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Personalised Medicine Implementation in Low and Middle-Income Countries

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Abstract

The potential of Personalised Medicine makes it attractive to health systems, and personalised approaches are being applied in practice in highly developed countries. However, the implementation of personalised medicine in low- and middle-income countries (LMICs) faces a number of barriers. In this group of countries, where resources allocated for health are limited, innovation is often not a priority. Methods: database search was used to identify publication that describes barriers and prerequisites for the implementation of personalised medicine in LMICs. Results. Insufficient regulation, lack of necessary infrastructure, high costs, lack of training of healthcare providers, low awareness of policy makers and population about benefits are barriers to the implementation of personalised medicine. Strengthening research in the field of personalised medicine, aligned with international standards, on a continuous basis, generating evidence on the long-term benefits of personalised medicine is a prerequisite for the implementation of personalised medicine in LMICs. The collaboration between researchers, information exchange and knowledge transfer between different actors of the health system is an essential element to overcome barriers to the implementation of personalised medicine. Ensuring access to personalised medicine services by identifying solutions to reduce health inequalities is a priority for implementing personalised approaches in health systems in LMICS. Conclusion. Prioritization of personalised medicine at the national level will ensure the strengthening of research, financing and the



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creation of infrastructure necessary for implementation. Consolidated efforts of all actors involved: health system actors, decision makers, citizens are needed to develop and implement personalised medicine in low- and middle-income countries.

Keywords: personalised medicine, middle-income countries, health systems.

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