The ethics of distress: Toward a framework for determining the ethical acceptability of distressing health promotion advertising

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Abstract

Distressing health promotion advertising involves the elicitation of negative emotion to increase the likelihood that health messages will stimulate audience members to adopt healthier behaviours. Irrespective of its effectiveness, distressing advertising risks harming audience members who do not consent to the intervention and are unable to withdraw from it. Further, the use of these approaches may increase the potential for unfairness or stigmatization toward those targeted, or be considered unacceptable by some sections of the public. We acknowledge and discuss these concerns, but, using the public health ethics literature as a guide, argue that distressing advertising can be ethically defensible if conditions of *effectiveness, proportionality necessity, least infringement*, and *public accountability* are satisfied. We do not take a broad view as to whether distressing advertising is ethical or unethical, because we see the evidence for both the effectiveness of distressing approaches and their potential to generate iatrogenic effects to be inconclusive. However, we believe it possible to use the current evidence base to make informed estimates of the likely consequences of specific message presentations. Messages can be pre-tested and monitored to identify and deal with potential problems. We discuss how advertisers can approach the problems of deciding on the appropriate intensity of ethical review, and evaluating prospective distressing advertising campaigns against the conditions outlined.

In most national populations, mortality and morbidity patterns are heavily influenced by prevalences of health risk behaviours (Kromhout, Bloemberg, Feskens, Menotti, & Nissinen, 2000). Public health agencies use marketing approaches to encourage people to change risk behaviours, often delivering persuasive communications using print and electronic mass-media, product labelling or public information materials1 (Emery, Szczypka, Powell, & Chaloupka, 2007). Commonly campaigns employ vivid and disturbing portrayals of outcomes (Slater, 1999), including graphic images of diseased organs, severe injuries or descriptions of pain, but also more subtle presentations that emphasize themes of loss, regret, and guilt. Defenders of this approach point to the need for dramatic material to draw audience attention to messages (Baron, Logan, Lilly, Inman, & Brennan, 1994; Peters, Ruiter, & Kok, 2014, this issue) and argue that distress is an active driver of persuasion-induced behavioural change (Hill, Chapman, & Donovan, 1998).

But this approach is controversial (Duke, Pickett, Carlson, & Grove, 1993; Hastings, Stead, & Webb, 2004). Distress caused by health promotion advertising might impinge on psychological wellbeing in the short term, and possibly cause long-term psychological damage. Concern also exists over violations of personal autonomy (Turoldo, 2009) and stigmatization and unfair targeting of vulnerable groups (Guttman & Salmon, 2004; Hastings et al., 2004). However, informed by utilitarian ideas, many ethicists contend that the public good can justify limited interference with other moral considerations (Childress et al., 2002; Nuffield Council, 2007). This places responsibility on practitioners to weigh and compare any impacts on ethical principles with potential benefits (Turoldo, 2009).

Several commentators have examined the ethics of distressing health advertising. Guttman and Salmon (2004) and Hastings et al. (2004) describe potential ethical problems, while Duke et al. (1993) explain how problems can be viewed from differing ethical perspectives.

Aware of the ethical concerns that some have with distressing advertising, but proceeding on the basis that fear-arousing approaches are generally effective and justified, Williams (2011) makes recommendations pertaining to how individual campaigns might be made more ethically congenial. It is our view that Williams' paper is an important contribution to the ethics of distressing advertising, although unlike Williams we regard the literature on the effectiveness of distressing advertising as inconclusive (see subsection "Empirical evidence for the effectiveness of distressing advertising"); thus, rather than operate from a general assumption that distressing approaches "work" (or that they do not), we will suggest that a case will need to be made for specific interventions, using a range of arguments for effectiveness. However, in this paper our concern is not so much how to improve the ethical aspects of a campaign, but rather how advertisers should go about evaluating whether or not a distressing advertising campaign is ethically defensible to begin with. Our aim, then, is to outline a framework to help advertisers to make decisions regarding the ethical acceptability of a planned fear-arousing campaign. Using the public health ethics literature as a guide (Childress et al., 2002), we suggest that distressing advertising can be ethically permissible provided that it satisfies conditions of *effectiveness*, *proportionality*, *necessity*, and *least infringement*, and that a *public accountability* process is followed. Taking account of the empirical uncertainties, we then provide suggestions as to how prospective interventions might be evaluated against these criteria.

Definitional issues

"Distressing advertising" can be defined as advertising that causes distress—understanding "distress" to refer to negative emotional states such as fear, disgust, anxiety, remorse, and sadness. Such advertising can be taken to include the use of aversive imagery, aversive verbal or print descriptions, or disturbing themes, as well as the mere provision of risk information. The definition is deliberately inclusive because it is likely that different techniques raise different levels of ethical concern, which will be relevant to determining whether a particular form of advertising is ethically acceptable. Also, while we agree that any potential to cause distress raises ethical issues, we think it plausible that the type and level of activity directed toward justification should be in proportion to the likelihood and severity of possible adverse consequences. Thus we suggest that at a low level of risk, such as the mere release of information to a population that would not be considered psychologically vulnerable, ethical review may involve only a process of self-assessment or reviewing material with colleagues. Higher risk campaigns, such as those that use traumatic imagery or target vulnerable groups, would require a more rigorous ethical review. We deal more fully with the issues regarding extent of ethical review in the section "Intensity of ethical review" toward the end of the paper.

Ethical objections to distressing public health advertising

Three broad types of reasons have been identified as to why the use of distressing advertising might be considered ethically problematic. It might harm individuals, restrict individual autonomy, and compromise social equity (Guttman & Salmon, 2004; Hastings et al., 2004). First, distressing techniques may cause harm because they impinge on individuals' psychological wellbeing. Although quantifying distress caused by health advertising is difficult, we note that harms may not be trivial. During 2007, the advertisement that attracted most formal complaints (774) to the UK Advertising Standards Authority (ASA) was an anti-smoking advertisement (ASA, 2007). During 2003 an advertisement for heart disease (92), and during 2008 a children's charity that portrayed child abuse (840) and an anti-smoking advertisement (215), were in the top 10 most complained-about advertisements (ASA, 2004, 2008). All advertisements contained distressing images and themes. The major focus of complainants was the potential of advertising to cause distress, with effects on children particularly emphasized. Others cited offensiveness, suggesting that the images and themes might have violated standards of community taste.

At the lesser end of the spectrum, these harms may manifest as temporary feelings of unease. More serious effects could possibly accrue from presentations of traumatic health events that reactivate symptoms of disorders such as health anxiety or posttraumatic stress disorder in vulnerable people (Riskind, Black, & Shahar, 2010). For example, many people involved in traffic crashes or myocardial infarction experience post-traumatic distress (Ayers, Copland, & Dunmore, 2009; Ehring & Ehlers, 2011) which may be aggravated by exposure to vivid media recreations of these events. Theories of emotional disturbance emphasize the contribution of imagery (Holmes & Matthews, 2005), and presentation of either images or verbal descriptions can lead to symptom aggravation (Kleim, Wilhelm, Glucksman & Ehlers, 2010). Mass-reach advertising is a blunt weapon, and it is often difficult to target messages in ways that avoid vulnerable individuals or groups.

Also, distressing advertising might be more likely than nondistressing advertising to stigmatize vulnerable groups (Guttman & Salmon, 2004). The use of extreme approaches to target individuals' health behaviours suggests that these behaviours, and the individuals practicing them, are sufficiently intractable or dangerous to the community to warrant such

approaches. The problem is compounded when targeted behaviours, such as drug use or drunk-driving, contravene social norms. This threatens harm in two ways. It can directly harm group members by degrading their self-images or their perceptions that they are valued by society, but also, stigmatization can be socially divisive, and members of the group could become more vulnerable to abuse, ridicule, and social exclusion (Guttman & Salmon, 2004). An example of the latter would be the implications carried by a distressing advertisement that carriers of sexually transmitted diseases are blameworthy for contracting the disease and unconcerned about risks to others.

Second, distressing advertising might be objected to on the grounds that it can compromise the degree to which people can exert autonomy or sovereignty over their lives (Guttman & Salmon, 2004; Turoldo, 2009). Distressing techniques threaten to undermine people's autonomy in two ways. First, they intrude into normal life, and audiences are not given opportunities to consent, withdraw, or express dissent to the use of these techniques. Of course, this problem is common to most public health interventions, and the objection stands irrespective of whether the intervention may be harmful or not. Nevertheless, concerns about consent and withdrawal arguably become more compelling when interventions have the potential to cause harm or offence.

Further, respecting autonomy is normally taken to mean that people should be able to make decisions on the basis of their deliberations of the costs and benefits of lifestyle change. Distressing advertising might threaten autonomy if it uses emotion to suppress or bypass reasoned decision-making (Turoldo, 2009). For example, Hill et al. (1998) report using distressing techniques to "develop a conditioned association between the images of bodily harm and the act of smoking" (p. 7). This strategy might adversely influence the extent to which people will act or are able to act in accordance with their considered deliberations of whether or not to continue smoking.

A third reason that distressing advertising has seemed ethically problematic relates to issues of social justice and equity (Guttman & Salmon, 2004). A public health policy that discriminates against particular sections of society, or which is targeted at some groups but not others, might be considered unfair and for that reason ethically unacceptable (Kass, 2001). For example, Durkin, Beiner, and Wakefield (2009) suggest that distressing advertising might assist lower socioeconomic status (SES) smokers to quit. To do this would mean that advertising is targeted toward these groups. This obviously places lower SES groups at greater risk of distress than other groups, particularly as they can experience greater difficulties in changing behaviour (Phillips & Klein, 2010). Also, as previously mentioned, the obvious targeting of extreme advertising could carry unintended messages that some groups require "special" attention and, as a result, they could become stigmatized (Thompson, Barnett, & Pearce, 2009), thus again threatening to breach a principle of equity.

The use of distressing public health advertising can be ethically problematic for the reasons discussed. However, none of these reasons appear sufficient to show that such techniques are *never* ethically acceptable, since each is potentially defeasible through consideration of other factors. For example, distress induction might be defended if it can be shown that such techniques are beneficial in terms of public health outcomes, and that the harms are not so great as to outweigh these benefits. Here we are recognizing the commonly accepted view in medical and public health ethics that considerations of benefit can override worries relating to harm (e.g., Kass, 2001). Similarly we suggest that considerations of autonomy and equity can sometimes be defeated by other ethical considerations; for instance, we think that if

interfering with people's autonomy by exposing them to distressing advertising without their consent is required in order to protect the public good then such interference might be ethically acceptable. Indeed, it is difficult to justify many public health interventions otherwise, since procedures for protecting autonomy, such as consent and withdrawal, often cannot be meaningfully pursued (Buchannan, 2008).

Conditions governing the ethical use of distressing health advertising

The potential ethical dilemma in using negative emotion in public health advertising brings into focus the need to formulate conditions to be met before a prospective advertising campaign can be deemed acceptable. Conditions governing public health interventions in general have been discussed elsewhere (Childress et al., 2002; Kass, 2001; Turoldo, 2009). We base ours on Childress et al. (2002), who propose the conditions of *effectiveness*, *proportionality*, *necessity*, *least infringement*, and *public accountability*.

No public health intervention is ethically acceptable unless it satisfies a condition of *effectiveness*, which refers to the capacity to achieve positive intended health outcomes. Second, the condition of *proportionality* asserts that the public health benefits are not to be outweighed by other ethical considerations, including those of harm, equity, and interference with autonomy. Third, the public health intervention must be *necessary*, in that there must be no equally effective but more acceptable alternative to the proposed intervention. Fourth, the public health intervention must involve the *least possible infringement* of other general moral considerations. Childress et al. (2002) give the example of a breach of confidentiality. Even if a breach of confidentiality is effective, proportionate, and necessary, it should involve disclosure only of the minimal information needed to achieve the desired objective, and only to those who need the information (p. 173).

Childress et al. (2002) use the term *public accountability*, a procedural requirement to ensure openness and transparency by providing a coherent public explanation of agency activities and their implications. This goes beyond explaining and justifying decisions made. Public health agents could also solicit the views of the public, including important stakeholders, *before* making decisions that might adversely affect the public. This is because stake-holders might have differing views about, or provide important information regarding, the nature and value of the harms and benefits of a proposed intervention, and these may be pertinent to formulation and resolution of the competing ethical considerations. Moreover, it is arguable that advertisers should not assume a role of moral superiority by making and accepting ethical justifications for their actions without taking account of public opinion (Buchannan, 2008). In a pluralistic society, views regarding the *acceptability* of public health interventions are to be solicited prior to their design and enactment.

Evaluating the likely effectiveness of proposed programs

Empirical evidence for the effectiveness of distressing advertising

To demonstrate effectiveness, it must be shown not only that distressing content brings benefits, but also that the *distressing components actively contribute to this effectiveness*. In other words, a message presented in a distressing manner ought to be more effective than the same message presented in a non-distressing manner. As remarked earlier, some commentators discussing the ethics of fear-arousing approaches proceed on the basis that such approaches are generally effective (see Williams, 2011). We, on the other hand, regard

the literature on the effectiveness of distressing advertising to be inconclusive. Ruiter, Kessels, Peters, & Kok's (2014, this issue) review of meta-analyses, for instance, suggests that distressing components might not actively contribute to effectiveness. In terms of the laboratory work, our interpretation of the evidence from meta-analyses (e.g., Peters, Ruiter, & Kok, 2012; Witte & Allen, 2000) is that fear-induced distress can be effective given a suitable combination of message, audience, and context. While messages can be designed according to best practice guidelines and delivery strategies can be chosen to maximize the likelihood of success (Williams, 2011), it is difficult to change audience characteristics that moderate the effectiveness of distressing advertising and such effectiveness may only be evident in subgroups. Possible moderating variables include objective and perceived vulnerability to the health threat (Freeman, Hennessey, & Marzullo, 2001; Kessels, Ruiter & Jansma, 2010; Liberman & Chaiken, 1992), self-efficacy (Peters, Ruiter, & Kok, 2014, this issue; Witte, Berkowitz, Cameron, & McKeon, 1998), self-concept (Harris, Mayle, Mabbott, & Napper, 2007) and defensive coping style (Brown & Locker, 2009; Brown & Richardson, 2012).

In advertising research, the external validity of conclusions drawn from laboratories should be tested in field environments (e.g., Batra & Vanhonacker, 1988; Calder, Phillips, & Tybout, 1981). Problems with external validity could be attributable to laboratory demand characteristics, the inability to reproduce the "real world" environments in which advertising is encountered (e.g., repeated exposure to the message over a length of time in a competitive media environment), and the difficulty in measuring sustained behavioural change (Hastings et al., 2004). Field studies could provide evidence that distressing approaches work in "real world" settings. However, those that exist are often hampered by internal validity problems, and cannot directly compare the same messages presented in distressing and nondistressing ways. Some smoking studies have used nonrandomized comparisons to isolate distressing components of advertising. Borland et al. (2009) and Hammond et al. (2007) examined crossnational comparisons to assess the effects of distressing imagery presented on cigarette packaging, while Durkin et al. (2009) took advantage of smokers' differential exposure to differing styles of antismoking advertising to examine relationships between distressing advertising and smoking. These studies suggest that distressing approaches might have been effective, although one study compared messages that differed in content as well as presentation (Durkin et al.). Also, these need to be considered beside other field evidence suggesting that such approaches are less effective (Albarracín et al., 2005). Unless stronger evidence emerges from field studies, we regard evidence for the hypothesis that distressing approaches add to the effectiveness of health messages to be suggestive rather than conclusive.

How to evaluate the future effectiveness of proposed programs

Nevertheless, it must be allowed that it might be possible to make empirical arguments for the efficacy of distressing advertising in *specific* contexts. For instance, the use of a distressing approach to promote child restraint in cars has proved effective (Will, et al., 2009), possibly because it targets a group (parents) who are highly motivated to take an easily-administered precaution. So, granting this can we say some more about what should be considered when assessing the effectiveness of a proposed distressing advertising campaign?

A first step is to be clear on what constitutes an "effective" campaign. In smoking cessation campaigns, the incidence of sustained smoking cessation represents a gold standard with tangible public health benefit. However, campaign objectives might sensibly include

stimulating quit attempts, intentions to quit, consideration of quitting or simply raising public awareness. These outcomes need to be related to the likelihood that they will lead to sustained cessation. We believe that this is possible, as sufficient prospective evidence exists to allow noncessation outcomes to be weighted in terms of their usefulness compared to cessation. Webb and Sheeran (2006), for example, calculate the likelihood that a given level of change in behavioural intention will manifest as behavioural change. While the available prospective data may not always allow estimates to be made at this level of precision, broader estimates of the likelihood of behaviour change can often be made.

The next step is to make a theoretically and empirically informed argument as to how the induction of distress can augment effectiveness with respect to the intended outcomes. An argument for likely effectiveness would require demonstrated capacity to define and access target groups, a clear theoretical rationale as to how distress will improve effectiveness, an easy to implement behaviour, and would include components that will allow a distressing approach to work(such as self-efficacy; Will, Sabo, & Porter, 2009) and adherence to principles of good message design (Williams, 2011). The third step, empirical justification, could be achieved by arguing precedence: that similar distress inductions have been effective in similar target groups in the past. This could be obtained from the empirical literature or from unpublished evaluations of previous campaigns. Another source of data, particularly for new campaigns, could be derived from pilot or formative testing that suggests that distress induction is efficacious in achieving the desired outcomes.

Assessing proportionality, necessity, and least infringement

Assuming effectiveness, advertisers need to be confident that the anticipated benefits of a proposed distressing advertising campaign will exceed its expected ethical or moral costs. This requires, first, identifying the moral costs involved in a particular distressing advertising campaign, including the nature and severity of likely harms, and, second, weighing the moral costs against the expected benefits.

With respect to the first requirement, it should be emphasized that little attention has been paid to the range, incidence, or extent of harms incurred by distressing advertising. The lack of empirical evidence means that we are unable to make generalizations about the likely effects of distressing advertising. However, this does not necessarily mean that estimations of harm cannot be made for specific cases. In the absence of research evidence, we recommend (1) examining responses to previous campaigns to determine where public sensitivities might lie, (2) piloting test material with recipient audiences to identify possible harms, and (3) monitoring campaigns to ensure that harms are detected. At a basic level, piloting could employ qualitative techniques to examine both expected and unexpected effects of advertising and informal monitoring of public complaints. Higher risk materials might also warrant a more systematic investigation. The range and depth of testing and monitoring should be determined by risk factors such as the level of distress intended and the likely number and characteristics of message recipients.

Of course, this raises the questions of how advertisers are to identify materials likely to cause harm and how to weigh costs against benefits. The previously described complaints to the UK Advertising Standards Authority (ASA, 2004, 2008) suggest that graphic portrayals of injury or illness, or intense negative emotion, such as pain, are distressing, particularly if they involve children. One reason we value the process of public accountability (see section below) is that those responsible for designing and implementing advertising campaigns may

become habituated to distressing material and, therefore, underestimate its capacity to cause distress.

Regarding the requirement to weigh ethical costs against putative benefits, several considerations make a material difference to the relative weightings of the competing considerations. In particular, the more severe and widespread the costs, the higher the expected public health benefit will have to be to offset them. A campaign that threatens to cause high levels of distress, for instance, will be much easier to justify if it has a high probability of success than if it has a low to medium probability of success. Of course, weighing the likely costs against the putative benefits involves an element of subjective judgment that will reflect social and cultural influences. However, this is not to say that comparison ought to be avoided. Indeed, engaging in this weighing process is an inescapable part of responsible ethical practice.

Sometimes, comparing the costs with the likely benefits will be a straightforward matter. For instance, a campaign involving a moderate fear induction to stimulate an easy-to-implement behaviour with obvious public health benefit might be fairly easy to justify. Where it might be more difficult to discern the relative weightings (or to determine which considerations carry greater weight), consulting others, including the public (especially important stake-holders) can help advertisers to arrive at more defensible positions regarding the proportionality of a prospective public health campaign. However, if after consideration of all relevant views there is still a position of equipoise, then in our view the campaign probably ought not to be conducted in its intended form (and especially if the campaign carries the potential to cause serious harm).

The condition of necessity requires that there are no equally effective but more acceptable alternatives to the distressing advertising campaign under consideration (where these are to be taken to include both distressing and nondistressing alternatives). Other papers in this issue (Kok, Bartholomew, Parcel, Gottlieb, & Fernández, 2014; Ruiter et al., 2014) make the case for alternatives to fear appeals, through interventions that improve the capacity of people to regulate their behaviour or manipulate environment contingencies (Berke, Koepsell, Moudon, Hoskins, & Larson, 2007). It must be borne in mind, though, that a truly alternative tactic should perform a similar function in the behavioural change process. For example, an intervention that aims to develop behavioural skills will not provide a direct alternative to a distressing message, because the former is directed toward decision enactment while the latter is designed to influence risk perception. A more direct alternative might be to use a humorous message to increase risk perceptions. Overall, a moral justification for a distressing advertising campaign would need to show some awareness of alternatives for achieving specific goals, and argue that such alternatives are either less effective or unsuitable for other reasons. Valid arguments for using distressing approaches might be that alternatives are less effective, unfeasible, have their own moral costs, or are already being implemented, or that maximum benefit would be achieved by using both a distress-based approach and its alternative.

The condition of least infringement requires that the possibility of harm be minimized to the least that is necessary to produce the intended effect. This question is important because early work in fear-based advertising suggests that any fear effects are linear or monotonic (Janis & Leventhal, 1968). To avoid the temptation to simply maximize distress (Peters et al., 2014, this issue), intervention goals should be clearly defined and a means of identifying minimally sufficient distress to achieve them needs to be established. It would be prohibitive to pilot test

incrementing levels of distress (or other moral costs) to establish the least necessary, and we do not suggest it. Rather, advertisers ought to bear this consideration in mind, and develop and test the most moderate distress inductions that they believe would be effective. Advertisers might also think beyond simply controlling the degree of distress. Other strategies to reduce moral costs may be to improve targeting to minimize exposure of non-target groups (e.g., cigarette packet advertising is unlikely to affect non-smokers) or using pilot testing and monitoring to identify and reduce stigmatizing or offensive content.

Public accountability

In our view, distressing advertising will normally be possible to justify only if public attitudes have been considered before designing and enacting an intervention, and a publicly available explanation and justification is offered for interventions that are enacted (Childress et al., 2002). Where there is potential to cause nontrivial harm or offence, it will probably be necessary to actively solicit public opinion about the approach that is considered. Further, soliciting public opinion can inform the evaluation of whether the other conditions have been met. For example, the public view can be important (although not necessarily definitive) in determining potential harmfulness or offensiveness of differing styles of advertising or the weighting of such harms against potential benefits. Understanding this will also help to determine how intensive an ethical scrutiny a given program requires.

This gives rise to the questions of how to solicit public opinion and how to interpret the outcomes of this. One way is to allow stakeholder input from representatives of communities that are likely to be affected by advertising. Such approaches are already widely and effectively used when intervening with minority groups. This provides specific input at a range of levels, but its usefulness is limited by the extent to which such representatives actually represent group views. Many health authorities take a more direct approach, conducting population surveys concerning the feasibility and acceptability of distressing tactics. These surveys usually show public support, and often a desire for more "hard-hitting" approaches, although potential members of target audiences are often less enthusiastic (Peters et al., 2007; Vision Critical, 2011). Small-group formative research tests materials for effectiveness in terms of audience response. While searching for possible ethical problems may not currently constitute a key aim, formative research provides an opportunity to assess the potential for harm, public offence, and acceptability of the message to target audiences. Ongoing campaign monitoring is important, and can take different forms depending on the level of risk. At a basic level, complaints and comments from the public should be monitored and investigated if issues of concern are raised. More sophisticated and extensive survey and small group work might be necessary if materials are deemed likely to cause high levels of distress.

A second issue concerns how advertisers should integrate information pertaining to public acceptability into decision-making. Public acceptance surveys often simply question whether specific presentations are acceptable, and responses may well be predicated on the (contestable) perception that distressing messages work when alternative strategies do not. This problem could be reduced by employing a line of questioning that examines the extent to which respondents feel that content could cause distress and whether, and how much, distress is acceptable. However, it is doubtful that public opinion should carry weight only if it is predicated on accurate perceptions of the benefits and risks attached to such advertising techniques. Although it is clearly desirable for the public to base its opinions on accurate perception—and efforts should to be made to properly inform the public—public opinion

carries weight independently of the accuracy of the perceptions on which opinion might be based. In other words, we believe it to be important, on ethical grounds, to consider public views and to accord them a moral weighting for the purpose of deciding whether an advertising campaign is acceptable or not, however poorly informed the public might be.

This leads to the question of how cases are to be negotiated where public opinion appears at odds with what is known about the effectiveness of a proposed advertising campaign. For instance, the use of distressing approaches to promote child restraint in cars may be potentially effective (Will et al., 2009), but, even if distress is minimal, the portrayal of injuries to children could be considered unacceptable by the wider community. As with other conflicts between different ethical considerations, such cases will have to be resolved on a case-by-case basis with due attention being paid to the strength and scope of public opinion. Also, regard should be given to whether such views are likely to be transient or susceptible to change if challenged. A public opinion that is of a transient nature or that does not reflect strongly held views is likely to carry less moral weight than one strongly held over a long period of time.

Interestingly, Peters et al. (2014, this issue) found that some intervention developers cited public expectation as a reason for using distressing advertising. Implicit in this view is the idea that such an approach, even if insufficiently effective, could be justified by recourse to public expectation. We have argued that effectiveness is a necessary condition, and reject the view that a public acceptability argument would be sufficient to justify an ineffective campaign.

Intensity of ethical review

A summary of the conditions and how they might be evaluated is given in Table 1. As touched on earlier, we suggest that the intensity and extent of ethical review will have to be decided on a case-by-case basis. For instance, higher risk campaigns that use traumatic materials or target vulnerable groups are likely to require higher scrutiny in terms of establishing effectiveness and harms that might accrue. Also, campaigns that are ongoing or designed to access large populations may require greater scrutiny than smaller scale campaigns. We acknowledge, of course, that identifying risk is complicated by the lack of an evidence base that tells us which materials are likely to cause nontrivial harms and in which contexts, and research is urgently needed to improve this. Nevertheless, we recommend that if program developers are uncertain as to whether materials could cause ethical problems, it would be wise for them to "err on the side of caution" by monitoring possible adverse effects of distress during pilot testing and campaign evaluation.

Table 1. Summary of recommendations for possible actions applicable to each consideration

Effectiveness	• Be clear as to what constitutes effectiveness
	• Show clear theoretical rationale for the use of distress in the context of the specific campaign
	• Target groups for whom distress will be effective
	• Include intervention components, such as self-efficacy enhancement, that will improve effectiveness of distressing messages
Proportionality	• Examine responses to previous campaigns

	• Pilot-test materials that might cause distress and monitor the audience for signs of harm
	• Weigh putative benefits against likely moral costs, paying attention to severity and extent of interference with other moral norms and likelihood of success
Necessity	• Ensure that equally effective but less potentially harmful or ethically challenging alternatives are discounted
Least infringement	• Consider how to minimize the moral costs of an intervention during the design stage
Public accountability	• Ensure that regard is paid to the strength and permanence of public opinion during design and implementation stages
	• Ensure that the values and moral standards of the community are incorporated into decision-making

Conclusion

We have argued that the deliberate induction of distress in health advertising brings ethical concerns, which can potentially be offset against intervention benefits. However, advertisers face real uncertainty in gauging whether distress can be effective, for which the evidence is inconclusive, and balancing that against possible harms, which have not been subject to extensive research attention. In this situation of uncertain gains and losses, we urge those involved in the development and implementation of distressing forms of advertising to (1) not treat distressing approaches as a ''go to'' option, and (2) try to identify possible harms when preparing and monitoring campaigns. We do not advise the forgoing of the use of distressing approaches, but that advertisers be clear about why materials are used, make specific justification for doing so, and, if nontrivial distress is anticipated, pilot test materials and monitor campaigns with a view to identifying possible moral costs.

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