Evaluating Inequality in Healthcare Indices in Khorasan Razavi Towns

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Received: 23 April 2016 Accepted: 28 February 2017

Extended Abstract

1. Introduction
The main aim of all schematizations is to reach measurable improvement as well as achieving balance; the principle of social justice is one the fundamental principles in most ideologies. Ideologies of institutions and those of planners' form based on social justice, which is one the principles leading to the fair distribution of achievements among urban and rural citizens. Convenient access to health services plays an important role in improving society's level of health, safety and peace of mind, which is considered as an important index in realization of social justice as well. Regarding the availability of health services to all segments of the society, this is taken into account in underdeveloped and developing countries. Studies reveal substantial inequality among social groups as well as geographic areas in spite of the considerable growth of health indicators in the national average (Vaez Mahdvai, p. 73, 2009). For instance, the published statistics by Ministry of Health about the number of health centers in Khorasan Razavi province reveal that approximately half of the clinics and hospitals are located in the city of Mashhad with the rest in other 26 towns. General condition of healthcare highlights huge gaps in Khorasan Razavi province; what makes this study a necessity is devising provincial plans for healthcare service-provision so that the towns of the province benefit from a steady level public health, which leads to the development of the province's situation in the country.

2. Theoretical Framework
In the general sense of the word, development means improving people’s quality of lives in every aspect, i.e. something more than income, which is continuous education, improving hygiene and nourishment standards, alleviating poverty, better environment as well as economic and social equality in enjoying equipment and opportunities, more personal freedom

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and richer cultural life (Taheri, p. 34, 2001). Developing healthcare services and its location in improving societies is one of the main aspects of social development. One the most highlighted problems in providing healthcare services is improper distribution in urban and rural areas (Taghvaii & Shahivandi, p. 38, 2010). Proper distribution and benefitting from healthcare services reflects proportionality among some factors, such as the ability to pay as well as the availability of services traditionally with criteria such as the number of doctors and beds in a hospital divided by a unit of population (Karimi et al., p. 52, 2009).

3. Methology
In terms of methodology, the current study is considered to be a descriptive-analytical one whose method of data collection, literature review and field studies is quantitative. In order to survey development of Khorasan Razavi’s towns in terms of having healthcare indicators, 18 criteria are used while the collected data are analyzed through VIKOR model. Furthermore, Excel and ARC MAP 10.1 software are used to analyze data and draw maps. Shannon entropy model is used to determine weight research indices. In order to measure development of towns in Khorasan Razavi based on healthcare indices, the latest data published by Iran’s Bureau of Census (2013) in Khorasan Razavi’s statistical yearbook is used.

4. Results and Discussion
In the first step, decision-making matrix were formed. Accordingly, the required raw data of the study is extracted from Statistical Yearbook of Khorasan Razavi Province in 2013. Afterwards, the acquired data was standardized in relation to the population of each town. Secondly, decision-making matrix data were normalized and thirdly, the amount of efficiency (S) and regret (R) is measured for each option; Shannon entropy model is used to determine the weight of calculations in the third level. After that, ideal positive and negative points are determined for each index with amounts of S and R for each town. Finally, the final VIKOR factor (Q) is measured, according to which ranking of options happened; the best town is the one with minimum Q.

5. Conclusion and Suggestions
The results gained from performing the model in ranking the towns based on healthcare indices show that three towns of Mashhad, Neyshabur and Gonabad enjoy the highest level of development regarding healthcare facilities and services as well as preventive measures, after which are towns of Sabzevar, Torbat Heydarieh, Bardekan, Bejestan, Kashmar, Dargaz, Sarakhs and Joqatay. Central, religious and tourist position of Mashhad and
towns with the high percentage of population, such as Neyshabur, Gonabad and Sabzevar, are effective in attracting healthcare services. Towns of Mahvelat, Khalilabad, Bakharz, Roshtkhar and Zaveh are ranked among the lowest towns in healthcare services and worst health status compared to other towns, which reveals low level and poor access of citizens to health services, coverage, first aids and suitable securing. Totally, presence of spatial equality in healthcare among town in Khorasan Razavi, especially central and border town, reveal that the implemented plans are far from principle of social justice leading to regional health inequalities around the province.

Key Words: Healthcare, Khorasan Razavi Province, VIKOR model, Spatial Inequality

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**How to cite this article:**  