

# Oral health inequalities—Developments in research, policy and practice over the last 50 years

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## Abstract

At times of major geopolitical conflict, macroeconomic crisis and the 'aftershocks' of the COVID-19 syndemic still having a global impact, it is the most vulnerable and disadvantaged in society who undoubtedly suffer the most. During these turbulent and uncertain times, it is essential that sufficient policy attention is given to tackling the persistent and stark health inequalities that exist both between and within countries. This commentary aims to critically reflect on developments in oral health inequalities research, policy and practice over the last 50 years. Despite often challenging political contexts, progress has undoubtedly been made in our understanding of the nature and underlying social, economic and political causes of oral health inequalities. A developing body of global research has highlighted patterns of inequalities in oral health that exist across the lifecourse, but less progress has been made in implementing and evaluating policy interventions to tackle these unfair and unjust inequalities in oral health. At a global level through WHO leadership, oral health is at a 'tipping point' with a unique window of opportunity for policy change and development. Transformative policy and system reforms co-produced with community and other key stakeholders are now urgently needed to tackle oral health inequalities.

## KEYWORDS

oral health inequalities, policy, research

## 1 | INTRODUCTION

In 2023 the world is in a precarious and uncertain time. A major war is taking place yet again in Europe and risks escalating into a global conflict. The war in Ukraine has already had major global economic impacts, with inflation rates in many countries at their highest levels for decades and a consequent cost of living crisis resulting in dramatic increases in food and energy costs, forcing millions of people into poverty. Global food supply chains have also been seriously affected by the war and there is an increasing risk of food shortages in many low-income countries. At times of political and macroeconomic crisis, it is always the most vulnerable and disadvantaged who

suffer the most. Before the current Ukrainian crisis, the COVID-19 pandemic had a devastating impact with 6.64 million deaths worldwide but again the most disadvantaged and vulnerable suffered the worst during what has been more accurately called a syndemic—the interaction of biological and social vulnerabilities that led to stark health inequalities in COVID-19 deaths.<sup>1</sup>

Although the COVID syndemic and the current cost of living crisis have undoubtedly greatly fuelled global health inequalities, prior to these calamitous events, growing concerns had been raised that socio-economic inequalities in health were already widening.<sup>2,3</sup> Very limited information is available on trends in inequalities in oral health, but trend data from England has shown that among 5-year-old

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children, inequalities in caries rates by levels of deprivation have remained relatively unchanged between 2008 and 2019—certainly no major improvement has occurred.<sup>4</sup> Tackling oral health inequalities remains a major global oral health policy priority. This paper aims to critically reflect on progress and challenges in addressing oral health inequalities over the last 50 years in terms of developments in research, policy and practice.

## 1.1 | 1980's—A golden age for public health

In many respects, the foundations of contemporary public health policy and practice were laid in the 1970s and 80s. Leading public health scholars and advocates including Nancy Milio, Geoffrey Rose, John McKinlay, Ivan Illich and Thomas McKeown were all highly influential figures whose radical ideas remain highly relevant 50 years later. These public health pioneers championed the need to focus on the underlying determinants of health, the 'causes of the causes', and called for a shift in focus from downstream individual preventive measures to upstream policies.<sup>5,6</sup> Illich and McKeown were highly critical of the mainstream narrative that improvements in mortality rates in many industrialized nations in the 19th century were the result of medical interventions, rather than broader social changes and improvements in living conditions.<sup>7,8</sup> Indeed the risks and dangers of modern medicine were recognized for the first time and eloquently described as clinical, social and cultural iatrogenesis.<sup>7</sup> Although Illich was vilified by the medical professions when he first raised concerns about iatrogenesis, there is now widespread recognition of these issues including for example, hospital acquired infections, antimicrobial resistance and the creeping medicalization of many aspects of modern life.

In the 1980s, traditional concepts of clinical prevention and health education were also challenged, including the limitations of the dominant high-risk approach and instead the need for universal whole population preventive strategies were advocated.<sup>9</sup> These critiques also highlighted the limitations of the 'top down' professionally led approaches to prevention and instead stressed the importance of empowerment and community action. These radical perspectives were then formulated and adopted by the World Health Organization in their bold and forward thinking Ottawa Charter Declaration for Health Promotion.<sup>10</sup> Although many subsequent WHO declarations on health promotion have been published, the Ottawa Charter remains the seminal global foundation for health promotion policy and practice. Building healthy public policies, creating supportive environments, strengthening community action, developing personal skills and reorienting health services as the building blocks of health promotion still provide a progressive and radical vision for health improvement and action to tackle health inequalities.

In 1980, despite the best efforts of the then Thatcher government to block publication of what was considered a very controversial and highly sensitive document, the Black Report was published, which was the first comprehensive assessment of socio-economic health

inequalities in the United Kingdom.<sup>11</sup> Although the Black Report stimulated considerable political and professional interest in health inequalities, it had limited policy impact due to political suppression. It was not until a new Labour government was elected in 1997 that the Acheson's Independent Inquiry into Inequalities in Health was published.<sup>12</sup> This comprehensive report documented evidence on patterns of stark socio-economic inequalities in both mortality and morbidity rates across the UK population. Data on oral health inequalities were submitted as part of the Acheson Review.<sup>13</sup> As one of the core committee members, Professor Sir Michael Marmot, has recently remarked: 'I remember it well. Aubrey (*Sheiham*)<sup>14</sup> came and presented the data to the Acheson Committee. It (*oral health data*) was among the clearest, most stark evidence of health inequalities that we had'.<sup>15</sup> In 2010 Marmot and his team were then asked by the UK government to review policy options to tackle health inequalities and promote greater health equity.<sup>16</sup> At this time many other countries were also publishing reports on health inequalities and at an international level the WHO published a very comprehensive overview of global health inequalities and made a range of policy recommendations to close the health gap.<sup>17</sup>

## 1.2 | Political context over last 50 years

The emergence of progressive public health principles and policies in the 1980s sharply contrasted with the shifting political discourse in many parts of the world. For example in the United States and United Kingdom, Reagan and Thatcher were dominant political figures with a shared neoliberal ideology that promoted globalization, deregulation, and the 'free market' economy. Public utilities such as water and energy supplies were privatized and there was a general shift away from state and public sector involvement in delivering core services towards growth of the private sector and an increasing emphasis on individual and personal responsibility. The ultimate goal of this ideological view was to create a 'smaller state' where the unfettered 'free market' would supposedly create economic growth and prosperity for all. In the early 1980s the term 'nanny state' was frequently used by right wing politicians and commentators as a pejorative phrase to denote the 'evils' of state interference in daily life and personal choice. As a consequence of this neoliberal agenda, during the 1980s and 1990s economic and social inequalities widened in many parts of the world, fuelling the stark health inequalities that were documented in subsequent national and global public health policy reports.<sup>16,17</sup>

In more recent decades the political context in many countries has become even more hostile to the public health principles and values of equity, fairness and inclusion. The rise in nationalism, authoritarianism and populism fuelled by demagogues such as Trump, Johnson, Orban, Putin, Duterte, Bolsonaro and Meloni has polarized political discourse and led to the oppression of religious minorities, LGBTQ+ groups, migrants and other vulnerable groups. This populist and polarized political discourse has also led to increasing public distrust in science, evidence and indeed trust in government and health and other professionals.

### 1.3 | Developments in oral health inequalities research, policy and practice

Despite these turbulent political times, what progress, if any, has been made in our understanding of oral health inequalities and what policy and practice responses have been adopted to promote greater oral health equity?

There has certainly been a rapid and steady growth in the number of peer-reviewed papers that have focused on oral health inequalities over the last five decades. Overall, however, most of these papers have presented fairly simple epidemiological descriptions of the patterns of socio-economic, and to a lesser extent, ethnic inequalities in oral health in mainly high-income countries. Useful systematic reviews of the international evidence on oral health inequalities have summarized the evidence on socio-economic inequalities in caries, tooth loss, periodontal disease and oral cancers.<sup>18–20</sup> Limited research has however focused on assessing trends in oral health inequalities over time. Influenced by seminal public health theoretical frameworks on the social and political determinants of health inequalities,<sup>21</sup> there has been growing research interest in exploring the underlying causes and pathways for oral health inequalities. There remains however a dearth of high quality research evaluating interventions to reduce the oral health gap, or indeed of studies assessing whether intervention generated inequalities occur in oral health. Over the last 20 years, professional international research networks and collaborations such as the IADR Global Oral Health Inequalities Research Network (GOHIRN) and the International Centre for Oral Health Inequalities Research and Policy (ICOHIRP), have been successfully established to provide a forum for discussion and development of research into oral health inequalities. The success of these networks and the growth of research interest and activity in oral health inequalities has highlighted how this topic has moved from the margins to the mainstream of oral health research.

Despite increasing awareness and understanding of the importance of upstream interventions, downstream approaches to prevention are still very dominant in health policy in general, and most certainly in relation to oral health.<sup>22</sup> The persistence of the individualistic downstream approach is due to a combination of interacting factors including health professionals' allegiance to the status quo and the fact that professional practice is still grounded in the dominant biomedical and behavioural paradigms. Evidence of the impact of upstream interventions is also limited due to the less well-developed methodologies that are appropriate to evaluate upstream policy approaches.<sup>23</sup> The WHO Framework Convention on Tobacco Control (FCTC) is often cited as the best public health example of how upstream policies can be implemented to promote health and reduce health inequalities.<sup>24</sup> The FCTC includes a range of complementary upstream, midstream and downstream tobacco control measures that collectively have had a significant global impact on reducing tobacco use and its related disease burden. Good oral health examples of upstream policies include the fluoridation of public water supplies and the increasing number of countries adopting a tax on sugar-sweetened beverages.

At a global policy level, significant progress has been made recently at WHO in recognizing the public health importance of oral diseases and of the need to tackle the stark oral health inequalities that exist across the world. After decades of policy neglect, a landmark WHO resolution on oral health (WHA74.5) led by Sri Lanka and sponsored by 41 countries was agreed in May 2021 at the World Health Assembly.<sup>25</sup> This concise resolution highlights the global public health significance of oral diseases and very importantly stresses the need to tackle the stark oral health inequalities that exist both between and within countries. The resolution advocates urgent reform of oral health systems and stresses the need for closer integration of oral and general health and the reorientation of oral health services towards more of a health promotion rather solely treatment approach. Following the adoption of the WHO resolution in 2021, a series of WHO policy documents have been developed to support policy implementation. In 2022 the WHO Global Oral Health Strategy was published and then endorsed at the 75th World Health Assembly in May 2022.<sup>26</sup> The Strategy outlines six strategic objectives to prioritize and direct future action. Socio-economic inequalities in oral health, the social and commercial determinants and the need for upstream policies are all clearly highlighted in the WHO Strategy. In November 2022 the WHO Global Oral Health Status Report was published, providing a comprehensive overview of the global burden of oral diseases and highlighting the urgent need for action by member states.<sup>27</sup> The Report also highlighted stark inequalities in oral health between countries and the grossly unequal expenditure on oral health between high- and low-income countries. The average per capita expenditure on oral health services in low-income countries was estimated to be just over 50 US cents, whereas the figure in high-income countries was 260 US \$—a staggering 500-fold difference. In January 2023 WHO published a Draft Global Oral Health Action Plan and supporting monitoring framework, outlining key policy priorities for stakeholders. The WHO resolution and supporting WHO policy documents provide a very clear mandate for the development and implementation of national oral health policies by member states including specific action to address oral health inequalities.

The report of the Lancet Commission on Oral Health is also due to be published in 2023 and oral health inequalities are one of the key themes that the Commission has been focusing on over the last 3 years. Lancet Commissions have the potential to raise the policy profile of neglected global health topics and can galvanize transformative and radical policy change through engagement with diverse stakeholders.

In contrast to the recent very encouraging developments at a global policy level, very little progress has been made in mainstreaming oral health inequalities initiatives at a clinical practice level. Clinical dentistry around the world is still largely provided through private practitioners whose business model is dependent on treating patients who are able and willing to pay for their dental care. Poorer, less educated and more vulnerable and socially excluded groups in society often struggle to access affordable and good quality dental care.<sup>28</sup> Even in countries with better developed public health dental

services where out-of-pocket dental charges are reduced or non-existent, only limited attention is focused on addressing oral health inequalities. There remains a very distinct disconnect between the traditional clinical approach to delivering dental care and a broader societal concern over inequalities in oral health. Even among more specialized clinical disciplines treating specific vulnerable groups such as children and people with special and complex needs, a very individualistic and biomedical clinical approach dominates, which fails to acknowledge the underlying intersection of factors that determine oral health status of their patient populations.<sup>29</sup> Some progress has been made in raising dental clinicians' awareness of ethnic and cultural diversity and broader understanding of disabilities, but a lot remains to be done to fully engage clinical dental staff in the oral health inequalities agenda. In other areas of health, progress has been made in developing equity toolkits to enable clinicians to deliver and develop their clinical care with direct consideration of health inequalities and the opportunities they have to make a difference.<sup>30</sup> Although some progress has undoubtedly been made in reforming dental undergraduate courses to highlight the importance of oral health inequalities, this topic remains somewhat marginalized and peripheral compared to the mainstream focus on core clinical topics. Oral health inequalities should be a cross cutting theme across the entire undergraduate curriculum to ensure that it is fully integrated and embedded in all areas of professional practice.

## 1.4 | Looking forwards

Despite many political, organizational and professional barriers this is undoubtedly an important time of opportunity for global oral health. The exciting developments at WHO have highlighted the global public health importance of oral diseases and help raise the policy profile of oral health among the broader global health and public health communities. At this time of opportunity and development it is critically important that the oral health inequalities agenda is also highlighted. If oral health is considered as a basic human right, then unfair and unjust inequalities in oral health need to be tackled as a policy priority. Dental public health advocates therefore need to ensure that oral health inequalities are included within emerging policy frameworks at national levels. At the launch of the WHO Global Oral Health Status Report, editor-in-chief of The Lancet Dr Richard Horton called for transformative change in oral health systems to tackle the grossly unfair inequalities in oral health that persist globally.<sup>27</sup> More of the same is no longer an option for policy makers—radical changes are needed in oral health policy and system reform to promote sustainable improvements in oral health equity. Meaningful long-term investment in prevention and health promotion is urgently required, but this must move beyond the merely downstream level with its inherent limitations in tackling inequalities, to instead truly embrace a broader upstream and integrated policy agenda linking directly with NCDs and broader economic and social development initiatives. Dental public health advocates also need to improve the understanding and awareness of oral health

inequalities with their clinical networks and professional organizations to promote equitable development and reform of oral health services. Lastly, oral health professionals and in particular, dental public health practitioners, need to support and facilitate community action on political and social transformation for greater equity. For too long oral health professionals have controlled and dictated the development of oral health policies—a new approach is now needed which instead 'empowers communities to develop capabilities needed to exercise collective control over decisions and actions in the pursuit of social justice'.<sup>31</sup>

## 2 | CONCLUSION

At times of major political and macroeconomic global shocks and the on-going challenges presented by the COVID-19 syndemic, around the world the health of the poorest, most disadvantaged, and most vulnerable is suffering the most. Over the last 50 years our understanding of oral health inequalities has undoubtedly moved forwards but there is still a pressing need for transformative change in policy and practice to address the underlying social, economic and political drivers of inequalities in oral health. At a global policy level, oral health is at a 'tipping point' and there is now a unique window of opportunity for policy change.<sup>32</sup> Action to reduce oral health inequalities must therefore be a core and fundamental element in policy development at global and national levels at this critical time.

### DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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