# THE SLOW PROGRESS TOWARDS ENDING PREVENTABLE CHILD DEATHS

A recent ground-breaking study quantified neonatal, infant and child deaths from 2000–2017 at national and sub-national level in 99 low-middle income countries (1). Although globally 60 percent of the local districts examined showed sustained progress, the authors calculate that 58 percent of 123 million deaths could have been prevented had all areas experienced the same mortality rates as the best-performing regions in their country. Similar issues also exist in high income countries where there can be vast differences in health outcome by geography and ethnicity.

Governments, agencies and healthcare professionals need to make prudent choices to reduce such tragic and avoidable deaths, informed by data such as this in order to target interventions effectively. Such choices may be essential for progress towards achieving the United Nations Sustainable Development Goal 3.2 – namely, to end preventable child deaths by 2030. At first sight, the results from the study appear to suggest that greater attention should be paid to preventing such deaths in regions now shown to be clearly at high risk. However, as the authors point out, when the size of the population is greater in low-risk areas, the “prevention paradox”(2) operates such that the burden of preventable deaths is actually greater there than in high-risk areas.

Should the focus of intervention therefore be at the whole population level, rather than being directed largely at high risk regions? Answering this question requires thinking about factors associated with poor health in high- versus low-risk areas, and especially the extent to which citizens are free to influence such aspects through their own agency. It should be borne in mind that he issues may be different in low- versus high-income countries, where additional issues such as poor infrastructure and opportunity cost are other factors.

# INDIVIDUAL CHOICE

Much public policy for women’s and children’s health is based on the concept of promoting better individual choices, whether in terms of modifying behaviors or receiving access to healthcare services. However, choosing to adopt healthy behaviors depends on the interrelating triad of capability, opportunity and motivation (3). Our recent data from the UK showed that unhealthy behaviors before first or subsequent pregnancies, in terms of smoking, obesity or low folate status, were most prevalent in the adolescent age group and their presence was associated with other social problems such as drug or alcohol misuse, migration status, or domestic violence (4).

Such studies emphasize that making healthy choices is difficult for members of the population who live in low resource settings and who are socially, educationally, economically or politically disadvantaged. Unhealthy choices may be more attractive in terms of availability or affordability. Indeed, arguments from life history theory and evolutionary medicine suggest that the unconscious unhealthy choices made in such contexts are not inappropriate if a long lifeis not anticipated (5). Without a degree of agency resulting from some financial stability, a sense of empowerment and independence, the concept of ‘healthy choices’ can appear merely convenient and hollow rhetoric.

# CHOICES BY THE STATE

While there is a spectrum, governments that lean towards neoliberal policies tend to favour freedom of choice about health behaviours by their citizens, rather than focusing on the broader social factors underlying health – and especially health during early development. In times of austerity, during which health inequalities are arguably magnified, choosing policies aimed at addressing the wider social determinants of health may be deemed too expensive and therefore not prioritized.

The effects on women’s and children’s health are particularly acute. For example, by 2017/18 in the UK, one third of children (4.6 million) lived in poverty. They are more likely to have had a lower birthweight, to die in the first year of life or to be obese in childhood (6). These are all risk factors both for poor mental health in later childhood and beyond, and for chronic illness in adulthood. In New Zealand, child poverty rates doubled during the late 1980s and 1990s (7), a period during which there were big shifts in the political economy towards economic liberalism.

# SOCIAL EMBODIMENT - BEYOND CHOICE

The field of the developmental origins of health and disease (DOHaD) has, over the last three decades, provided insights into the ways in which the environment during early development affects the risk of later conditions such as the non-communicable diseases (8). More recently, DOHaD research has been extended to environmental effects on neurocognitive and emotional development of the young child. It is increasingly appreciated that epigenetic processes provide the mechanistic basis for DOHaD phenomena, by affecting gene expression in the developing embryo, fetus and child without altering the inherited genetic make-up (9).

It is now clear that such processes operate in all pregnancies across the whole population, not just at extremes such as maternal obesity or malnutrition. Yet fetuses, infants or children themselves have no ability or opportunity to make any choices. This lack of agency then extends to the adolescent or young adult, particularly to girls, who are less likely to remain in school and to have equal access to nutritional or other health requirements. These processes reflect the operation of wider system effects, included socioeconomic and ethnic factors, and the influence of peers and neighbours, which become embodied in individuals and pass from generation to generation (10). To this extent, they are largely beyond the realm of choice by individuals.

DOHaD research emphasizes that some of the factors that influence development in the ‘first 1000 days’ of life, from conception to age 2 years, are actually in place before a couple conceive a child, giving a new impetus to health promotion and advice in the preconception period. Thus, there could be a role for supporting prospective parents to make healthy choices. This accords with recent initiatives in, for example, engaging adolescents in co-creating initiatives to promote their health now and in turn that of the next generation (11).

# CAN POPULATIONS MAKE HEALTHY CHOICES?

When individuals do not realistically have a choice, whether as a result of lack of capability or opportunity, or of demotivating socio-economic contexts, then this reflects the failure of society to accord them the right to those aspects of life which permit choice. It implies a need for a broader perspective by policy-makers.

This raises the question of whether healthy choices can be made by populations and their agents, the policy community. Where democratic governments have the well-being of their populations firmly enshrined in health policy statutes, then choices are arguably being made at the population level. These are most often executed through the resulting legislation, such as taxation on sugar-sweetened beverages, banning smoking in public place, supporting antenatal care or financing parental leave.

However it has to be recognized that risks to health, especially from the wider environment, are increasingly out of the control of vulnerable populations or even the jurisdiction of their governments. For example, with respect to many of the factors DOHaD research considers, fundamental changes in food systems or in women’s equity are beyond the capacity of the individual or population to effect change.

# FACILITATING HEALTHY CHOICES

We argue that there are realistic opportunities to assist the promotion of healthy choices, from the level of citizens to that of international bodies. However, this requires acknowledging where agency lies.

Firstly, we believe that the key to improving the decision-making ability of those for whom it is most critical to make healthy choices lies in education. Curricula modifications are needed so that children are supported from what is arguably the most critical stage of life – the pre-school years – and onwards, in developing the cognitive and emotional skills essential for wellbeing, especially in the digital world, and for being resilient towards unforeseen challenges (12).

Secondly, in terms of healthcare support, the insight that the interventions should operate across the entire population argues for renewed investment in social medicine. Structural changes are needed to avoid social structures limiting individuals and societies from reaching their full potential (13). A shorter-term and needed initiative would be to prioritize funding for the interdisciplinary research necessary to develop such initiatives and to monitor their success.

Thirdly, we suggest that the inability of many individuals and population groups to make healthy choices should be revisited at the policy level. To pass responsibility onto individuals in contexts where they cannot make choices is irresponsible and poor policy making. While greater agency follows social and economic progress, this will be hampered by intergenerational echoes of previous challenges or ill-health and other systemic or structural aspects. Governments in countries at all levels of income and with different economic models need to avoid the trap of assuming that individuals have agency, when this is not the case for many contemporary challenges to health. We propose that there is a critical need to consider the nature of institutions necessary to deal with rapidly emerging new health threats from the environment at an international as well as national level.

# CONCLUSION

Although much attention has focused on the right of individuals to exercise choice over whether and how to live healthy lives, we argue that this is highly challenging, given the wider political and societal forces which underpin such challenges, especially for the socially disadvantaged. Nevertheless, the ability to make healthy choices to improve maternal and child health can be facilitated by structural and policy changes that more accurately reflect where agency lies.

# AUTHOR STATEMENT

All authors have made a substantial contribution to the conception, drafting and editing of the article. All authors approve the version submitted to Global Health Promotion.

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