

Barriers of Referral System to Health Care Provision in Rural Societies in Iran

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ABSTRACT

Introduction: Health care delivery systems in rural areas face numerous challenges in meeting the community's needs. This study aimed to describe barriers of health care process in rural societies in Iran.

Methods: In this qualitative study, 26 participants (21 rural health care providers and five rural patients) were selected through purposive sampling. The data was collected via semi-structured individual interviews and small focus group discussions. Data was analyzed with qualitative content analysis.

Results: One category, "ineffective referral system", and five subcategories, i.e. being far from the ideal referral system, lack of adequate governmental referral system, lack of connection between different levels of the referral system, self-referential and bypassing the referral system, and insufficient knowledge about the referral system, were found.

Conclusion: Considering the obstacles to the referral system, improvements in its structure are necessary to promote the quality of health care in rural areas. Such changes require coordination between the three levels of the referral system, strengthening the public sector of the system, increasing public awareness about the referral system, and prevention of self-referential.

Introduction

Rural health and its care provision have been major concerns and international discussions in recent years.¹ About half of the seven-billion world population lives in rural areas. As this large population requires substantial health services, their health attracts the attention of nurses, midwives, and other health care providers as well as health care systems and governments.² All people deserve to have access to health care services regardless of their place of residence and rural populations are no exception.³ Nevertheless, rural communities are still experiencing a multitude of health problems in comparison with their urban counterparts.^{3,4}

Primary health care is commonly used as the main strategy to satisfy the health needs

of rural areas across the world.² Although the concept of primary health care, as a strategy to bring health for all, has remained lasting, there is little equality in its implementation. In fact, many primary health care programs in low-income countries have been unsuccessful due to their lack of necessary adequacy.⁵

According to the census of 2011, Iran has a population of over 70 million among whom 29% live in rural areas.^{6,7} After the Islamic Revolution in Iran, the priority of rural and underserved areas was been stated as a basic policy. Primary health care system of Iran was hence located in both rural and urban areas to improve health care for disadvantaged people and to reduce the gap between health outcomes. In the past two decades,

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health indicators in Iran have undoubtedly had significant improvements due to the implementation of the primary health care program.⁸ However, the health care delivery system in rural areas is still facing numerous challenges in dealing with the needs of the society.⁹

Health care services in rural areas of Iran are provided through an extensive national network consisting of a referral system. It begins from primary care centers in the area and continues up to secondary and tertiary levels in the higher centers.¹⁰ The referral system in all environments of primary health care (PHC) ensures equitable possibility of access to secondary and tertiary health care by all members of the community.¹¹⁻¹³ Implementation of the referral system is considered as one of the strengths of the Iranian health care system.¹⁴ The way of implementation of referral system has influence on quality of health care process in rural areas. Despite the belief about the absolute efficacy of the referral system, it always has to cope with various challenges.^{12,13} Quantitative studies have shown that the referral system has low effectiveness and efficiency and will thus need to be improved in terms of performance.^{13,15}

While the referral system is one of the major challenges of the health system in the future,¹⁶ no qualitative study has evaluated the barriers to the referral system in the process of health care provision in rural areas. Considering social and cultural complexities, it is impossible to understand health care and its barriers within the paradigm of proof-oriented and most scientific and experimental approaches. Since care is a phenomenon depending on the surrounding social context,¹⁷ the best way to understand it is assessments in its natural environment. Such a view of nature-oriented approach or interpretation attempts to study the phenomena and processes in their natural, compatible environment. Today, qualitative research methods play an

important role in our understanding of rural health issues. The qualitative research methods are identified as appropriate methods for research on rural health and other areas of social research. Qualitative methods have the necessary capacity to produce data to discover the effects of social context on health.¹⁸ These approaches in the study of primary health care are necessary when a researcher wants to focus on the experiences of the participants.¹⁹ Considering disability of proof-oriented or quantitative paradigm in understanding of the health care process and its barriers in terms of cultural and social complexity, in this study, the researcher, who had worked as a coach in rural health centers for 11 years, tried to describe people and health care providers' experiences about the barriers to health care process in rural community.

Materials and methods

This qualitative content analysis was performed to describe barriers to care process in rural communities of Iran during 2011-12. Rural region of Arsanjan (a city in Fars Province) was the research environment. A total of 26 participants including 21 rural health care providers (13 health workers, two rural family physicians, two midwives, and four rural nurses) and five villagers were selected by purposive sampling. The inclusion criteria were having at least two years of experience in the field of health care in rural areas and willingness to describe personal experiences. The majority of participants in this study were health workers who had a significant role in the process of health care provision in rural areas. The experiences of other participants in the health care process was used to further clarify the process of health care in rural areas in the form of theoretical sampling.

Data was collected by semi-structured interviews and small focus group discussions. Interviews were performed in rural health centers, health homes, and the

participants' houses. The interview questions were about the process of health care in rural areas. Each interview was analyzed and rewritten before the next interview. The average interview time was 60 minutes and interviews continued until data saturation. Small focus group interviews with a total of three to four participants with specialized knowledge or experience in the discussion topic are one of the best methods to collect qualitative data.²⁰ We held a meeting with four nurses who had worked in rural health care centers (second level referral system) and obtained their views on the process of health care in rural areas. The small group discussions concerned the challenges in rural health care. We recorded the participants' interactions as a data resource; in addition, the researcher also acted as facilitators during the group discussion.

Before the initiation of the study, the subjects were explained about the study protocol and aims, their right to withdraw at any time, and also the anonymity and confidentiality of data. They were then asked to sign written informed consent forms. The interviews were recorded only if the interviewee accepted to. Time and place of interviews were selected based on the participants' ideas.

Data was analyzed using qualitative content analysis according to the method described by Granheme and Landman.^{21,22} This process includes open coding, abstracting, and creating classes. All individual and group interviews were transcribed and the texts were read several times. Then, initial codes (semantic units) were determined. During the process of open coding, the researcher examined texts line by line and word by word. By allowing the free creation of the codes, all aspects of the content were described in respondents' words. In the next step, semantically similar codes were allocated to the same class. The classes were then grouped to form larger classes to make the minimum number of

groups. Microsoft office onenote 2007 was used to assist data analysis.

Various methods were used to ensure the accuracy of the study. After the coding, the participants were asked to confirm the accuracy of the codes and interpretations. To ensure consistency in data analysis, during the interview coding, the researcher was referring to previous coding interviews to evaluate codes again. The researcher also asked faculty members, faculty advisors, and colleagues familiar with qualitative research for their comments about the correctness of the processes of analysis and interpretation. In order to incorporate the production resources and methods of data collection, the researcher tried to choose subjects from all groups related to caring process in the rural areas and also used different methods such as interviews and group discussions to collect data.

Results

The participants in this study were 21 health team members and five rural clients. Demographic characteristics of the subjects are presented in table 1. A main class, "The referral system is dysfunctional", was emerged. It included subcategories of being far from the ideal referral system, lack of adequate governmental referral system, lack of connection between different levels of the referral system, self-referential and bypassing the referral system, and insufficient knowledge about the referral system.

The referral system is far from the ideal state

Our findings indicate that although the referral system is good but it has not been well implemented. Nurses participating in group discussion believed that "a referral system is generally good and will work fine if implemented correctly. But unfortunately, it does not run well". A family physician stated that the referral system has many problems, e.g. patient care is not practiced as it should be and patient does not receive the services they need. A midwife declared that the

Table 1. Demographic characteristics of the participants

Health staff Profession	Place of work	Number	Gender	Education	Experience
Health worker	Health home	13	9 women, 4 men	Junior high school, high school diploma	3 to 20 years
Family physician	Rural health center	2	2 men	General practitioner	2 to 3 years
Midwife	Rural health center	2	2 women	Associate degree	5 to 6 years
Nurse	Rural health center	4	2 women, 2 men	Bachelor's degree	2 to 11 years
Rural patients	Housewife	2	2 women	Elementary school, associate degree	-

referral patterns are wrong and that the routine should be visiting a general physician first and be referred to a specialist only if necessary. Based on the experiences of health caregivers and the current situation, the referral system is a preventing factor against the rural health care process.

Lack of adequate governmental referral system

According to the participants, the governmental referral system is not responsive to the needs of rural communities, i.e. the number of experts and their attendance days in clinics is limited. A health worker stated that the governmental health clinic is crowded, especially public clinics that are only two days a week, all people want to go to public clinics, but we're 23 health centers. Moreover, the patients are obliged to wait long for their turn or to a private office.

"We can say there are no governmental specialists because they are too few. They only visit 10-15 patients two days a week", said a health care provider. The governmental referral system failure has led the patient to leave it in many cases.

Lack of connection between different levels of the referral system

The participants emphasized the absence of necessary connections in the hierarchy of the referral system. The process of referral and patient follow up may be disturbed by lack of feedback on the referral system or

when the patients leave the governmental referral system.

"We are not given feedback. Whenever we refer patients to doctors, we ask them to write us about what they have done. But they will only sign and seal the referral form", complained a health worker.

"We refer patients to doctors with a referral form. It is our duty to send referral forms but no doctor sends us feedback", mentioned another health worker. Lack of feedback from higher to lower levels has been one of the preventing factors in the referral system and affected the quality of health care in rural areas.

Self-referential or bypassing the referral system

Non-compliance with the hierarchy of the referral system and referring directly to the physicians and more specialized levels as self-referral were other problems in rural health care provision. A health worker reported that people do not follow the referral system and that they directly refer to specialists.

People, on the other hand, are dissatisfied with their obligation to refer to health centers for using their rural insurance. The necessity of attending the referral scheme is not pleasant for people especially in emergency situations. Sometimes, the problem is the absence of the family physician.

"I do not have rural insurance, but those who do are in real trouble. They go to a rural health center taking referral form with seals

and go. The doctor writes prescribed drugs on one page and tests on the next page, but the next page is no longer valid. People are annoyed because no physician in the emergency room would sign the referral form...", stated a villager.

"The problem is that if a physician is on leave and you want to make an urgent reference, the costs are not covered by the rural insurance because the insurance sheet should be stamped by physicians. Family physicians are usually absent during non-office hours", said a health worker. Therefore, people will go directly to a specialist. In group discussion, nurses concluded that patients recognize that they should go to a specialist. Self-referential and bypassing the referral system were hence the factors that affected the quality of health care.

Insufficient knowledge about the referral system

Based on the statement of the participants, many people and staff members do not fully know and understand the referral system and this causes problems in the health care process.

"Family physicians and referral system are for people's convenience. But some people do not have this level of understanding and awareness", mentioned a health worker. Not only people, but also health care providers lack adequate knowledge in this regard. This unawareness is an obstacle to the referral system and influences the quality of health care in rural areas.

Discussion

Results of this study indicated that the referral system in rural areas is far from its ideal state. In fact, the referral system is not being implemented as it has been defined. Similarly, Ebadi Farde Azar believed that the referral system is still much different from its ideal state. Admission without referral forms is common and approximately there is no reference among patients with referral forms and without referral forms.²³ Likewise, Nasrollahpour Shiravani et al. showed that

many of the referral system rules are not respected, i.e. patients are not referred to family physicians by health homes or to the second level according to the diagnosis of the family physician, taking the role of selecting level 2 physicians by family physicians, higher levels do not provide feedback to the lower levels, following the referred case by health workers and family physicians, and patients are not returned to the first level.^{12,13} An ideal referral system will require sufficient coordination and relationships between its different levels and elements. In such a system, reference to the higher level will only be possible through the lower level and referred cases can hence be tracked by receiving feedback from higher levels

We also found that the governmental referral system is not responsive to the needs of rural communities. In addition, the number of specialists and the time of their presence in rural health centers is limited. Overcrowding generally forces patients to wait for a long time or to go to the private office of a specialist. Referral system is designed to optimal the use of three levels of health services and to avoid unnecessary congestion and waste of human and material resources in the specialized levels.^{11,24} However, limitations in specialty levels and overload of non-urgent referred cases have made the referral system unsuccessful.

The findings of this study indicated the absence of necessary connections in the hierarchy of the referral system. Lack of feedback in the referral system or the patients' tendency to leave the governmental referral system disturbs the process of referral and patient follow-up. Results of this study were consistent with other studies. For instance, Khayyati et al. showed that rate of feedback received by family physicians from higher centers was 36%. They suggested that since feedback is very important to the management and treatment of patients in family physician program, all referred cases should receive feedback. Thus, this rate of feedback is not acceptable.²⁵ Nasrollahpour

Shiravani et al. found absent or poor feedback as a common problem in the referral system that most of the grading care systems are faced with. However, in well-organized health systems, higher levels should record outcome of visit and treatment of all referred patients from the lower level in standard form and should report the follow-up recommendations to the referring center.^{12,13} Ebadi Farde Azar study also showed that there is no favorable situation in terms of feedback and no kind of feedback is given to patients with referral leaves (or without referral leaves).²³

According to the findings of this study, self-referential, bypassing the referral system, not following the hierarchy of the referral system, and going directly to the physician and more specialized levels are other problems in the process of care in rural areas. People's obligation to respect the hierarchy of the referral system, especially in cases of emergency, is a major factor in their dissatisfaction. They are dissatisfied because they can only use rural insurance in health homes or for visiting their family physician. Similarly, Nasrollahpour Shiravani et al. showed that more than half of the patients were directly referred to the second level by family physicians without a referral from health homes. They also found inadequate compliance with the referral rules is not only bypassing the health house, some patients were referred based on their request and insistence. Unnecessary referral of patients to the second level is one of the challenges of hierarchical systems of care including the family physician program and referral system. In the absence of appropriate control measures, concerns about the effectiveness of the plan in preventing undue and unnecessary referral of patients to the second level will increase.^{12,13} Previous studies have introduced referral systems as a strategy to make better use of hospitals and tertiary health care services. However, all patients should first be seen by a primary health care physician who decides on the necessity of the

referral. Access to hospital care should be through primary health care centers except for emergency cases. This prevents the inefficiency of a system and lack of specialty care due to increased pressure on specialists following inappropriate self-referential. Despite a reference structure, there are many situations in which people try to escape from primary care. Unnecessary self-referential results in ineffective specialized system and problems such as increased unnecessary costs, payment difficulties for patients, absence of comprehensive care information for patients, lack of planned referral and continuity in care, reduced specialty care standards due to increased system load, reduction in the feedback and follow-up care instructions, and transportation problems for both individuals and the health care system.^{11,24}

Our findings indicated staff members and patients' lack of awareness about the referral system and the probable problems caused by bypassing it. Consistent with our finding, Nasrollahpour Shiravani et al. showed that a small number of patients returned to the first level or their referring doctors after receiving care at the second level. The majority of patients cited lack of knowledge as the main reason.^{12,13} Likewise, Shams et al. showed that knowledge on health services provision at the primary level in the referral system affects the refer rate and people acceptance of these services. Hence, investment in upgrading this factor can ensure the usefulness of the system.¹⁵

Overall, the results of the present study suggested the quality of the referral system as an important factor in undesirable process of health care in rural areas. Barriers associated with the referral system are inhibiting factors of the health care process in rural areas and can influence the quality of care process and inhibit the referral system from achieving the desired goals.

Although the present study provided valuable points about the barriers caused by the referral system to the process of health

care in rural communities, the findings should be generalized with caution due to the subjective nature of the collected data and the small number of participants. Since this study was part of a wider study aimed to explaining the process of health care in rural areas, further studies are recommended to specifically determine the challenges of the referral system in rural areas.

Conclusion

The quality of the referral system is undoubtedly one of the main factors in determining the health care process in villages. Obstacles to high-quality implementation of the referral system can prevent the achievement of its goals. Since the current conditions of the referral system are not desirable, the structures of the referral systems have to be improved by creating greater coordination between the three levels of the referral system, strengthening public sector of the system, increasing public awareness and the knowledge of caregivers about the system, and preventing self-referential.

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Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

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