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## **Research Paper**

# Scenario Planning of Health Services in Makrān Coastal Region by Morphological Analysis Method

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#### **Abstract**

In the field of planning, especially health care development planning, decision-makers need new approaches to respond to the changes and ways to predict future changes to be more prepared for the future. The data collection method was documentary and field methods. For this purpose, reviewing documents and literature and interviews have been used. The research population included health experts in the Makrān region who have been selected by the purposeful method. Theme analysis was used to analyze the qualitative data. The morphological analysis, Morphol software, Régnier's abacus technique, and the desirability of the hypotheses were used to formulate the scenarios. After identifying and examining the influential factors, 9 factors were identified as the most important factors affecting the development of health services in the Makrān region. The data were analyzed in Morphol software. 4988 scenarios were identified as the first or preferred scenario, from which the top ten scenarios with the highest probability of significance were extracted. The present study has identified the leading scenarios for developing health services in the Makrān coastal region on the horizon of 1415.

Keywords: Scenario, La prospective, Morphological Analysis, Health Services, Makrān Coasts.

#### Highlight

- This study highlights the importance of developing health services in the Makran coastal region.
- Identifying progressive scenarios for the development of health services in the Makran coastal region will enable future studies to be conducted within the required scientific framework.

#### **Extended Abstract**

#### Introduction

The future is constantly being built in every moment and never stops, by looking at the future it can be discovered and evaluated to create a desirable future (Pouragha & et al., 2018: 290-296). Thinking requires a certain language to be formulated by it, and the planner needs a tool to be able to express the future in the form of predictable elements and uncertainties, these tools are the same scenarios. Relatively specific elements and uncertainties of the future can be explained with a set of scenarios and based on it to take a position and plan for the future (Randall and Fahey, 1998: 3-9). Planning for the future plays a key role, especially in a competitive business world. Scenario analysis is a popular tool for future exploration and acceptable planning (Tavana et al., 2021: 1-17). Scenario planning is in fact, a tool used in the decision-making process; It is very useful when the decision maker is dealing with issues under uncertainty, That is a situation where at least one of the parameters of the decision is not a definite decision is very useful (Gaspars-Wieloch, 2019: 111-21).

Sustainable development is the most important goal of the modern era and can only be achieved through a comprehensive approach. Effective governance measures are the key to success in maintaining a balance

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between meeting basic needs and expected goals, and each country must find a path to development tailored to its national circumstances. Such a broad approach requires the realization of activities through a rational division of labor and cooperation between management bodies, and only by achieving goals, including; Living without poverty, ensuring health, education, gender equality, economic and labor rights, social equality and the development of a more inclusive society, we can live a life of prosperity (Wang & et al., 2019: 386-388).

We are currently witnessing changes in the health care system and we can expect more such drastic changes in the future, and one of the developing methods is to find strategies to achieve the future situation, this approach involves reasoning from a favorable image and The future state is to identify the changes needed to create the desired image (Dortland & et al., 2014: 15-31). The results of studies in the health sector indicate that futures study provide important tools and evidence for policymakers in almost all areas of the health system's functions, such as determining the amount and types of services needed, allocating funds, number of beds, expansion of hospital departments, technology requirements, the impact of policies and programs (Pouragha & et al., 2018: 290-296).

The Makran coastal region, which includes the eastern coast of Iran, is of strategic importance to the country due to its extraordinary economic, security, regional and international access and communication capacities, and since this area is underdeveloped and health services are not in a good condition in this area, so it is necessary to know the scenarios for the development of health services for the development of Makran coastal region, so this study seeks to answer the question of what are the upcoming scenarios for health services in Makran coast?

#### Methodology

The present research is a mixed research method quantitative and qualitative methods. The data collection method is done in both library and field methods and the data collection tool in the field method is interview and questionnaire. First, using hand search, relevant resources were searched among articles, books and dissertations, and then, using a systematic review method, Appropriate and relevant backgrounds were extracted. Also, in order to obtain upstream documents related to health services in Makran region, searches were conducted, which eventually led to the extraction of relevant documents. Then, by designing the relevant protocol, interviews were conducted with experts to obtain the required information, and then categorization. The influential components extracted from the backgrounds, documents and interviews of researchers were classified as effective factors on the development of health services in Makran region and on the horizon of 1415. Thematic analysis method was used to identify factors affecting health development and data collected by soft Maxqda software was categorized. Then, the most important and final influential factors on the development of health services were extracted by the researchers with the help of Micmac software.

Scenarios were developed based on the French school method of La prospective and morphological analysis method. The main influencing factors were used for analysis in Morphol software Also, by designing another questionnaire, the experts were asked about the preferred connections between the situations related to the main factors, and finally the scenarios of health services in Makran coastal region were extracted.

#### Results and discussion

9 variables; "Existence of government laws and regulations", "Foreign policies", "Support plans and programs", "Economic situation of the region", "Coordination of influential actors", "Demographic characteristics", "Investment activities", "Regional economic events" and " "Migration" were identified as the main influential variables. Through morphological analysis, 4988 scenarios were identified as the preferred scenarios of the software according to the amount of significant probability. By morphological analysis, 4988 scenarios were identified as software preferred scenarios according to the probability of significance, of which the top 10 scenarios were analyzed. Finally, solutions were provided for different situations of health services in Makran coastal region.

#### Conclusion

The results of the analysis of the best and most probable scenarios of health services in the horizon of 1415 in the region, show the gradual growth of possible situations of effective indicators. Considering the importance of the development of Makran coastal region in the development plans of the country, paying attention to the results of this research can be used for planning the development of this region and also the results of this research can be used by the Management and Planning Organization, Parliamentary Research Department, Council Planning and



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development of Hormozgan province and Sistan and Baluchestan province and other developing regions of the country and even the world, to consider these results to advance their goals.

Keywords: Scenario, La prospective, Morphological Analysis, Health Services, Makrān Coasts.

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