

# Concerned About the Shortage of Paediatricians in Developing Countries

Sir,

In recent years, the shortage of paediatric doctors in developing countries has come to the fore and has become one of the focal points of public opinion and research. The number of paediatricians in China was 135,524 at the end of 2019. The number of practising paediatricians per 10,000 children aged 0-14 was 4, far lower than that of developed countries, such as the United States, which has an average of 1.46 paediatricians per 1,000 children, leaving a large gap in paediatric practising physicians.<sup>1</sup> The same plight is occurring in Pakistan, especially with the shortage of paediatric surgeons.<sup>2,3</sup> There is a large unmet demand for paediatric surgery. Developing countries like Pakistan and China are receiving increasing attention from the international community, and it has become imperative to address the mismatch between the number of paediatricians and the growing population. Some information regarding paediatricians is shown in Table I.<sup>4,5</sup>

**Table I: Some data on paediatricians.**

Children aged 0-14 in Pakistan / China / India / Malaysia / Philippines / Thailand	78/220/362/7.5/33/11 million
Paediatric surgeons per 100,000 patients aged 0-15 years in Pakistan	0.26
New births in Pakistan / China/India / Malaysia / Philippines / Thailand in 2021	6/4.3/2.3/0.52/2.22/0.69 million
Number of paediatricians in China in 2019	Over 130,000
Number of paediatricians per 1000 children	0.53
Children's specialist hospital	68
Number of paediatric beds	250,000

These are several reasons for the shortage of paediatricians. Firstly, paediatricians have a heavy workload, are under pressure, and are at high risk. Secondly, there are often conflicts between doctors and patients and the working environment is suboptimal. Thirdly, the training system for paediatricians is inadequate with the limited number of residency training positions available due to factors such as late start and the influence of teachers, funding, and student numbers. Fourthly, children's medical resources are unevenly distributed. Most children's hospitals are concentrated in economically developed eastern cities, and the ratio of urban to rural children's hospitals is 4:1.

To address these issues, there are some relevant responses for the future. The government should increase investment to promote the development of paediatric medicine. The government should clarify its responsibilities by making the construction of a children's medical system a key reform project, and increasing financial investment. Government human resources management departments should take full account of the characteristics of children's medical institutions when approving total performance and implement appropriate policy tilts to promote better development of dedicated children medical institutions.

It is essential to improve the training system for future paediatricians. This requires a planned, systematic, and forward-looking approach to train paediatric medical talents. One strategy could be to increase the number of medical schools specialising in paediatric medicine and expand enrolment. Such measures would help to ensure that there is a sufficient supply of qualified paediatricians to meet the growing demand.

## COMPETING INTEREST:

The authors declared no competing interest.

## AUTHORS' CONTRIBUTION:

LX: Conceived, designed, drafting of the manuscript, data collection, interpretation of data and final approval.

HY, ZB: Review, editing and final approval.

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