Improving healthcare for children in rural China: commentary on WeChat-based self-assessment with tailored feedback

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Adherence to early days of life management is critical to achieve improved long-term health outcomes and cost-effective health care. Numerous studies have indicated that improving feeding and movement behaviors of early childhood can effectively reduce the risk of chronic non-communicable diseases in later life.[1–3] Despite abundant progress in recent decades, children in rural areas tend to face more difficulties than those urban peers from the beginning of life, including the worse prenatal care and infant health outcomes, lack of access to quality healthcare, poor caregiving health-related behavior and so on.[4] To fill the gap mentioned above, more researches were needed to reflect the real situation of those children in economically disadvantaged environments. The present study by Wu et al. with a total of 1610 children suggested that the WeChat-based self-assessment with tailored feedback intervention was effective in delivering feeding and movement behavior recommendations in rural China, which provides valuable experience to push on child health care in rural area.[5] In addition, according to the baseline characteristics of the primary caregivers, potential interventions such as addressing the health needs of mothers and grandparent caregivers should be paid more attention. Overall, this is a meaningful study on effectively improved complementary feeding practices and movement behaviors of children aged 6–20 months in rural China. This approach can be applied to change feeding practices of caregivers of young children alongside routine child health care in rural China.

Self-tracking feedback helps to transmit data and influence people's attitudes and behaviors, so as to promote early detection, early treatment and early prevention of diseases.[6] With the development of e-health, WeChat has been widely used in China, which greatly facilitates the collection of clinical data and the evaluation of health information.[7] It is a new and original idea that combines both WeChat self-assessment data collection and a tailored feedback intervention to connect the doctor and patient. What's more, WeChat can efficiently gather patient information to shape a comprehensive database, simplifying the tedious process of data collection in clinical research. Of course,

WeChat-based follow-up is also beneficial to establish a good doctor–patient relationship. It is inspiring to find in this study that the intervention also improved caregivers' knowledge on complementary feeding practices and movement behaviors.

In spite of the positive findings, the present study also had some limitations. Firstly, this study just includes only one rural country in China, which might cause bias and uncertainties, and limit the generalizability of results. In addition, the period of the follow-up just lasted two months, the long-term effectiveness of WeChat-based self-assessment data collection and tailored feedback has not been evaluated. What's more, the absence of pure control groups and the potential for mutual intervention effects between the two groups further complicates the interpretation of the results. In the later stage, if a large-scale WeChat children early health care management system is developed, the information security of patients should be considered more carefully. In the future, WeChat platform should be used to complete the connection management mode of children early health care between comprehensive hospitals, community health service centers and rural are. Therefore, future research should include larger-scale randomized controlled trials to provide more robust evidence.

In conclusion, this study contributes to the understanding of child health in rural China and the potential benefits of WeChat-based interventions. However, further research is still needed to address the limitations and evaluate the long-term effectiveness of such interventions.

Declaration of interests
The author declares no conflict of interest.

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