence of potentially distressing topics, the use of such warnings in medical education remains understudied. Understanding the perceptions of medical educators alongside those of students is essential to inform further research agendas in this emergent area and in responding to student expectations. The study aimed to explore medical educators' views and experiences of managing distressing situations in medical education and, specifically, their use of warnings in advance of topics or materials they perceived might be distressing to students. Aligned to the expanding and evolving use of the term *trigger warnings*, beyond accommodating clinical diagnoses, and increasing recognition that distressing subjects are commonplace in clinical education, we were interested in use of warnings broadly. To address this aim, we formulated the following research questions:

- In what circumstances do medical educators use warnings when teaching?
- What is educators' rationale for and experience of using warnings?

Methods

In this study of medical educators' experiences of managing distressing content and, specifically, use of advance warnings, we wished to explore the meanings participants assigned to experiences, and factors underlying behaviour and practice, thus a qualitative methodology was chosen (34). A previous survey study amongst psychology educators acknowledged that more complex questions could reveal nuances in educators' attitudes (33). Individual semi-structured interviews were used to gather data and allow participants to describe their experiences, interpretations and perspectives in detail (35).

The study was approved by (Ethics committee name redacted for anonymity).

Participants

Participants were educators currently involved in or with recent experience (within 4 years) of providing classroom-based teaching (lectures, case-based learning facilitation, small group teaching) to students in the early years of a graduate-entry 4-year medical degree programme, awarded as *MB ChB*, in (location redacted).

Earlier years of the medical degree programme consist of more classroom-based learning than later years, where clinical placements dominate. Such teaching

provides, for many students, first exposure to subjects they will later encounter in clinical contexts and, as such, provides a 'safer' context for students to consider personal impacts of subject content. Therefore, educators involved in earlier years

teaching were sampled to explore their use of warnings in the classroom.

Participants were invited by email and provided with information outlining details of the study. They were invited to ask questions or seek any clarifications prior to agreeing to

participate. As the study sought to openly explore educators' experience and practice in managing potentially distressing situations, we aimed to recruit and interview educators involved in teaching from a variety of roles and subject

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areas. Purposive sampling was used to access educator participants with experience of classroom-based medical education. As we did not wish to limit the study to our own preconceived ideas about subjects where warnings would be more likely to be used, we aimed to openly sample any educators involved in such teaching on the programme.

Context

Ours is a graduate-entry programme, with older students from a greater variety of backgrounds, including traditionally underrepresented groups, and with greater life experience than school-leaver entrants. As an accelerated 4-year curriculum, our programme is at times intensive and academically demanding, thus student personal wellbeing is emphasised and supported in curricular development and delivery, and the learning environment. There has been recent increased focus on differential student experience and differential attainment amongst minority students on the programme.

Interviews, data collection

We developed interview questions to reflect and explore our research questions. Areas of focus were established through review of existing literature and researcher discussion. Key papers identified were survey studies so open-ended questions were developed to explore educators' attitudes and experiences of warnings. After initial interviews further questions to explore previously unanticipated areas were added. A semi-structured format with open questions and probing to illicit full response was adopted to ensure participants could explore areas of relevance and importance to them. Interview guide, available in Appendix 1, provides detail of question areas.

Verbal consent was affirmed at the time of interview. As the study was conducted during the Covid-19 pandemic, interviews were facilitated via Microsoft Teams videocall and recorded. Videos allowed nonverbal cues to be noted.

Neither participant information nor the opening question included the term *trigger warning*; this was intentional, in order to accurately explore educators' use of warnings and whether

they considered these to be *trigger warnings*. As the term “trigger warning” has acquired particular connotations in some academic fields we used a more neutral phrase initially. Later questions explored views on what a trigger warning was (33).

Data analysis

Thematic analysis was used to identify, analyse, organise, describe and report themes identified within the dataset, where a theme refers to an important feature of the data in relation to the research question and adds meaning within the dataset (36). Thematic analysis was chosen to assess the perspectives of various participants, to identify similarities and differences in their responses and perspectives and to identify unanticipated perspectives, thus creating a rich account of the data (37). HN transcribed verbatim audio recordings. We both read and reread transcripts to allow immersion and familiarisation and manually coded initial transcripts independently. We did not use a predefined coding framework. Initial analysis of data was carried out concurrently with further data collection. Contemporaneous notes were made throughout analysis, beginning in the transcription phase, and patterns and connections in the data and codes were noted in a reflexive diary.

Initial codes were applied and then discussed and we agreed a coding framework. HN iteratively coded all transcripts using Nvivo 12 (QSR International Pty Ltd, Doncaster, Australia). LR had access to and read all of the interview transcripts to confirm agreement with coding categories and codes. As new codes were identified, previous transcripts were recoded. All data identified by a particular code were then collated. We then reviewed all of the codes that had been generated and sought patterns and connections in order to inductively identify themes. Notes and diagrams were developed to represent and organise themes and sub themes.

We then reviewed the proposed themes against the dataset to ensure that all key ideas within the dataset were represented and agreed that the names assigned to themes were appropriate.

In the analysis and write-up of the study, we contacted participants to review illustrative quotes for their consent for use.

Reflexivity, positionality

While we were known to the participants and familiar with the programme, we are not substantively involved in programme delivery, thus we were unaware regarding individual educator experience and practice of using warnings. Both authors have previously held pastoral roles in medical schools and now have educational leadership roles with oversight of student feedback and programme enhancement which includes issues of accessibility and duty of care. However, this study was seeded by anonymous student evaluative feedback and developed in the spirit of academic inquiry rather than in response to personally encountered issues. As there is little empirical evidence in relation to warnings in medical education settings and no known previous studies with medical educators on this topic, we believe we maintained an open stance in relation to the subject. Bimonthly researcher meetings occurred during each stage of thematic analysis. Reflexive notes were discussed and a number of discrepancies or disagreements in the analysis, interpretation, and reporting were considered, ensuring that individual perspectives were not unduly influencing interpretation. Through discussion, reflection and revisiting the dataset, we established consensus.

Results

We conducted twenty semi-structured qualitative interviews with educators (sixteen female and four male). Fifteen participants were qualified in a medical or other healthcare profession.

Participants included teaching fellows, associate professors, and professors representing a range of seniority and clinical and non-clinical (e.g., medical ethics and jurisprudence, biomedical sciences, epidemiology) academic roles. Some of the educators

interviewed had additional roles e.g., student support tutors.

Interviews lasted on average 28 minutes (range 14 – 47 minutes). Noting the variety of participants interviewed, the quality of dialogue and creation of data aligned to addressing the research questions, we

agreed that we had appropriate data to address the research questions after completion of twenty interviews (38).

Data analysis identified themes in the following areas; 1. educators' conceptualisation of trigger warnings, 2. educators' rationale for using warnings, 3. concerns about warnings and 4. the critical purpose of medical school in preparing students for clinical practice.

Themes and subthemes are summarised in Table 1 and presented here.

Quotes are presented according to participant number.

(Table 1) Summary of themes and subthemes identified.

1. Educators' conceptualisation of a trigger warning

Participants understanding of the term 'trigger warning' fell into three non-exclusive categories.

Most described a trigger warning as an advance caution to students about content that may cause distress, because it resonates with students' current or previous negative experiences *or* because of the nature of the content itself. Here participants generally identified their practice as being analogous to using a trigger warning.

Just what we've been discussing; that you say the material may trigger some kind of strong emotional psychological response in the student so you give them a warning that there may be triggering factors in the material that's coming. (P10)

A few participants described a trigger warning as a warning to prevent triggering symptoms associated with specific psychological conditions e.g. PTSD, and they differentiated this from their own practice as they considered that the warning could be relevant to a broader range of subjects and students, by contrast to this original definition. A trigger warning also differed from general preparatory statements that were for the attention of *all* students and which highlighted both the need to be aware of one's own emotional response and to be respectful of others' views. Some participants were disinclined to use the term trigger warning, instead preferring terms such as "content warning". They discussed the connotations that "trigger warning" has collected over time e.g., associated with "coddling" and ascribed to a "snowflake generation". Here participants distanced themselves from disparaging views of students' coping abilities or emotional reactions.

Others felt the term could be alarmist. Some suggested that simply using a “label” without indicating how students could access support limited the warning’s utility and this differed from their own practice.

The reason I don't like “trigger warning” is the notion of a trigger is something that has been latched onto by certain right wing commentators about people being oversensitive and the “snowflake generation” so I prefer content warning as a description of that. (P3)

Trigger warning sounds a bit alarmist to me, so I'd be quite cautious of using that...there's a bit more ...power behind it whereas disclaimer is more neutral, I guess. (P16)

Some were unfamiliar with the term and speculated, showing a general understanding of the concept and suggested examples of where they had seen it used e.g. social media. Others were given prompts or examples. Within this category, participants varied about whether they saw their practice as using a trigger warning, noting both similarities and differences.

2.1. Rationale for using warnings.

Participants almost universally indicated that they had used warnings or advisories to highlight in advance teaching content that they felt could be distressing. As the medical curriculum features a broad range of potentially traumatic or distressing subjects that could resonate with students’ experiences, it was appropriate to forewarn students and this was part of fulfilling a duty of care to them. Some noted that subjects could provoke a response when students first encountered them. Many participants had experienced students requiring support with sensitive content. This manifested as students proactively requesting details of session content, absenting themselves from sessions or, occasionally, students becoming upset during sessions. For some educators, these experiences had led them to use warnings.

At the start of the lecture I say 'I know this is a sensitive subject for some and we will be covering some sensitive subjects as we go through the lecture, so I'm quite happy if it's disturbing for you to leave and we can catch up later'. (P8)

2.2 Intended outcome.

Participants explained that warnings could serve a number of purposes. Warnings allowed students to prepare themselves emotionally or to absent themselves from a session where they felt unable to attend at that time or that their learning would be compromised.

I use it as a courtesy to students in that we may be discussing distressing stuff. If we can help to manage that distress; if we can either prevent it from happening in the first place, and or by dealing with it appropriately when it does occur, then I think we're doing the best we can. (P7)

Issuing a warning to students was seen as a way to inform and empower them in deciding how to approach potentially distressing topics and to consider additional support that they might require. Participants generally signposted support for students, with this being integral to the warning;

My strong belief is that we have to give that responsibility to the student, give them permission ... I think we just have to promote students to be self-aware, know what their limits are. (P2)

Warnings were used to create "safe spaces" to enable safe engagement with difficult subjects; either in the immediate teaching environment or, where necessary, through an alternative means later. Students could explore and learn how to respond to distressing topics in a supported, controlled way. Noting that students needed to engage with these subjects, they were encouraged to participate in respectful discussions and emotional responses were accepted.

I think it's an important tenet of creating a safe space for students to learn, if something triggers this response in them, they have a choice whether to take part or to not, it's not a black and white thing. (P16)

Warnings acknowledged that some learning experiences can be distressing and educators aimed to normalize and signal acceptability of emotional reactions and seeking support.

It allows them to know that it's likely that they're going to get upset and that's okay. That's not being a weak doctor or unprofessional, but actually being self-aware – that's the important thing. (P2)

Warnings were also a reminder to non-affected students to be considerate of their peers and role-modelled respectful communication, which itself was a necessary skill to develop.

It's also just a reminder to all students that the issues may have affected people who were in the class and that they should be mindful of that when discussing it. (P19)

2.3 How educators determined topics where a warning was appropriate

A broad variety of topics were identified as potentially sensitive. Some topics were determined due to their nature i.e., a content driven decision, others were identified as a result of students' distress. While there was consensus regarding several topics, there was also evidence of individual practice regarding what merited warnings, often in relation to an educator's own discipline. A few participants had discussed their practice and decision to use warnings with colleagues. Some had discussed this within their teaching team e.g., when formulating wording of warnings. Others had informally discussed their use of warnings with colleagues and noted anecdotally that others had adopted similar practice.

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Amongst the most frequently cited were mental health, dying, breaking bad news, ethics, and discussions on race, gender and inequalities. Distressing subjects emerged from evolving social issues. Participants noted that it was necessary to highlight complex, contentious topics, where learners may hold different personal views. As *any* topic could resonate with a student's own personal experience, any topic could potentially cause distress.

It's very, very extensive in medicine...it depends what's going on in that student's life so I think our minds have to be open to the fact that it can occur at any time. (P17)

Previous experiences of students requiring support with sensitive topics influenced practice and use of warnings for some participants. However, experiences of participants receiving specific feedback in relation to warnings from students were relatively few. A few participants recalled instances where a student had expressed appreciation for a warning and the option to leave or to speak to the facilitator after a troubling session.

Some participants discussed warning as being linked to specific content. Although in favour of using *some* specific warnings, others felt that instead of linking to particular content, it was more helpful to provide overviews of *all* content, not just that which was deemed sensitive.

Regularly acknowledging to students that experiences in medical education can cause distress, without linking the warning to particular content, while also suggesting coping strategies and supports available, was felt to be more effective in supporting students' personal and professional development.

It's a blanket kind of warning rather than linking to any specific content - you don't know what will upset students and we don't need to know, necessarily, that's their privacy. We can only flag up to them that this is what you should do if you think you might find this content distressing. (P2)

3. Educators' concerns about the use of warnings

3.1 Substitute for support

All participants noted some limitations associated with use of warnings and, although they used them, warnings on their own were insufficient in managing distress and could not replace other supports or the need to develop coping strategies.

I wouldn't want it to be a situation where it is one or the other. I don't think that feels like a helpful choice to be making... Looking from a programme perspective, you'd use a variety of tools to manage students' emotional responses to situations and trigger warnings might be one of them. (P19)

If warnings were used in isolation and to *prevent* an emotional response, this risked pathologizing students' reactions and was not educator's intention. It was important for students to experience strong emotions during learning e.g., in relation to injustice and inequalities. It was noted that discomfort is fundamental to learning about novel, unfamiliar concepts.

3.2 Difficulties in predicting or identifying all stressors.

A major limitation was the difficulty in predicting all "triggers". Students are individuals, with unique life experiences influencing what they may find distressing at any particular time. While some "triggers" are commonly recognised and therefore easily identified (e.g., poor mental health, death), *any* condition can have negative impacts on the affected individual. For others

these conditions may appear relatively benign and educators may not think to flag these, therefore it becomes impossible to predict all sensitive subjects. To do so would negate the utility of warnings; recipients would soon ignore them or become desensitised. Faculty and student consultation may help in establishing expectations and a suitable approach, it was noted.

You can't anticipate every single person's trigger and then you've got the problem that if you are always saying there's a trigger warning, then it means nothing....it nullifies it. (P10)

3.3 Nocebo effect

A few participants noted risks of hypersensitising students to topics; this “nocebo effect” risked undermining resilience.

If you say to students you may find this difficult, we're then almost preparing them to find it difficult almost like a self-fulfilling prophecy...triggering the trigger! (P1)

3.4 Avoidance

Participants reflected on issues where warnings facilitated students' avoidance of troubling topics. Blanket avoidance of particular topics would not be possible in medical training.

Participants hadn't experienced this issue with students, who instead found alternative ways or times to explore topics.

4. Critical purpose of medical school in preparing students for clinical practice.

4.1 Medical school as a “halfway house”

Participants discussed the role of the medical school and often contrasted classroom- and medical school-based teaching with that in the clinical environment. While classroom-based teaching is relatively controlled and predictable, there are more variables in

the clinical environment and often no opportunity to warn students regarding what might just be considered “professional hazards”, as one participant described. Neither could students choose to avoid troubling conditions or topics. Whilst overprotection may under-prepare students for clinical context learning, many participants felt that on balance use of warnings was reasonable in early years and in the classroom setting. The classroom, described by one participant as a “halfway house”, was felt to be a safer environment where students could easily access support from peers and staff.

I feel like the medical school should be sort of a halfway house, that they can at least have some warning about these things. It should be in part practice for what's going to come. We should at least make the transition to being a doctor as comfortable as possible for them. (P3)

Beyond individual classrooms or discrete topics, participants emphasised cultivating an educational environment and culture that proactively engages and supports students in their holistic development. This overcomes the risk of failing to predict all distressing topics.

4.2 Supporting holistic development.

In the case of a medical degree, educators must also support students’ professional development, seen as a shared responsibility of the student to be aware of their own experiences and anticipate when they might be affected. Several participants noted that within the medical profession self-care is often neglected, to the detriment of the professional’s wellbeing.

Maybe if you don't have trigger warnings it fosters that culture of ... “you're going to be a doctor; you need put your personal life and emotions aside, you've still got to learn this.”... I

think that's not right, people should be encouraged to talk about things that have happened to them and be open if something is upsetting in teaching....that's the best time to address it, right at the beginning. (P11)

Beyond forewarning topics, educators prompted students to reflect on their responses to emotionally challenging areas as this encouraged self-awareness and enabled development of coping strategies. Warnings signalled that self-care was valued. By encouraging students to reflect and seek support, students could prioritise wellbeing early on, before clinical practice, thus developing the resilience required for their professional role.

We would understand if students chose not to attend the session, but we would ask students to reflect on their coping mechanisms, on how they can develop coping mechanisms, because in the future they will encounter triggering scenarios, and perhaps seeking some support now for how they are going to do that might be a useful thing to think about.(P1)

Discussion

This study explored medical educators' views and experiences of using warnings in advance of topics or materials they perceived might be distressing to students. To our knowledge, this is the first study conducted amongst medical educators in this area and qualitative interview methodology allowed detailed exploration of participants' perspectives.

Participants indicated that they invoke warnings in advance of some classroom-based teaching sessions. They recognised that illness, suffering and other distressing topics are at the core of many clinical learning experiences and that the educational experience itself can be traumatising; an educational iatrogenesis (18). Experiences such as witnessing suffering or traumatic injuries can lead to "vicarious traumatisation" for students (22) and warnings were used consciously to highlight potential for and reduce occurrence of distress. Our study suggests that enabling avoidance is usually not the primary intention of warnings.

Our findings appear to contrast with survey findings from psychology educators, another discipline where sensitive content is prevalent (33). The majority of psychology instructors surveyed indicated reticence about using warnings which appeared grounded in disapproval of facilitating student avoidance of course content. Despite expressed views, nearly half of those psychology instructors actually used regular warnings before discussing suicide and trauma with authors noting that a survey approach restrained depth of exploration of this contradiction. Our qualitative interview approach allowed deeper exploration, and this, alongside different professional intentions of medical and psychology students, may explain contrary findings.

There were a variety of drivers and deterrents influencing educator practice, summarised in Figure 1. Drivers included educators' desire to prevent distress, desire to role model and signal value of self-care and to create a safe environment to enabling maximal learning gain. Opponents of warnings highlight the risk of perpetuating an "avoidance culture" (2) and "coddling" (39) students. However, it was noted that factors such as unpredictable clinical encounters and requirements of a regulated professional degree preclude avoidance of stressors in medical education. Participants recognised that consideration should be given to the timing and circumstances of engagement with distressing content. Notwithstanding their desire to prevent distress, educators discussed potential risks of overprotecting and underpreparing students for distressing experiences and the need for medical students to develop professional coping skills. These challenges and tensions echo those described by medical student survey respondents (32). While warnings allow students to prepare themselves, longer term professional development needs, including managing distressing situations, also need to be considered (32). It was within the constraints of these competing interests that educators were operating.

Figure 1. Factors influencing educators' use of warnings.

A frequently cited indication for warnings was teaching relating to mental health. The potential for the demands and experiences of medical education to have a deleterious effect on student wellbeing is well recognised, thus adding enhanced relevance to discussion of warnings in this field. Several participants alluded to the dichotomy within medicine between those providing care and those receiving it (26, 40). Within the medical profession, there has been a perception that experiencing mental health issues was

scorned and a potential barrier to professional success (24, 41). Professional identities are influenced by the culture of the learning environment and professional identity formation occurs through processes of socialization (42). Effective role modelling by educators in an educational environment that values wellbeing can promote compassionate behaviours and humanistic attitudes in medical students (43). By openly and regularly signalling to students the importance of well-being and acceptability of emotional reactions, educators sought to overturn historical stigma. It is essential to inculcate these practices early in medical training (21, 40). Classroom-based preclinical learning represents a suitable opportunity for this.

Participants emphasised the need for students to develop self-awareness, self-care, and coping strategies, as professional competencies necessary for later clinical practice, findings that are consistent with previous recommendations (40, 42, 43). Warnings were used during initial exposure to impactful subjects, as an interim measure, before students have developed necessary self-awareness and coping strategies. Self-awareness refers to insight into one's own emotional responses to specific situations (44). Students should understand their own psychological strengths and emotional triggers as this self-awareness is a prerequisite for self-care, physically and emotionally (45), and aligns with recommendations of trauma-informed medical education (30). This enables development of reflective capacity and resiliency required for humanistic practice (43). Warnings may prompt students in identifying their own triggers and could signpost appropriate actions, including reflection, self-care and seeking external support. Hence warnings alone were not used as a panacea but seen as part of a progressive strategy to enable self-care skill development.

While development of self-care skills is important, structural factors contributing to distress should not be overlooked if we are to maximise learning opportunity (30). Educators described efforts to ensure that the medical school environment allowed students to safely engage and learn. Effective classrooms that promote learning challenge views and assumptions and thus are not free of emotion (3, 9). Discomfort and dissonance are inherent to transformative learning (46) and some stress, "eustress", may be motivational (47).

However, compelling students to endure a troubling topic not only provokes emotional distress, but also adversely impacts learning (12). By using warnings during initial, graded exposure to impactful subjects, educators allowed students to prepare themselves, while still acknowledging and accepting that strong emotional responses can occur. This space allowed supported exposure and safe exploration in advance of later transition to the clinical environment. Warnings also signalled to non-affected students expectations of

sensitivity and respect for others, a feature described elsewhere as serving a pedagogical function for all students (5, 18, 32).

Participants did not generally endorse widespread use of warnings but that they be reserved for particularly distressing topics, a view shared by medical students elsewhere (32). While some consensus was noted regarding topics meriting a warning, individual or discipline-specific practice in identifying where warnings were needed was strongly evident, potentially leading to discrepant approaches and inconsistent student experience. Efforts to predict distressing topics could fall short, particularly as new stressors emerge. Warnings also risked producing nocebo effects, acting as harbingers of negative emotions. Conversely, excessive warnings could lose legitimacy, with recipients becoming desensitised. Some participants advocated an overarching advisory to students regarding the potential for distress in medical education. This began to address the challenge of flagging all emerging “triggers” and the risk of a nocebo effect. An overarching advisory, coupled with detailed content overviews, shifts emphasis from anticipating and minimising emotional responses to instead enablement of informed student decisions (48). This practice, against a backdrop of visible supports and development of students’ self-awareness, more holistically supports professional development and resilience. This ideal notwithstanding, it was noted that the “most distressing” topics should be flagged to students and individual educator practice arbitrarily determined this. Similar to survey findings from psychology educators (33) and medical students (32) responses also demonstrated disparity in what is understood and intended by the term “trigger warning”. Those more familiar with the origins and recent evolution of the term felt it could have an unhelpful influence in achieving the intended student-centred outcomes and they rejected notions of “coddling”.

Limitations of study

Educators from only one institution were contacted to participate. However, we recruited educators from various disciplines and roles, ensuring a representative sample. Twenty qualitative interviews sampled a range of educator subject areas and backgrounds, suggesting transferability of results. Expanding this study across other institutions would yield a more heterogeneous sample, assess the generalisability of these results and could reveal additional themes. We recruited staff based predominantly in the university setting as the context of the study was earlier, classroom-based teaching and did not aim to explore clinical learning experiences as this experiential learning is often less planned or controlled. Average interview duration was 28 minutes however, given that this explored a focussed issue and the quality of dialogue achieved, we consider that research questions were fully addressed.

The Covid-19 pandemic necessitated online interviews which may have removed some elements of scene-setting and safe environment creation, compromising openness and depth. Anecdotal evidence suggested this platform was not perceived as a barrier and gave participants greater flexibility promoting convenience of interview.

To ensure that not only proponents of the use of warnings participated and to minimise bias, we did not mention warnings directly in participant information or recruitment correspondence. Participants may have demonstrated social desirability bias in responses to questions about warnings. However, responses were situated in accounts from participants' experiences as educators and interactions with students, which suggest that responses were authentic and reflected previous or current practice.

Conclusions

Experiences in medical education can be inherently distressing and avoidance of distressing

content is neither possible nor desirable. Pedagogical and wellbeing approaches to manage adverse effects and embed persisting skills for wellbeing are required. Some of the discussions and attempts to derive empirical evidence for trigger warnings have focused on warnings alleviating symptoms of clinically diagnosed conditions and have excluded non-clinical sensitive issues (1, 4, 15). Viewed through this lens the main purpose of warnings is to prevent hyperarousal symptoms precipitated by the trigger. In this study, participants have suggested that warnings may have a role more generally in early medical education and broader functions.

Educator practice demonstrated some accepted principles – preventing distress, supporting effective learning and professional development, yet the approaches taken appear to operate outwith a clear consensus of purpose and framework. Individual educator practice was shaped by varying rationale; recognition of the impact of the subject in some cases, a response to previous student distress in others. Both pedagogical and pastoral motives were in effect; supported exposure to distressing content and foregrounding professionals' self-awareness and self-care skills. Despite frequent use, educators identified concerns regarding warnings. Use of protective mechanisms had to be counterbalanced against the need for authentic, experiential learning and preparation for the demands of professional practice.

Implications for educators

This study highlights that an absence of clear policy for implementation has produced individual and arbitrary practice.

Consensus on an appropriately scaffolded approach, embedded in curriculum strategy, is required to address competing tensions and inconsistent approaches. Warnings may be one of

a suite of measures that also includes embedding professional skills and valuing self-care in a trauma-informed approach to medical education . Such

principles require consideration and graded integration into curriculum design. In responding to student requests or expectations for warnings, we suggest students and educators need clarity regarding intent, function, and terminology. We recommend that perspectives should be explored to inform the ongoing discussion about warnings in the educational setting.

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Appendix 1; Interview guide for semi-structured qualitative interviews:

1. Do you use warnings or cautions when discussing distressing or sensitive teaching topics or materials during teaching sessions? Please tell me about this.
2. If yes, what topics have you identified that might be distressing for students/ what was the nature of the material that might be distressing for students?

(Note will be taken if the participants volunteers the term “trigger” or “trigger warning”.)

3.What do you understand by the term *trigger warning* in the context of medical education?

4.Do you think trigger warnings have a role in medical education? Why/ why not?

5.Have you received any feedback from;

- Students in relation to such a warning/ caution that you have given?
- Peers in relation to such a warning/ caution that you have given?

Further question added after initial two interviews;

Some participants discussed the warning as being a signal to the broader student group. A further question as added to explore this.

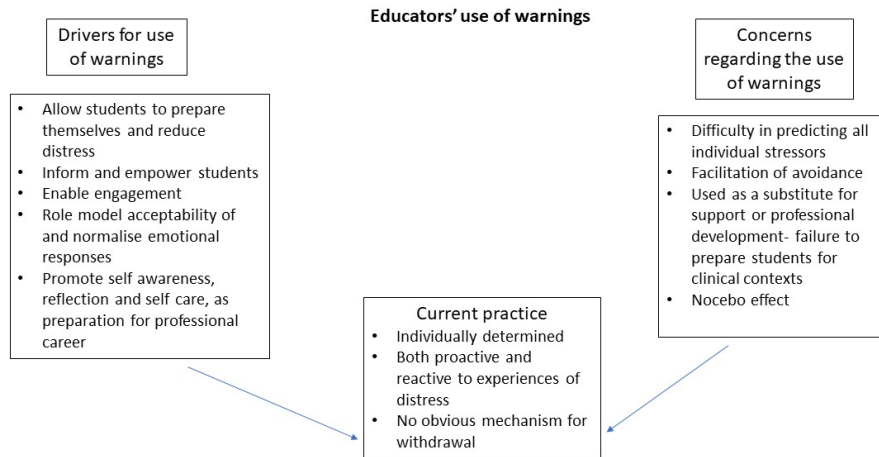
- Where a warning is used, who is the warning intended to benefit -students affected by particular content or other students? Who? Why?

Participants discussed limitations and tensions associated with using warnings. A further question as added to explore this.

- How can we implement a step like this, in light of these limitations?

Thematic area	Sub themes
Educators' conceptualisation of a trigger warning	Three non-exclusive categories
Educators' rationale for using warnings	<ul style="list-style-type: none">• Rationale for use<ul style="list-style-type: none">○ Duty of care○ Reaction to experience of individual students • Intended outcome of giving a warning/purpose.<ul style="list-style-type: none">○ Inform, empower students.○ Allow students to prepare themselves.○ Normalise emotional responses, role model the professional tendency to recognise and manage responses, sensitive communication.○ Enable engagement. • How educators determined topics where a warning was appropriate
Educators' concerns about use of warnings	<ul style="list-style-type: none">• Warnings being used as a substitute for support or as a defence. • Difficulties in predicting or identifying all stressors. • Warnings having a nocebo effect.

	<ul style="list-style-type: none">• Facilitation of avoidant behaviours
Critical purpose of medical school in preparing students for clinical practice	<ul style="list-style-type: none">• Medical school as “Halfway house”• Supporting holistic professional development



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