Social determinants of health and cancer screening in China



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China faces a steep road in achieving universal cancer screening coverage.1 Among the existence of limited screening programs, even some of which pay extra attention to the disadvantaged population, such as rural residents and low-income urban residents, social disparities in their uptake persist.2 The Healthy China Action-Implementation Plan for Cancer Prevention and Control (2023-2030), issued in November 2023, continues to focus on providing organised cancer screenings primarily in areas with high cancer rates and among populations at elevated cancer risk. However, the feasibility of sustaining regular organised screenings, even in these high-risk groups, remains uncertain.

Xia et al. from the National Cancer Centre of China proposed an innovative model where the government subsidises initial screening costs for high-risk individuals, with subsequent screenings being self-funded.1 While this strategy could expand coverage of cancer screening, it also raises concerns about health inequities, particularly impacting the deprived. Requiring individuals to pay for their subsequent screenings may exacerbate disparities in cancer care outcomes, with those who cannot afford continuous screenings potentially dropping out of the program. Furthermore, the affordability challenge extends beyond costs of screening to patient uptake, referral, confirmation, and treatment phases, and concerns over high treatment expenses may hinder the update of screening.

To address these challenges, modifications are needed for the current government-covered screening eligibility criteria, which is predominantly targeting individuals with high biomedical and behavioural cancer risks while neglecting social vulnerabilities. For example, poverty, low levels of education, unemployment, and lack of health insurance may increase the cancer risk and reduce an individual's adherence to and affordability of screening.3 We suggest that social determinants of health, collected either through selfreporting or automatically from electronic tax or social security systems, be integrated into the existing screening eligibility assessment. While additional verification is required, compiling data on social determinants can aid in assessing the relative deprivation individuals.4 Depending on the capacity of government-sponsored screening service, the most deprived should be prioritised for such screenings in conjunction with traditional assessment. In other words, among individuals traditionally identified as being at high risk for cancers, those additionally screened as financially difficulty should receive governmental financial assistance to uptake regular screening. Moreover, continuous support, including medical assistance or patient assistance programs, should be extended to them throughout the entire cancer screening process, including referral, confirmation, and treatment stages.

Incorporating social determinants into the risk assessment for cancer screening, though needing extra efforts to implement, is a crucial step towards equitable and affordable cancer screening and treatment in China. This strategy will not only improve cancer care outcomes but also shed light on advancing health equity.5

Declaration of interests

We declare no competing interests.

- Xia C, Basu P, Kramer BS, et al. Cancer screening in China: a steep road from evidence to implementation. Lancet Public Health. 2023;8(12):e996-e1005.
- Liu Y, Guo J, Zhu G, Zhang B, Feng XL. Changes in rate and socioeconomic inequality of cervical cancer screening in northeastern China from 2013 to 2018. Front Med. 2022;9:913361.
- Srinath A, van Merode F, Rao SV, Pavlova M. Barriers to cervical cancer and breast cancer screening uptake in low- and middleincome countries: a systematic review. Health Policy Plan. 2023;38(4):509-527.
- King JB, Pinheiro LC, Bryan Ringel J, et al. Multiple social vulnerabilities to health disparities and hypertension and death in the
- Wang Z, Yang G, Guo Y. Harnessing the opportunity to achieve health equity in China. Lancet Public Health. 2021;6(12):e867-e868.

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REGARDS study. Hypertension. 2022;79(1):196-206.

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