

## On individualism, environmentalism, and the degree of complexity needed in obesity prevention: a response to Mokdad (2003)

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Dear editors,

In his editorial to SPM's recent special issue on “Obesity”, Mokdad (2003) depicts a perspective on the obesity epidemic which culminates in the conclusion that “It is time for all of us to change our behaviours and adopt a healthy lifestyle” (p. 144), and the call “Let us all eat a balanced diet and restore physical activity to our daily routine” (ibid.). Both come after reflections on a number of other options (medication or surgery, some technological possibilities such as bicycle-like office chairs, and environmental interventions, the latter of which will be the focus of this letter) which are judged to be principally pertinent but eventually too expensive. More importantly, they are regarded as unnecessary for people to behave in a way that prevents obesity.

To be honest, these assertions came to us as an incredible surprise after what we had read in the first three paragraphs of Mokdad's editorial. Namely, he vividly describes an environment (!) thoroughly preventive of sedentary lifestyles and unhealthy diets, and providing a multitude of opportunities to be physically active and nutritionally sensible (specifically, Mokdad describes his homeland in Beirut, Lebanon). Thus, by way of this anecdotic and in our view highly instructive portrayal, Mokdad makes an incredibly clear-cut case in point for the effects of the environment on obesity-related behaviour. Ultimately, however, he dismisses environmental interventions as unnecessary, and resorts to an in our view rather individualistic plea to “all of us” to, if nothing else, behave healthily.

Now, to prevent any misunderstanding to begin with, we do not disagree with this plea. Public health surely knows enough on behaviour and health to make this kind of recommendation to each and every member of our respective

societies. However, we certainly do object (1) that it will be all that simple, and (2) that we can put out of your minds policy and environmental approaches in obesity prevention. Let us justify these two objections by referral to a “simplex”-model of obesity and health shown in Figure 1. It is “simplex” because it tries to compromise between a sufficiently “simple” way of looking at things and a degree of theoretical “complex”-ity we judge necessary.

ad (1): First of all, health-related behaviours frequently are highly habitual, i. e., evolve in early life and grind in over years or even decades (actually, Mokdad hints at this in his anecdotic report; in lieu of his obesity-averse upbringing, we have to admit some envy). To change from unhealthy to healthy habits, people usually have to go through numerous processes which have been extensively studied in the behavioural sciences, especially health psychology (e. g., Schwarzer 2001). In particular, they have to acknowledge personal susceptibility to the given health risks (risk perceptions), come to a favourable cost/benefit-balance (i. e., positive outcome expectancies have to outweigh negative ones), and acquire the belief that they are able to change the behaviour (self-efficacy). Especially the latter two are not at all trivial. Fatty foods taste good, for instance: (from his childhood, the present first author recalls enthusiastic birthdays celebrated at restaurants advertising with a big M despite a mother who would have been willing and able to pay more in an alternative location). In other words, the “outcome” of a feeling of instant pleasure is just about certain. Also, sustainably rooting physical activity into a so far sedentary daily life requires considerable competencies in self-management. Finally, to lead a healthy life motivated by feelings of social responsibility (Mokdad refers to this as being a “role model”) has been

shown to happen (Kals & Montada 2001) but at least implies a strong resistance to the individualism virulent in our societies.

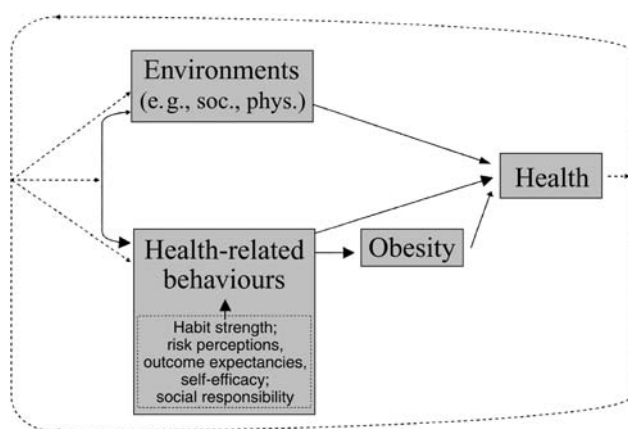
ad (2): Regarding the environment, Mokdad states that "...without environmental changes, we can still eat a balanced diet and be physically active" (p. 144). Well, yes, if we'd be perfectly rational, self-controlled, and compliant human beings, this might be the case; at least in our neighbourhoods, people tend to be more flawed (and that, alas, includes the authors). More importantly, three other arguments speak out loudly for including policy and environmental approaches as a prerequisite for efficient behaviour modification by public health. First, many studies have shown that more or less simple changes in people's environment can influence e.g. their physical activity. For instance, Blamey et al. (1995) reported that simple signs at choice points between stairs and escalators in underground stations to a large extent increased use of stairs, and Sallis et al. (1990) found positive associations of the plain spatial proximity of exercise facilities and the frequency of exercise behaviours (for an overview, see Sallis et al. 1998). In other words, and as Figure 1 suggests as well, behaviours are in fact influenced by the physical and social environment. As these are potentially within the reach of health promotion policies, we cannot see why we should not target them (all the more since the studies just cited indicate that this does not have to be horrendously expensive; on the contrary, even civic practitioners have asserted that "Policy and environmental approaches may arguably have a greater impact [than individually focused approaches to behavior change; note by the authors] because they influence the whole culture and are less costly and more enduring"; West Virginia Bureau for Public Health, 1997, p. 6). Second, a recent European study has shown that the health effect of physical

activity is stronger if residential opportunities are perceived as good (vs. bad, most notably for women; Rütten et al. 2001). Last but not least, and especially taking into account the issue of social responsibility brought up before, societies are not only made up of John Q. Publics. Economically and otherwise much more powerful players such as governments, industries, the media and interest groups co-determine many environmental factors that contribute to obesity-related nutrition and activity patterns (Hill & Peters 1998). Indeed, at the very heart of health promotion as a policy lies the concept of healthy policy as an intersectoral strategy (WHO 1986)!

To make sure, these reflections are not claimed to be remarkably innovative – in fact, many related assertions can be found in the other editorials of the "Obesity" issue. E.g., Panico (2003) stresses the need to put pressure on the food industry to join public health efforts, Galuska (2003) refers to school policies such as increasing the frequency and quality of physical education classes, Beer (2003) cites the "Suisse Balance"-programme which includes preventive measures at worksites, and Somaini (2003) argues for architectural and urban planning options to enhance people's opportunities for physical activity in their residential environments. Also, we re-iterate that we do agree with Mokdad that everyone as a citizen of a community actually should lead a healthy life, both for the sake of one's own as well as of the public's health (see also the feedback loop in Fig. 1). However, we do disagree that this assertion sufficiently lives up to the obligations of public health as the science and art of preventing disease and promoting population health. Most importantly, the (re-)recognition of the role of social and physical environment in the "web of causation" of risks factors such as obesity definitely stresses the relevance of creating environments and cultures supportive of healthy lifestyles. Of course, this should be complemented by educational measures sophisticated enough to handle the complexity of individual behaviour change.

Finally, and linking the analysis back to Mokdad's childhood story of the Lebanon, it is not proposed here that transforming high-income economies such as the U.S. or Germany into such a pristine environment would be realistic – probably rather sentimental and maybe even debatable. However, it is argued here that the long-standing WHO-catchphrase "Make the healthier choice the easier choice!" is appealing not only on paper and for its ethics, but from the practical viewpoint of prevention and health promotion as well.

In sum, we hope to have contributed a tad to delineate just the right level of theoretical complexity we need to appropriately study – and eventually control, if not prevent – the obesity epidemic.



**Figure 1** A "simplex"-model of obesity and health

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