

NEW DIMENSION SERIES

Sustainable Development Goals (SDGs) for Hypertension Zero in the era of Anthropocene.

CATEGORY A: HYPERTENSION AND LIFE ENVIRONMENT

Loneliness – a new threat to human health

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Loneliness is an omnipresent sensation that is often dismissed as a transient emotion. It is a feeling influenced by both internal perceptions and the external circumstances. “People feel lonely when their social needs are not met by the quantity and quality of their social relationships” as surmised by Luhman et al.¹

Loneliness and social isolation are related terms, but they do not have the same meaning. While social isolation refers to the objective lack/deficiency of contacts with other individuals (e.g., due to living alone), loneliness reflects a subjective feeling of being isolated from others (sometimes even with an apparent social proximity of other individuals). In fact, loneliness not always correlates with social isolation.²

The estimates suggest that one in four adults on average are socially isolated.³ Loneliness exists in all populations and across different age categories⁴ although it appears that both younger and older populations are more affected than other age groups; possibly for different reasons.⁵ Those from socially marginalised groups are particularly vulnerable.¹ Chronic loneliness has a profound effect on the emotional well-being and quality of life of affected individuals.⁶ It is increasingly recognised as a new risk factor for many chronic conditions including depression, dementia, diabetes, infectious diseases, and premature death.³⁻⁴ Given the emerging threat of loneliness

to human health World Health Organisation has now created a Commission on Social Connection.³

There is a well-documented heterogeneity in causes of loneliness – from deeply personal factors including level of self-esteem and life events (e.g., loss of family members and friends) to global phenomena such as urbanisation, migration, and use of social media.⁷ Most recently, COVID-19 pandemic has amplified the social isolation and loneliness around the globe through the imposed lockdowns, restrictions on social interactions and face-to-face contacts. Very young adults, the elderly, women, and those with the lowest income were particularly affected.⁵ The full magnitude of the impact on healthcare will only start emerging in the years to come. At the same time, the COVID-19 pandemic illuminated the importance of loneliness and social isolation as a risk factor for many chronic disorders.⁴

It is acknowledged that loneliness is difficult to define and hence not easy to investigate.⁴ Most studies used either a single item measurement (agreement or not with the statement ‘Much of the time during the past week, I felt lonely’)⁵ or more developed scales for emotional and social loneliness. There is persuasive evidence for a connection between loneliness and cardiovascular disease.⁸ Indeed, a meta-analysis of 11 and 8 longitudinal studies found that feeling lonely was associated with an increased risk of coronary

artery disease and stroke (respectively).⁹ In the English Longitudinal Study of Ageing, those who reported feeling lonely showed a 27% higher rate of coronary artery disease and stroke in the follow-up period and this relationship was independent of the conventional biological (e.g., blood pressure and lipids), lifestyle (e.g., alcohol consumption and physical inactivity) or behavioural risk factors (e.g., depression).⁵ The magnitude of loneliness' effect on cardiovascular morbidity was compared to that of smoking 15 cigarettes a day.¹⁰ Indeed, on the scale of existing and emerging risk factors for cardiovascular disease in diabetes, loneliness was positioned higher than smoking.¹¹ A few small studies showed that loneliness was associated with an increase in blood pressure¹², possibly independent of the most obvious potential mediators including increased intake of calories, body mass index and reduced physical activity. There is a concern that loneliness/social isolation will deprive individuals of an essential pillar of support for regular treatment of hypertension (and other chronic conditions), i.e., encouragement/care from family and friends. Indeed, in the clinical service we often see how essential the closest support circle can be in overcoming therapeutic non-adherence and maintaining regular administration of antihypertensive medications.

In our Society, the relevance of loneliness (and its proxies) to hypertension is also increasingly attracting attention. Published in early 2023, our review article led by Professor Alta Schutte (ISH Past President) recognised poor social support as one of the drivers of global disparities in hypertension care.¹³ Later that year, Professor Hiroshi Itoh, our Vice-President introduced a new series of Hypertension News articles dedicated to Sustainable Development Goals (SDGs) and listed loneliness as an important point of convergence between SDGs and Hypertension Zero.¹⁴ Our ISH2022KYOTO Hypertension Zero Declaration highlighted the importance of "community in which no one with hypertension is left behind" and its benefits to "sustainable well-being for all".^{15,16} In early 2024, in a comprehensive analysis of social determinants in hypertension, Professor Tazeen Jafar, ISH chair of Global Health Partnerships examined the relevance of poor social cohesion to hypertension and cardiovascular disease.¹⁷ A few weeks later, ISH's team led by Professor Fadi Charchar (ISH

Treasurer) contemplated "social connectedness" as one of the new areas that should be further explored in relation to lifestyle management of hypertension".¹⁸ In this most recent ISH position paper, we further proposed that listening to music on a regular basis could be beneficial to management of hypertension, possibly through stress relief.¹⁸ It transpires though that music can be also an important social surrogate improving mood and a sense of connection with others.¹⁹

With loneliness rates as high as 14% in the population, and the Government appointing a Minister of Loneliness in 2017; the challenge of tackling loneliness has been brought to the fore of the social care agenda in the UK.²⁰ These trends followed in other European countries. Indeed, in 2022, awareness campaigns on preventing loneliness were initiated at the federal level, e.g., the "Strategy against Loneliness" of the Federal Ministry for Family, Senior Citizens, Women and Youth in Germany.²¹ Different strategies have been proposed to "manage" loneliness or loneliness-associated conditions, mostly through face-to-face interventions although remotely delivered (e.g., via telephone) behaviour-changing psychological interventions have started to emerge.²² It appears that doctors may also have a role to play in combating the loneliness.²⁰ On the individual level, feeling lonely should be a wake-up call to reflect and re-think one's social interactions, friendships, acquaintances, habits, and hobbies, to maximise engagement in those with the highest potential to reduce the early sense of isolation and perceptions of being unconnected.

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