people are a category considering and necessary for the development strategy from below [36]. Access to health service depends on many factors; nevertheless, the most fundamental of them is the presence of operators offering health support. Overall, the main problem in rural areas is an unsuitable distribution of physicians.

In a study that was performed to describe a method of supplying and distributing active clinical physicians in the USA in 2005 by focusing on rural areas, unbalanced distribution of physicians in city-village and diversity of distribution of physicians in rural areas were observed and the total ratio of specialist/population in rural areas was reduced [37]. Moreover, native and non-native workforces, with equal rates, were asked to be transferred from disadvantaged areas. This trend has demonstrated that the policies of educating indigenous specialist forces did not lead to maintaining specialist physicians in deprived areas [37], [38]. Only 9% of physicians work in non-urban areas where 20% of the USA population lives [39]. Differently, persons residing in rural areas have equal right for benefiting high-quality health services as persons living in the cities.

World Health Organization (WHO) believes that public access to motivated, active, and skillful health workforces, especially in rural areas, is the necessary condition for better understanding health, human rights, and social justice [40]. In 2010, the support for patients and cost-effective medical care were implemented for all US citizens. However, it is not possible to reach the goals of this law until there is not balancing between offering and using global health services [40], [41].

Traveling to a specialty center is problematic for families since it disturbs the regular daily schedules of family, education, and leads to absence from the workplace for adults [42]. Such lack of access to sub-specialty of pediatrics, particularly for children in the emergency ward of rural areas, could lead to unnecessary reception of patients by using expensive methods, including an air ambulance [43]. Tele pediatrics is commonly applied to children in different rural communities, and it is often focused on children with specific medical and health requirements [43], [44].

The impediments created for rural societies have led to the different medical care of children. These imbalances caused low access to newborns and children to health services. According to the census in 2010, nearly 20% of the USA population is residing in rural areas, and thus, many children have to face shortages for obtaining important health and medical services [45]. These hindrances include geographical ones, relative scarcity and unsuitable distribution of general and subspecialty pediatricians, and socioeconomic impediments for traveling. These obstacles may endanger children's health. General practitioners that work in villages often have barriers for accessing to sub-specialty of pediatrics.

5. Conclusion

All the studies mentioned above suggested that a telemedical strategy, using medical informatics and other advanced systems, may offer many advantages for the people that live in underprivileged areas where the pediatric population tends to more vulnerable.

On the other hand, health professionals (physicians, nurses, etc.) formation and distribution represent an important challenge for all countries. This problem hits significantly Iran notwithstanding they used many resources to increase the number of health professionals, the latter prefer to stay in big cities and to litter remote areas. However, this shortage should be covered and in particular when these regard pediatric services because the pediatric population needs both care services and prevention services. Governments and health policymakers also need to take the initiatives on the source distribution and funds allocations on health care development especially for people living underprivileged areas. But in the meantime, the development and use of a telehealth system become crucial to help these populations.

Conflicts of interest

The authors declare no conflicts of interest.

Author contributions

Conceptualization-S.M.M. and S.S.M.S.; Methodology-G.B.; Formal analysis-G.B.; Investigation-S.M.M. and S.S.M.S.; Resources- G.B.; Data curation-G.B.; Writing original draft preparation- S.M.M., S.S.M.S., and G.B.; Writing review and editing-G.B. and S.K.T.; Supervision-S.K.T., and F.A.; Project administration-S.K.T. and F.A.; Funding acquisition- S.K.T. and F.A.

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