

## **Towards Planetary Health — revisiting the social determinants of health model**

The way we choose to view health has a profound influence of how we pursue it. The World Health Organisation (WHO) at its foundation in 1946 defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. However, already by this time, following the advent of modern antibiotics and the emerging belief that medicine could cure everything, the medical model health, that is, the focus on doctors and clinical intervention, became more and more dominant. The WHO definition however, points the way to a more holistic conception in the struggle to achieve better health and leads to the recognition of how social conditions have a profound effect on health. This in turn suggests that it is the context of people’s lives that to a large extent determines their health. This in itself was obviously not a new idea — after all the genesis of modern town planning was very closely associated with the struggle to improve health and predicated on the role of the environment in achieving that. But with the growing dominance of the medical model that realisation was pushed into the background. However, it slowly began to reassert itself and what became known as the Social Determinants of Health (SDH) model thus gained currency in the 1990’s as a ‘counter weight’ to the continuing hegemony of the medical model of health. Its clearest expression, in a simple but effective ‘rainbow’ diagram, was suggested by Dahlgren and Whitehead <https://esrc.ukri.org/about-us/50-years-of-esrc/50-achievements/the-dahlgren-whitehead-rainbow/>. This basic diagram has been enhanced in subsequent years, in particular by Barton and Grant.

What is, at least on the surface, a simple diagram, it seeks to illustrate the myriad influences on health as successive layers from the core genetic factors to the broader social, economic and environmental context within which people and communities live. The genetic and personal factors became known as proximal and the wider, what might be termed more distant factors as distal. Simple it may appear but the model is potentially very powerful and despite remaining marginal to mainstream approaches to health the influence of the model was sustained and informed an increasing number of WHO initiatives and reports such as its Health in All strategy. The latter was an attempt to integrate health perspectives in multiple strands of public policies outwith the strictly medical health programmes, such as Universal Health Care. These developments were accompanied by a growing realisation of the increasing impact of non-communicable diseases (NCDs). Sometimes termed diseases of affluence these were, paradoxically it seemed beginning to seriously impact poor communities, increasing mortality and morbidity and imposing what was termed a ‘double burden’ on the poorest countries with persistent rates of communicable disease being accompanied by rising rates of NCDs resulting in diabetes, obesity, and cardio-vascular disease (CVD).

The social determinants model offered clear insights into this process and focussed attention on the causes of ill health as distinct from the continuing and absolutely necessary efforts to improve mainstream healthcare and clinical practice. The WHO developed strategies for addressing NCDs which drew attention to the importance of physical activity, diet and increasingly air pollution. This awareness and strategy development was also widely reflected in health policy in high income countries with an increasing focus on obesity and physical activity, the latter being characterised by the UK’s Chief Medical Officer as a ‘wonder drug’.

The growing realisation and insight into the ‘environmental’ or distal causes began to be reflected, we might more accurately say reintroduced, in urban planning strategies as planning for health became a distinctive strand of theoretical and policy thinking. The term obesogenic environments was coined and there are now many examples of codes and toolkits for pursuing healthy or ‘salutogenic’ outcomes. It is nevertheless still difficult to conclude that this approach has achieved more than a marginal effect on planning policies. It is clearly consistent or complementary to more

mainstream concepts as 'compact' towns and cities but in which health is envisaged not so much as a principle but a contingent outcome. Planning for healthcare also remains fragmented, illcoordinated and often reactive with relatively few examples of strategic spatial integration of health and planning strategies.

So, should the social determinants of health model still be guiding the approach to planning and development given the new context and global challenges that we face? Whilst it offers powerful if under-used insights into the causes of morbidity and mortality it is important to stress that the various societal and environmental realms within it are treated as 'determinants' in a mechanistic and static way. The model is thus deterministic and not truly interactive or dynamic. In other words the various influences are treated as exogenous and the possibility, indeed probability, of their being influenced in turn by other proximate and distal factors and in particular human actions are not explicitly accounted for. If a more dynamic approach were adopted that, for instance, incorporated feedback loops whether negative or positive the power of the model would, it can be suggested, be significantly enhanced. Such a new or adjusted perspective would illuminate the generation and role of the truly distal causes such as climate change and biodiversity loss and the more proximate such as local air pollution. Such an approach would also offer an alternative perspective to conventional planning and health strategies which tend to treat health as a fragmented, contingent variable. The New Urban Agenda and in some respects the Social Development Goals (SDGs) for instance, deal with health as such as a desirable outcome - that arises from addressing pollution, lack of open space, contaminated waste water for instance rather than as a fundamental and cross cutting aim of urban policy. The concept of a "healthy city" in a more holistic perspective would be viewed as a functioning self-supporting organism rather than simply as an urban area in which most people could be said to be healthy. Similarly, expanding the scale, a vision of a healthy planet would be one in which ecosystems were functioning in a stable way to sustain health in the various biomes and in human populations. The human impact on biomes would in itself be seen to constitute a major determinant of the conditions for health. Thus in only one example, the destruction of vegetation and tree cover in the Great Rift Valley in Kenya has led to rapidly rising lake levels that have destroyed livelihoods and are threatening both settlements and fishing and farming. In this case human intervention has effectively fashioned the environmental and economic determinants of individual and community health in a very damaging way. The same is true of course at a global scale of the damage caused to the ozone layer by CFCs and by excess concentrations of CO<sub>2</sub> leading to climate heating. In this sense escalating climate change and environment degradation is quintessentially a health issue. It follows that dealing solely with the downstream effects will inevitably be frustrated. Climate change and collapse of biodiversity may thus be said to be the principal 'cause of the causes'; the ultimate distal determinants.

This change of perspective requires the social determinants of health model to be considerably enhanced or expanded. The concept of planetary health which has been gaining currency in fact demands such a change in perspective. At its heart would an interactive integrated model of the planet in which the health or effective functioning of each component or subsystem demands the health or effective functioning of the others. The emphasis thus shifts upwards in the casual chain. Struggling to control and reduce high levels of intestinal disease in a settlement where the water supply is continually contaminated is an impossible and unrelenting task. So it is for the island dwellers and those in flood and monsoon-prone coastal areas as sea levels rise and weather events become inexorably more severe. Many countries in the Commonwealth have weak manufacturing and tertiary production and rely heavily on primary resources and in this sense they are disproportionately at risk from the deterioration of climatic conditions and loss of biodiversity. The

causes and the effects are by no means co-terminus and acting as if they are however wellmeaning, is futile.

The shift in perspective being suggested, if translated into action, would potentially have very significant benefits for the health and well-being of the people of the Commonwealth by enabling the better capture of synergies between health, planning and biodiversity interventions. It would thus contribute to the delivery of the SDGs and provide an enhanced framework for sustainable cities.