1 | INTRODUCTION

What does equity and justice in oral health look like? Whatever conception may come to mind while reflecting on this question, and no matter how far away we may be from that conception, it is a re-markable thing that the question itself is now comprehensible to a wide group of people. Fifty years ago, the idea of equity and justice being related to health would have been likely met with incredulous guffaws. It would have been said that the question is incoherent. Not everyone can be healthy or have good oral health. Nor can everyone be of equal health. Nor can everyone be healthy all the time. Surely, the correct question is what does equity and justice look like in the distribution of oral healthcare? It is a sign of progress that despite these and other possible objections to the question, we are now able to ask the question and then discuss and debate various conceptions of equity and justice in oral health. So where to now? In the following discussion, we present a quick conceptual history of healthy equity and health justice, some plausible outcomes from the COVID-19 pandemic for the public's understanding of these concepts, and some recent and relevant learnings for realizing equity and justice that could be useful for dental public health and beyond. For decades, research or scientific 'evidence' has been consistently presented in this journal and others identifying the causes and distribution of social group inequalities in oral health, both within particular countries and across the world. Researchers have also argued for particular policy actions to address such inequalities, including and beyond healthcare, as well as suggested conceptual frameworks such as linking oral health inequalities to other chronic diseases, social disadvantage, healthcare spending and quality of life.1 Nevertheless, the explicit and robust talk of equity and social justice in oral health is a relatively recent development that reflects progress in our reasoning as well as being responsive to important social and global transformations. The expanding scope of dental public health into the sphere of ethics and social justice is important to explicitly acknowledge. It is also necessary to do so that reasoning about equity and justice in oral health becomes a concerted and deep endeavour, and help it avoid being dismissed as just passionate rhetoric of yet another special interest or neglected disease advocacy group.

2 | RECENT HISTORY OF HEALTH EQUITY

This 50th Anniversary Special Issue of CDOE which explicitly focuses on inequalities, inequities and justice undoubtedly owes an intellectual debt to Margaret Whitehead. Her seminal contributions starting in the early 1990s bridged the epidemiology of health inequalities with normative reasoning about social equity and ethical health policies. Of particular relevance to this journal's readers is that her earliest health equity publications under the auspices of the WHO Europe Regional Office make clear reference to social inequalities in dental health.2,3 So, her well-known definition of health inequities as those social group health differences that are "unnecessary, avoidable, unfair and unjust" was informed by an awareness of oral health inequalities from the start. And, indeed, her definition has been used by many in dental public health as a guide for health equity analyses. Less well known within the public health community is that also during the 1990s, other WHO regional offices such as PAHO, various Latin American intellectuals, American academics, and international economic development institutions such as the Rockefeller Foundation and World Bank were also engaged in the conceptualization and ethical grounding of health equity.4 – 7 Some of these individuals and organizations were

particularly exercised by the im-pacts of hyper globalization, the dogma of market fundamentalism and impact of rising social inequalities on health inequalities in low and middle-income countries. Of particular note is that in 1993, the World Bank focused its annual report on health and presented a new metric called the Disability Adjusted Life Year (DALY).8,9 This metric aimed to measure the combined negative impacts of both morbidity and premature death (life years lost) across all health issues. The metric was aimed to improve health equity in countries by helping allocate health sector resources to those interventions that produce greatest reduction of health harms (DALYs). More economically efficient allocation of financial resources across all health issues would, it was asserted, improve equity in health across a population. Within international and UN development organizations, the economist-philosopher Amartya Sen had growing influence because of his trenchant analyses bringing together development economics/policies, social justice philosophy and a focus on health. Sen's work during this period does not explicitly discuss oral health inequalities. However, he has frequently discussed his experience of oral cancer at age 18. The hugely toxic radiation treatment he received saved him from certain death, but also resulted in permanent damage to his voice. So even for Sen, awareness of oral health inequalities, and differential access to decent oral healthcare within and across countries can be assumed to be present from the start in his reasoning about health equity within debates about economic development and social justice philosophy. Two remarkable aspects of the WHO Commission on Social Determinants of Health (2005–2008) ('CSDOH') are that it aimed to bring together many of the above prominent health equity thinkers and diverse reasoning about health equity from around the world. It then moved the discussions forward by synthesizing and linking the health equity discussions to broader discussions about social jus-tice.10 The CSDOH did not just aim to analyse and then identify interventions to improve health inequalities but saw the improvement of health inequalities/health equity as deeply inter-related to building better societies. Perhaps the best example of the integration of these ideas is the following quote: Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair. It is this that we label health inequity. Putting right these inequities – the huge and remediable differences in health between and within countries – is a matter of social justice.10To restate it another way, the ideals of social justice—the kind of good society we aim to be—demand that we address the systematic, huge and remediable differences in health between and within countries that are avoidable through reasonable action. The heavy lifting here is being done by the moral force of the commitment to social justice. While the CSDOH left open the conception of social justice that could drive action, it can nevertheless be understood to be promoting egalitarianism. Every individual in society (and in every society) has equal moral worth and should have capabilities to live flourishing and full life spans. Enormous academic research, policy and advocacy activities were motivated worldwide by the final CSDOH 2008 report. The report and growing awareness of the vast implications of social epidemiology also motivated the new area of 'health justice' philosophical literature that debates how competing social justice theories would address health inequalities within and across countries.11,12 However, the impact on public awareness and policy makers from all these di-verse efforts toward driving social action on health inequalities within and across countries pales in comparison to the impact the COVID-19 pandemic has had in engendering widespread if not global understanding and interest in health equity and health justice.

3 | COVID-19 AND PUBLIC UNDERSTANDING OF HEALTH EQUITY

At least in the English-speaking media and scholarship, during the first 2 years of the pandemic, it was often stated that the pandemic has exposed and exacerbated social inequities that have been deeply embedded in societies. The statement was often made as a rejoinder to the initial rhetoric of politicians and others that in the face of this common health threat, we are all (equally) in this crisis together. The virus was presented as an indiscriminate or egalitarian opportunist. While it may have been well intentioned as well as useful rhetoric to engender social cooperation, the notion of everyone being in equal standing in the face of common health threat proved to be visibly and profoundly false. The rapid and higher mortality among certain social groups, unequal harmful impacts of lockdowns on certain individuals and groups (e.g. women, children, homeless, the isolated, etc.), the kinds of people being deemed to be 'essential workers,' the sudden destitution of the very poor, and so forth all made visible that within our own societies and across the world, social and structural conditions – including policy choices and neglect – were leading to differential impacts in deaths and enormous suffering across social groups. Inequalities in the risk of death and suffering, in the daily quality of life under pandemic conditions, and even in access to mitigation efforts and vaccines were constantly visible and recognizable as a reflection of social positions, capabilities, and who or what governments seemed to care about most.13If someone living through the pandemic described the diverse health and mortality impacts within and across countries simply as 'variations,' 'disparities,' or 'differences,' it would not only be odd but the act itself would seem unjust. Whether it was through traditional or social media, or through diverse personal communication channels, individuals around the world learned in real time how the various kinds of policy decisions or neglect were impacting their families, social groups and individuals differently. And many social and political organizations were very effective in publicly highlighting disproportionate harmful impacts directly from infections or from social policies or neglect. In light of these pervasive and visible in-equities flowing from policy choices or neglect, describing pandemic health inequalities in value neutral terms would reflect a purposive act to erase or obfuscate the multiple and interrelated inequities and injustices taking placing in people's lives underlying the bare statistics. There is sufficient reason to think that there is now a much better appreciation, especially in the middle classes and elites across countries, that health deprivations and inequalities across social groups are produced from a complex interaction of long-standing social inequities (racism, sexism, social exclusion, endemic poverty, elite capture, etc.) and differing social conditions (e.g. material, geo-graphical, political, commercial, legal, epidemiological, etc.).What the pandemic has also done with respect to health equity is – at least for a short while – shift the burden of proof from health equity researchers and advocates to public institutions.14 In light of the pandemic experience, the publics and policy makers are more likely to start from the position that public and social institutions are producing or neglecting health inequities and must hold the burden of proof that they are not. It has usually been the case that health equity researchers and advocates have had to provide convincing evidence that social conditions are causing unjust harms. In the United Kingdom, for example, from the Black Report in 1980 to Whitehead's WHO report in 1990 and onward, researchers and advocates have borne the burden of proving that health inequalities were being caused by social-structural determinants and are not random, natural, inevitable, due to personal choices, and so forth. They have had to provide

evidence as well as various kinds of justifications for interventions to change the status quo. And even that has not been enough to make any change. Because of the thoroughgoing social inequities being so widely visible during the pandemic, people across the world have achieved an understanding that the current states of social and global affairs are not good for the health of populations and, in fact, produce great health inequities and injustices. It may also not be too fanciful to think that the public and policy makers recognize that the unequal suffering and deaths due to the pandemic are not aberrations but an acute episode of what has been happening in the background as they lived their daily lives before the pandemic.15 Despite the initial responses to frame the pandemic as a natural disaster or random event, people understand that the ability to protect oneself and family in a crisis goes well beyond their individual choices and sphere of control. As the report Build Back Fairer: The Covid-19 Marmot Review stated, it would be a tragic mistake to aim to re-establish the status-quo before the pandemic as the pre-existing situation over the previous 10 years in the UK directly con-tributed to such high COVID mortality and morbidity and worsening health inequalities.16 While the report aims to make a detailed and convincing case for not returning to the pre-pandemic status quo, much of the UK public and elsewhere would likely agree with the argument just based on their lived experience. The repeated statement that the pandemic exposed and exacerbated existing inequities may have informed the public and policy makers about empirical truths and may also have done significant moral work in stimulating social fervour and collective action for health equity and social jus-tice. But such openness for significant social change may not last for long as the vast majority of middle-class people who have survived the pandemic will likely want to go back to their pre-pandemic lives. It is the people who were most negatively affected, and who have always been constrained by social conditions in their abilities to live the lives they value that will be left desiring a better status quo.

4 | APPLYING LESSONS LEARNED

In this (post) pandemic environment where there is greater and shared understanding across societies of health inequities and injustices, and recognition of the necessity for social change, there is an urgency and diverse opportunities to make progress. The opportunities exist or, indeed, should be created wherever we are – within our households, communities and workplaces all the way to national and global institutions. Our actions to make change must reflect and fully stretch our differing capacities. Some of us have capabilities to move institutions or transform communities while others can join in collective action. If there is one major lesson for public health from the pandemic, it is that one rule or approach applied to all places from the top can be both ineffective and profoundly unjust in producing unnecessary suffering and deaths. Such an approach also runs the significant risk of being rejected by the people it is meant to benefit. Being clear on the general scientific principles is crucial, but the ap-plication has to be informed by and relevant to the context. In this vein, three learnings seem to be particularly worth identifying.

5 | SCIENTIFIC EVIDENCE AND MORAL ARGUMENTS ARE NOT ENOUGH

Decades of scientific evidence on the social causes and unequal social distribution patterns as well as identification of evidence- based ‘best-buy’ policy recommendations to improve health equity have simply not motivated the kind and level of policy interventions

needed. Nor have diverse moral arguments for health equity, even those grounded in foundational principles of social justice and ethical values such as dignity, freedom and well-being. Scientific evidence and moral arguments seem to be necessary but not sufficient for initiating policy interventions. And it is not just the clearly visible anti-science or anti-expert movements in many countries. Even when systematic reviews and meta-analysis are done to produce best practices, even for medical interventions, it simply cannot be assumed that practitioners and policy makers will easily take up the guidance. And even when moral arguments are presented to policy makers or political leaders, ethical values may simply fail to resonate or convince. It has also become necessary to recognize the powerful and countervailing commercial forces that are at play in national and global policy making. There is much more learning needed here about bridging the gaps along the path from producing evidence and moral arguments to decision making to implementation.

6 | EQUITY ALL THE WAY DOWN

One of the significant outcomes of the synthesis of all the various approaches to health equity and justice has been the understanding that health equity is a multi-dimensional concept. Rather than being about equity only in one dimension such as health outcomes, it entails a consideration and balancing of many dimensions including the causes of ill-health and disability, levels in a population, distribution patterns, experiences of healthcare and interventions, non-health consequences, and even treatment of bodies after death. When given the opportunity to address one or a few of these dimensions for the explicit goal of improving health equity, public health practitioners seem to stop thinking about equity within the dimension. For example, once an opportunity is gained for addressing the health needs of women experiencing domestic violence, the homeless, or street children, the programmes are often then designed and de-livered to have the greatest impact possible. Meaning, while equity may be progressed by addressing the needs of a specific vulnerable group often ignored or neglected, when working within such a social group, programmes aiming to maximize their chosen outcomes often leave the most vulnerable within the group behind. And those left behind tend to be individuals and groups that are experiencing multiple forms of disadvantage, also understood as intersectional dis-crimination. As a result, health inequity is actually increased within the vulnerable social group while equity looks to be increased or improved across the general population. This is not a minor or esoteric point. The principle of 'Leave no one behind' has been prominently attached to the UN Sustainable Development Goals (SDGs) in direct response to how countries sought to achieve the Millennium Development Goal (MDGs) tar-gets. In order to improve equity in the entire world, the MDGs were framed as national targets and incentivized maximizing programme outcomes, even when working with socially excluded populations. The MDGs reflected an agenda for improving social equity but resulted in benefitting the easiest to reach. In order to maximize im-pact and get close aggregate targets, the most vulnerable people were neglected because they would take too many resources in the form of time, labour, physical resources and so forth. There is an important and relevant lesson here for dental public health. In rich countries and around the world, poor oral health is strongly correlated with social disadvantage. Not only do the socially disadvantaged experience more poor oral health, but it also predicts vulnerabilities to a lifetime of ill health. When analysing and addressing the oral health of a socially disadvantaged group, improving equity within the particular group must also be an explicit

consideration. While various conceptions of health equity might allow the pursuit of maximization of outcomes across a group, it is here that a conception of social justice that starts from the equal moral worth of every individual motivates reaching every last individual. It is not a tragedy the worst-off cannot be helped; it is a policy choice.

7 | GLOBAL PERSPECTIVE MATTERS

Those who are familiar with the CSDOH and social epidemiological literature will be aware there has been a long-standing awareness that health and health inequalities are not only caused by domestic factors but also transnational and global factors. Some members of the CSDOH, alongside many other contributors to social epidemiology, have been profoundly concerned for decades about the growing and harmful effects of supra-national factors such as trade and legal regimes, the governance of international institutions, foreign policy agendas of the most powerful countries and so forth. At the same time, the pandemic has made clear to almost every person on the planet that an event far away can add another health risk and can significantly impact their lives and communities. We have also become aware that even in the face of an enormous threat, the global governance architecture is not able to support or sustain an effective and equitable response. Indeed, it is likely that the current state of global governance engendered the scale and extent of harm of the pandemic. In light of the long-standing awareness, recent experience, and ongoing events, it would be profoundly short-sighted to continue to examine and address health issues as if they were only local and domestic. With respect to oral health, while there have been notable studies such as how international trade regulations affect dental caries in children in particular poor countries, there are clearly many more global dimensions that impact oral health and inequalities. Consistently pursuing a global perspective is important in two ways. Firstly, it provides an opportunity to examine if the causes of causes are actually embedded in the current global architecture and allows us to get the causal story correct. Second, it also allows the possibility of examining how our proposed responses to the issue at hand could be producing harms to other people in other places. In a world that has shown itself to be inter-connected and inter-dependent, not being open to global dimensions is a sort of denial of the equal moral worth of other people in other places. Despite these hard lessons that need to be applied and much more knowledge is needed on various aspects of policy making, the main point of this essay has been to trace the significant progress we have made in the understanding of and approaches to health equity. The journey from a focus on access to healthcare to inequities in health outcomes to now linking health to social and global justice has not been easy, predictable, or in coordination across relevant disciplines and professions. And yet, here we all are speaking understandably to each other within dental public health and beyond about health justice. And given the enormous transformations that are happening at the highest levels of the global order as well as at the deepest epistemic foundations of various disciplines and professions, now is the time to embed the idea and understanding that health, health equity, and a good and just society are interlinked. A vision for a better world on the other side of all of this current chaos will undoubtedly emerge sooner or later. Dental public health and public health more generally must aim to ensure health justice is at the centre of it. Though the 50-year journey may have been unpredictable, this must be our intentional next step.

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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