

The potential contribution of mixed methods research to primary care

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To cite: Xu Z, Qian Y, Pan J, *et al.* The potential contribution of mixed methods research to primary care. *Fam Med Com Health* 2019;7:e000196. doi:10.1136/fmch-2019-000196

Received 24 June 2019
Accepted 29 July 2019

Dear editor,

We read with great interest the article regarding mixed methods research by Creswell and Hirose.¹ As primary care physicians in China, we would like to hereby express our heartfelt appreciation to Professor Creswell for his significant contribution in guiding young researchers like us to go more in-depth into a study. However, the majority of primary care researchers may not yet recognise the great potentials of mixed methods for their research work. Therefore, further explanation is needed to illustrate why mixed methods research matters to primary care.

Mixed methods research, defined as the core element of both qualitative and quantitative approaches, is used in a single study to collect and analyse data, integrate the results and make a conclusion.² This combination allows researchers to compare and explore different aspects of one issue simultaneously. The particular strength of mixed methods research is to develop a more comprehensive and exploratory approach to evaluate interventions or influencing factors, which is vital to primary care research. Thus, we have been aiming at delivering the concept and methodology of mixed methods research to our peers because this approach meets the demands of both researchers and quality improvement of primary care.

Admittedly, an enabling environment is absent to support primary care researchers for conducting studies. The primary care in China at present focuses on training a sufficient number of qualified primary care physicians, yet the importance of primary care research has not been widely recognised. Even for those who have designed their research, they do not have enough resources to implement their research. For example, primary care is not listed as one category for funding application of the National Natural Science Foundation of China. Moreover, according to the new policy on training and

incentive mechanisms for primary care physicians issued by the General Office of the State Council of China, academic article publication has ceased to be one prerequisite of position promotion for Chinese primary care physicians who are further lacking the major motivation to engage in research.³

The new policy undoubtedly discourages primary care physicians to conduct research, though it might become a positive factor to improve the quality of research since they have no additional worries of publishing or perishing. It is necessary to inspire primary care physicians to develop their own research interests and to apply the appropriate research methods to realise their research ideas, and mixed methods research could be an option for consideration.

There is a great need for Chinese primary care physicians to transform their daily work pattern. They routinely struggle to cope with documenting public health records of inhabitants, but the effectiveness and feasibility of this approach remain to be studied, which may indirectly affect their social status.

Mixed methods can potentially play a key role in the studies on complex health problems in a community-dwelling population that require varied investigative methodologies.⁴ The qualitative method provides researchers a more detailed explanation and underlying reasons for quantitative findings (usually from data of questionnaires). Mixed methods research permits a more in-depth understanding of phenomenon, factors and experiences.

Both objective indicators and self-reported outcomes are necessary in primary care research. Either qualitative or quantitative methods alone cannot result in a satisfactory and convincing conclusion for primary care research.⁵ Through integrating these two approaches, primary care researchers are able to obtain a more profound understanding of patient experiences to make their research patient-centred and more instructive to their



▶ <http://dx.doi.org/10.1136/fmch-2019-000217>



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routine work. That is why we are firmly convinced that the quality improvement of primary care cannot do without mixed methods research.

Contributors ZX and YQ, JP and LF contributed equally to this work. ZX drafted the manuscript and YQ, JP and LF revised the manuscript.

Funding This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Ethics statement The letter has not been published in whole or in part elsewhere and is not currently being considered for publication elsewhere.

Provenance and peer review Not commissioned; internally peer reviewed.

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REFERENCES

1. Creswell JW, Hirose M. Mixed methods and survey research in family medicine and community health. *Fam Med Com Health* 2019;7:e000086.
2. Johnson RB, Onwuegbuzie AJ, Turner LA. Toward a definition of mixed methods research. *J Mix Methods Res* 2007;1:112–33.
3. General Office of the State Council. Opinions of reform on improving the training and incentive mechanism for primary care physicians. Available: http://www.gov.cn/zhengce/content/2018-01/24/content_5260073.htm [Accessed 1 Jun 2019].
4. Creswell JW, Plano Clark VL. *Designing and conducting mixed methods research*. 3rd edition. Sage Publications, 2018.
5. Sacristán JA. Patient-Centered medicine and patient-oriented research: improving health outcomes for individual patients. *BMC Med Inform Decis Mak* 2013;13:6–13.