

## Original Articles

# Difficulties faced when conducting primary health care programs in rural areas

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### ABSTRACT

**Objective:** The aim of this study is to explore the difficulties that face primary health care teams who work in rural areas in Aseer region, Kingdom of Saudi Arabia.

**Methods:** This study was carried out in 1999 by distributing a multi-purposes questionnaire to all members of health teams who work in the primary health care centers located in the rural areas of Aseer region, Kingdom of Saudi Arabia. This questionnaire consisted of 3 parts that were concerned with the characteristics of primary health care centers teams and difficulties faced by them while conducting primary health care programs during their daily activities at primary health care centers. Data was entered and analyzed by personal computer which was provided with statistical package for social sciences.

**Results:** A total of 68 primary health care centers were located in the rural areas of Aseer region, Kingdom of Saudi Arabia. Those primary health care centers serve 127,880 individuals who live in 657 villages. Three

hundred and four members of the primary health care centers teams answered our questionnaire, 23% were physicians, 45% were nurses and 17% were Saudis. Thirty percent reported that they face some difficulties during conducting primary health care programs and 24% reported difficulties during dealing with clients. Most of the difficulties were the lack of medical facilities, rough roads and languages barriers.

**Conclusion:** This study revealed that approximately one 3rd of primary health care teams who work in the rural areas of Aseer region, Kingdom of Saudi Arabia face significant difficulties that will affect the introducing of essential primary health care programs. A multi-sectoral integrated approach is mandatory to overcome these difficulties and introduce good quality care.

**Keywords:** Primary health care centers, difficulties, rural areas.

**Saudi Med J 2002; Vol. 23 (4): 384-387**

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The Kingdom of Saudi Arabia is one of the leading countries that accepted and implemented the primary health care concept in the Middle East region.<sup>1</sup> Since 1980, there has been a dramatic progressive increase in the Primary Health Care Centers (PHCCs) network which covers almost all parts of the Kingdom in addition to its accessibilities to everybody in Saudi Arabia.<sup>2-4</sup> To improve the quality of health services that are being introduced by those PHCCs, the General Directorate of PHCCs in the Ministry of Health (MOH) developed the quality assurance manual and other practical guidelines.<sup>5-9</sup> In

spite of those efforts, some reports from the Kingdom have shown that there are many barriers and obstacles facing the ideal implementation of some PHCC programs. Those reports concentrated on such barriers in urban areas and specific morbidity such as diabetes and acute respiratory infections.<sup>10-14</sup> The aims of this study are to explore and to understand the difficulties that face the PHCC teams in rural areas in Aseer Region, Kingdom of Saudi Arabia from the health teams perspective and to suggest solutions to overcome those difficulties.

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Received 15th June 2001. Accepted for publication in final form 18th November 2001.

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**Methods.** Aseer region is covered by a network of 246 PHCCs. About one 3rd of them are located in the rural areas. Rural areas are defined as any part in which the distance from the nearest city is more than 20km. In the beginning of 1999, a multi-purposes questionnaire was designed by the investigators and distributed by the technical supervisors to all the PHCC teams who were working in rural areas in Aseer region during their periodic visits to those PHCCs. The questionnaire consisted of 3 parts; the first one was completed by the PHCC managers and dealt with the socio-demographic characteristics of the rural area population. The 2nd part contained the demographic characters of PHCC teams such as age, occupation, nationality, and sex. The 3rd part was consisting of 2 sections; the first section was an inquiry regarding the difficulties facing the team members implementing the PHCC programs while the 2nd was the difficulties that they faced when dealing with people attending PHCCs. Data of the questionnaire was entered and analyzed by personal computer provided with statistical package for social sciences (SPSS) program. Statistical tests were used when appropriate.

**Results.** The total number of rural PHCCs in Aseer region was 68 which represent 28% of the total PHCCs in Aseer region. Those PHCCs serve 127,880 individuals who live in 657 villages. The average monthly visits to those PHCCs were 1074 visits. The distance from the nearest hospital ranged from 14km to 200km ( $58.5 \pm 39$ ). The characteristics of the PHCC teams who work in the rural areas in Aseer region are shown in **Table 1**. **Table 2** displays the difficulties that face the PHCC teams in conducting their programs in rural areas in Aseer region.

Statistical analysis to explore the association between difficulties and socio-demographic variables revealed that difficulties to conduct PHCC programs were greater among non-Arabic speakers ( $P=0.01$ ), female gender ( $P=0.01$ ) while difficulties with dealing with clients showed strong association with a short duration since recruitment ( $P=0.00$ ), and the female gender ( $P=0.03$ ).

**Discussion.** Community based health care through PHCCs was adopted by the Ministry of Health (MOH) in the Kingdom of Saudi Arabia to introduce good quality and accessible health services.<sup>1</sup> To introduce such good quality services, it is essential to have the infrastructures such as human resources, diagnostic and therapeutic facilities, good transportation means such as cars and ambulances.<sup>5</sup> Thirty percent of the PHCCs working staff in rural areas in Aseer region reported that they face difficulties in conducting the ideal PHC programs. The first difficulty includes lack of PHCC facilities (laboratory, good cars), the 2nd one was related to

**Table 1** - Characteristics of primary health care center teams in rural areas of Aseer region, Kingdom of Saudi Arabia.

Characteristics	N (%)
<b>N=304</b>	
Age	35.7 ± 7.4
<b>Sex</b>	
Male	177 (58.2)
Female	127 (41.8)
<b>Marital Status</b>	
Single	67 (22)
Married	237 (78)
<b>Nationality</b>	
Saudi	52 (17)
Non-Saudi (Arabs)	96 (32)
Non-Saudi (non-Arabs)	156 (51)
<b>Job</b>	
Physician	71 (23.4)
Dentist	5 (1.6)
Nurse	136 (44.7)
Midwife	16 (5.3)
Pharmacist	15 (4.9)
Radiographer	6 (2)
Lab. technician	14 (4.6)
Health inspector	6 (2)
Administrator	32 (10.5)
Others	3 (1)
N- number Lab. - laboratory	

the community (language barriers, illiteracy, traditional habits, and uncooperative people). The last difficulty was related to the environment such as difficult roads and scattered population. To optimize the PHCC health services and to overcome those difficulties, a step by step approach is suggested and can be implemented. The first step is to identify the difficulties, the 2nd step is to classify the difficulties, and the last step is to suggest practical solutions. Ten difficulties were identified and divided into 3 major groups. The first group was PHCCs related barriers that included deficiency of drugs, lack of laboratory facilities, unavailability of good cars, inadequate staff numbers. Some of those difficulties were reported by some diabetics in the region in a previous study.<sup>13</sup> All those barriers could be managed effectively by good coordination of the PHCC administrators with their counter part in the health sectors who can provide the PHCCs with medical and lab. supplies, help to maintain cars, and redistribute the staff in the sectors according to the population size.

The 2nd group of difficulties were related to the community. Those difficulties were language, illiteracy, unhealthy traditional habits, and uncooperative people, insisting for referral and prescribing specific medications. Those groups of problems need multiple solutions. Some of those

**Table 2** - Patterns of difficulties faced by primary health care center teams in rural areas of Aseer region, Kingdom of Saudi Arabia.

Patterns	N (%)
<b>Difficulties to conduct PHCCs programs</b>	<b>(N=91/304) (30)</b>
Lack of PHCC facilities	27 (22)
Road difficulties	14 (15.4)
Language problems	11 (12.1)
Illiterate people	8 (8.8)
Lack of human powers	7 (7.7)
Workload in the PHCCs	7 (7.7)
Uncooperative people	7 (7.7)
Scattered people	6 (6.6)
Traditional habits	3 (3.3)
Inadequate training of PHCCs staff	3 (3.3)
<b>Difficulties to deal with clients</b>	<b>(N=75/304) (24)</b>
Language	20 (26.7)
Poor compliance to appointment	7 (9.3)
Insisting for drugs	6 (8.8)
Insisting for referral to hospital	5 (6.7)
N - number PHCC - primary health care centers	

solutions should come from the PHCC administrators who can involve the community leaders in planning, implementation and evaluation of PHCC programs through community participation. The PHCC staff should intensify health education in the community according to the consumer health needs. To reduce the illiteracy, the administrators should discuss this issue with the community leaders, school heads and teachers to give night classes for the people in the rural areas. Most of the PHCC staff in the Kingdom of Saudi Arabia are non-Saudi and some of them were non-Arabic speakers,<sup>15-17</sup> rural areas in the Kingdom of Saudi Arabia in general and Aseer region particularly are preferred to be manned by Arabic speaking medical staff who can communicate and run effective PHCC programs.

The last group of difficulties were related to the environment. Populations in rural areas in Aseer Region are scattered between the coast on the Red sea in the west to the Sarawat mountains on the border of Yemen. The roads in most of those areas are long and rough. Such difficulties contribute significantly to inadequacy and difficulty in conducting important services such as vaccination, maternal and Child Care. These difficulties are shared with other services provided by other sectors such as education, telephone, and electric power services. Therefore His Royal Highness, The Governor of Aseer region adopted a presented development plan for the rural areas by means of the so called civil development centers to be the nucleolus for future model cities. However, there is

no simple solution, the above mentioned proposed solutions can be modified to meet each area needs, according to the available resources and to the concerned decision makers.

In conclusion, PHCC staff in rural areas in Aseer region were found to have many difficulties that interfere with introducing good PHC services. Those problems were suspected to be universal in the rural areas of the Kingdom of Saudi Arabia. A multi-sectoral approach is essential to overcome these difficulties and to introduce good quality health services.

## References

1. Al-Mazrou Y, Al-Shehri S, Rao M. Principles and Practice of Primary Health care. Riyadh (KSA): Ministry of Health, General Directorate of Health Centers; 1990. p. 9-402.
2. Ministry Of Health. Annual Health Report. (Arabic Version). Riyadh (KSA): Al-Hilal House Press; 1995. p. 189-194.
3. Ministry Of Health. Annual Health Report. (Arabic Version). Riyadh (KSA): Al-Hilal House Press; 1998. p. 92-109.
4. Ministry of Health. The Health in a century. (Arabic Version). Riyadh (KSA): Asbar Publisher; 1999. p. 5-194.
5. The Scientific Committee of Quality Assurance in Primary Health Care. Quality Assurance in Primary Health Care Manual. WHO-EM/PHC/81—A/G/93. p. 10-41.
6. The National Scientific Committee of Bronchial Asthma Protocol for the management of bronchial asthma. 2nd ed. Riyadh (KSA): Ministry of Health; 1997. p. 1-58.
7. Khoja TA, Al-Shehri S. Primary Care physicians Guidelines for Maternity and childhood care. Ministry of Health, General Directorate of Health Centers, 2nd ed. Riyadh (KSA): Khozam Press; 1997. p. 5-530.
8. Khoja TA, Ahmed K, Al-Hawas M, Al-Korashi M. National Protocol for Diagnosis and Treatment of acute Respiratory Infections Among Children in Health Centers and small Hospitals. Riyadh (KSA): Ministry of Health; 1997. p. 1-45.
9. The National Scientific Committee of Mental Health in Primary Health Care. National Manual for Primary Mental Health Care. 1st ed. Riyadh (KSA): Ministry of Health; 1997. p. 1-88.
10. Khattab M, Alakija W, Abolfoutoh M, Humaidi M, Al-Tokhy M, Al-Khaldi Y. Obstacles to and solutions for optimal implementation of primary care for diabetics in Abha, Aseer region, Saudi Arabia. *Saudi Med J* 1997; 18: 236-239.
11. Khattab M, Abolfoutoh M, Alakija W, Humaidi M, Al-Tokhy M, Al-Khaldi Y. Audit of diabetic care in an academic family practice center in Aseer region, Saudi Arabia. *Diabetes Res* 1996; 31: 243-254.
12. Kattab MS, Al-Khaldi YM, Abolfotouh MA, Khan MY, Alkija W, Al-Tokhy M. Impact of a diabetic program in a family practice setting in Aseer region, Saudi Arabia. *Diabetes Res* 1998; 33: 115-127.
13. Al-Khaldi YM, Al-Jaser AM, Al-Gelban KS. Barriers to Compliance among diabetics in Aseer region. *Saudi Med J* 1999; 20: 951-953.
14. Al-Khaldi YM, Al-Sharif AI, Gilban KS, Al-Hamami QM, Al-Jaser AO. Audit of Management of Respiratory Infections Among Children in Abha City. *Saudi Med J* 2001; 22: 244-248.
15. Al-Shehri AM, Stanley I. Continuing medical education for primary care. Problems and solutions. *Saudi Med J* 1993; 14: 8-15.

16. Al-Shamari SA, Khoja TA. An assessment of current status of continuing medical education (CME) among primary health care doctors "A case for creation of national CME body". *Saudi Med J* 1994; 15: 443-449.
17. Jarallah JS, Khoja TA, Mirdad SA. Continuing medical education and primary care physicians in Saudi Arabia. Perception of needs and problems face. *Saudi Med J* 1998; 19: 720-727.