

Saudi Diabetes Health Care System: A Consumer Evaluation

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Introduction

Since its establishment in 1951, the Saudi Arabian Ministry of Health (M.O.H) has held the responsibility of delivering free medical services to Saudi citizens. Currently, the MOH directly operates 1,925 health care centres and 220 hospitals. These organisations provide acute and primary health services, supplementing other governmental and private health systems in the kingdom.

Similar to several other countries around the world, the Saudi public health system is dominated by the curative trend, where acute care organisations are well-prepared and deployed around the counties. On the other hand, few studies have evaluated the primary health care system's ability to manage certain health needs, especially chronic diseases. The prevalence of diseases such as diabetes means that Saudi Arabia ranks in the top ten countries globally in terms of the disease rate.

Reported incidences of diabetes within the population range between 4% (World Health Organization, 2008) and 23.7% (Al-Nozha, Al-Maatouq. et al. 2004). The gap between these estimates notwithstanding, the rate is above the estimated world prevalence of 2.8% for all age groups in 2000 (Wild, Roglic et al. 2004). Based on the existing background, the researcher undertakes this evaluation as part of a larger project. The aim of this study was to evaluate primary health services based on the consumers' view.

Evaluation approach

The study was conducted in three of the four main health care centres covering the Almadinah region (Saudi Arabia) catchment. Twenty four type 2 diabetes mellitus patients (T2DM) and twelve health care providers were individually interviewed in this study. Inclusion criteria for T2DM participants were: must be able to participate without any mental disability that could affect his/her decision; must not have a physical disability that affects his/her self-care activities; must be registered at one of the three primary health care centres; and aged 26 years and above.

Health care providers' inclusion criteria were: must be an employee in one of the three study locations; and play a direct role in provide diabetes health care. The chronic care model (Wagner 1998) was utilised as a theoretical framework. Data was analysed by means of quantitative thematic analysis.

Evaluation outcomes

The study revealed numerous factors that impact the health system: delivery system; decision-making; clinical information system; self-management; and community. Providers mentioned several factors that may improve diabetes service outcomes, such as updating health education programs contents and strategies; improving provider-patient relationship; facilitating health providers' continues education; and providing primary health care facilities (table 1).

Theme	Providers	Patients		Total No (%)
		Male	Female	
Health system	26	7	5	38 (10.41)
Delivery system	36	26	10	72 (19.72)
Decision making	22	15	4	41 (11.23)
Clinical Information System	12	20	18	50 (13.69)
Self-management	19	19	26	64 (17.53)
Community	17	28	55	100 (27.39)
Total	132	115	118	365 (100)

Conclusion

The researcher concluded that even though huge efforts are invested in the Saudi primary health care system, the current diabetes health care system outcomes could be maximized by giving diabetes patients and health providers an opportunity to participate in setting up the system plan.

Lessons learned

Several lessons were learnt from this project. These lessons were:

- Identifying the mega-picture of the health care system may require evaluation approaches that overcome traditional research limitations. Using questionnaires to understand a wider context, such as how factors contribute to better health outcomes, is limited and may even promote some sort of ecological fallacy. For example, several studies have been published on factors affecting diabetes self-management outcomes. When these studies depend on a questionnaire alone, the result at best will identify factors listed in the questionnaire that result in an incomplete picture of the real situation. Even worse, other researchers and decision makers may take these results for granted fact when making future plans and literature synthesis.
- Considering the Saudi Arabian culture, principal researchers should consider involving female counterparts to manage female participants' interviews. Based on the researcher's experience in this study, there was a huge difficulty in interviewing female participants in the T2DM group. As the culture does not approve of women talking with male strangers, it was difficult for female participants to talk with a male researcher about personal issues, such how they manage everyday life and how their families deal with their health needs. During

this study, the researcher employed a female research assistant to perform the female interviews. Without this approach, it was impossible to get rich information from these interviews.

- Using an external evaluator for evaluating health services may yield stronger results than employing an internal evaluator. The researcher noticed in this study that the evaluation gave rise to several issues that have not been mentioned in earlier studies. Internal evaluators may have inherited a bias towards the programs where they took part in planning or implementation. Therefore, bringing in a fresh view by an external evaluator may be preferable to using internal evaluators.

References

Al-Nozha, M., M. Al-Maatouq., et al. (2004). "Diabetes mellitus in Saudi Arabia." *Saudi Medical Journal* 25(11): 1603-1610.

Wagner, E. (1998). "Chronic disease management: What will it take to improve care for chronic illness?" *Effective Clinical Practice* 1: 2-4.

Wild, S., G. Roglic, et al. (2004). "Global prevalence of diabetes: Estimates for the year 2000 and projections for 2030." *Diabetes Care* 27(5): 1047-1053.