

Physicians' perception of health insurance in Saudi Arabia

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ABSTRACT

Objective: To assess physicians' views on health insurance and its implication on the health care system.

Methods: We carried out a cross-sectional study in 2 major hospitals in Riyadh, Kingdom of Saudi Arabia. Data were collected from January to December 2002 through self-administered questionnaires that were distributed to a total sample of 400 physicians. The instrument consisted of 28 items that focused on assessing physicians' perception towards health insurance and its effect on health services. We performed a descriptive statistics and analysis of variance using the Statistical Package for Social Sciences.

Results: Overall, 151 physicians (38%) completed the survey. This study clearly shows that access to health care services is a major concern; more than 94% of the respondents agree that "everyone in the Kingdom should have access to healthcare services". Respondents also agree that health insurance will improve access to healthcare services for all citizens. Physicians also believed that health insurance would lead to more regulations and utilization review of services, create more competition between healthcare providers, and create new jobs in the healthcare sector. Saudi physicians reported a higher mean score for

11 items with significant *p*-values as compared with non-Saudi physicians.

Conclusion: Physicians in this survey believed that accessibility is a major policy concern, and that health insurance will have a positive effect on access to the health care system. Yet, accessibility is an illusive term with many aspects that go beyond the identification of need for health care to the actual delivery of health care services and the organizational structures to match the needs of society. Cooperation as a national health system should be built on collaborative efforts rather than market competition in itself. It has been suggested that markets are stronger in the role of delivery than in the financing of health care, that markets tend to promote more expenditure on technological innovation rather than producing the most desired set of social outcomes. Cooperative health insurance can be an answer to the current problems facing the health care system in the Kingdom of Saudi Arabia as long as it remains cooperative rather than competitive.

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A social health insurance system, that is publicly financed, is supposed to achieve equality by providing free access to health care services based on the believe that health care is an individual right and a social good that should have a joint consumption.¹ However, even with increasing the

proportions of governments outlays allocated to the healthcare systems; rising health care costs, long waiting lists, and timely access to health care services have become major obstacles that threaten the very existence of the public healthcare systems.

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In addition, some nations that cover medically necessary and appropriate services are debating the limits of publicly defined coverage.² Challenges such as changes in demography and patterns of disease, adoption of advanced technologies, increased drugs consumption, duplication of services, inefficiency and lack of cost awareness will eventually inhibit these public systems from achieving their primary goal of equal access to health care services.^{2,3}

Reform policies around the world vary considerably from nation to nation, some are moving towards a more competitive system others are continuing to rely more on government organization and financing of health care services.^{1,4,5} The Kingdom of Saudi Arabia has recently introduced cooperative health insurance to cope with the fundamental problems of shrinking access to health care and the rising costs of medical services.⁶ Decision No. 71 dated 27.04.1420H (Aug. 11, 1999) by the Council of Ministers approved a new cooperative health insurance plan in Saudi Arabia. The cooperative health insurance is a nonprofit plan based on the concept of cooperation and spreading the risk among members of the community. The cooperative health insurance Act calls for the establishment of a cooperative health insurance council to be in charge of the new system. The health insurance council will supervise and regulate insurance companies as well as health care providers. Mandatory coverage will first apply to all expatriates and their dependents working and living in Saudi Arabia. If after 5 years of operation this nonprofit scheme found to be successful, coverage will be extended to all Saudi nationals. Health insurance policies will have standard benefits with a basic coverage that includes; consultation, treatment and medication for outpatient services; preventive care such as vaccination, childbirth, and parental care; a laboratory and radiology tests; inpatient services, maternity care and operations; and treatment of dental and gum diseases. Medical premiums are to be negotiated between the insurance company and the employer or the individual applying for coverage.⁷

The cooperative health insurance scheme is not a new concept. Starr⁸ in his book "The Social Transformation of American Medicine" dates the modern cooperative movement to nineteenth century England. Advocates of medical cooperatives see it as an alternative to "state medicine" that combines the fundamental concerns of both socialism and capitalism, equality, collective action, and the ability to compete in the health care market. Medical cooperatives that were established in 1930s in the United States emphasized 4 principles: group practice; prepayment, preventive medicine, and consumer participation.⁸ However, the main principle of the

proposed health insurance scheme in Saudi Arabia is to increase the participation of the private sector in the health care market and to reduce the financial burden on government provided healthcare services. While market competition has been exported to European nations and many developing countries as the solution that will slow down or lower health care costs, many countries have concluded that competitive schemes in health insurance are likely to produce higher costs and inequities.^{9,10} The inherent causes of market failure concerns 2 weaknesses in the health insurance market, namely, adverse selection and moral hazard. Adverse selection refers to the difficulties associated with providing health insurance to individuals who know more about their true medical condition than the insurer does. Moral hazard arises when the insured that pays only part of or none of the marginal cost of covered services over utilize these services and knowingly engages in behaviors that allow controllable aspects of their health to deteriorate. Accordingly, the problems of "risk-rated premiums" and the increase in demand for medical services will require more government regulation of insurers and greater control over the insured.¹¹⁻¹³ On the other hand, social insurance systems that rely on government organization and financing with the objective of providing universal access and social solidarity are now under pressure to control health care costs and national spending on health care services. The global dilemma of reforming the health care systems illustrates a varying degrees of both market and government involvement with different blend and trends.¹⁴

The health insurance market in Saudi Arabia have grown rapidly since 1990, medical insurance premium grew 20.8% in 2000 reaching \$260 million against \$215.3 in 1999. The health insurance market in Saudi Arabia is still unregulated and underdeveloped and even with about 100 foreign companies selling insurance through Saudi agents, the only licensed company to operate in the Kingdom is the National Company for Cooperative Insurance (NCCI). Other companies are pending regulatory policies for registration and certification by the Ministry of Commerce.^{15,16} Understanding the full implications of the cooperative health insurance plan on the health care system in Saudi Arabia may take years after its implementation. However, it is important not to think of the proposed system simply as a way of increasing the role of the private healthcare sector or shifting the financial burden of health care services from government to the end user or their employers. The proposed policy is likely to have a significant effect on access, costs, quality of care, efficiency,

effectiveness, adoption of new technology, and utilization of health care services. This is one of the first attempts to assess the effect of health insurance on such variables in Saudi Arabia. The purpose of this study is to assess physicians' views on health insurance and its implication on the health care system. Physicians as clinical leaders and front line providers can be either a barrier to or a catalyst for the adoption of the proposed health insurance plan.¹⁷

Methods. The present research was part of a cross-sectional study to assess physicians' perception towards health insurance and its effect on health care services in Saudi Arabia. Two major hospitals in Riyadh the capital city of Saudi Arabia was chosen for this study for their size and large physician population. The first hospital is a university hospital with total bed capacity of 702 beds and 503 physicians, the second hospital is a specialist hospital with a total bed capacity of 620 beds and 552 physicians. A random sample of 400 physicians was selected, 200 physicians from each hospital.

Data were collected from January to December 2002 through self-administered questionnaires that were distributed to all physicians in the sample. A pre-structured tested and redesigned instrument was developed for this study. The instrument consisted of 28 items that focused on assessing physicians' perception towards health insurance and its effect on health services. Responses for these items comprised of 5-point Likert-type scale that range from totally agree with a value of 5 to totally disagree with a value of one. The survey also collected data on physicians' demographics and job status. Descriptive statistical analysis was performed using the Statistical Package for Social Sciences version 10 for personal computers. Analysis of Variance was also used to compare Saudi and non-Saudi physicians in the sample.

Results. A descriptive statistic reported in **Table 1** shows the characteristics of physicians who responded to the survey. Overall, 151 physicians (38%) completed the survey. The mean age of the respondents was 56.3 years with a standard deviation of 10 years. The majority of the respondents were male (86.1%) and married (89.4%) with an average number of 3.7 children. Most of the respondents were non-Saudis (63.1%). The overall mean of experience as a physician was 18.9 years with a standard deviation of 9.5 years, and almost all of the respondents were a full time staff member in the hospital. Respondents did not differ very much from all physicians working in Saudi Arabia. Female physicians in the study were less than the national average. However, Saudi

Table 1 - Shows the characteristics of survey respondents (N=151).

Characteristics	Respondents (N=151)		All physicians in KSA *N=31983 (%)
	Mean ± SD	%	
Age	56.3 ± 10		NA
Gender			
Male		86.1	73.5
Female		13.9	26.5
Marital Status			
Married		89.4	NA
Single		4.6	NA
Others		6	NA
Number of Children	3.7 ± 1.8		NA
Nationality			
Saudi		36.9	(21.3)
Non-Saudi		63.1	(78.7)
Experience as a Physician	18.9 ± 9.5		NA
Job Status			
Full Time		97.2	NA
Part Time		2.8	NA

*Source: Ministry of Health Annual Statistical Report 2001
KSA - Kingdom of Saudi Arabia, NA - not available

physicians who responded to this survey were slightly higher than the national average¹⁸ (**Table 1**).

Table 2 shows the respondents mean score for all of the statements in the survey. The highest overall mean score was obtained for "everyone in the kingdom should have access to healthcare services" (4.68). Respondents also agree that health insurance will improve access to healthcare services for all citizens; the mean score was (4.01). Physicians also believed that health insurance would lead to more regulations and utilization review of services, create more competition between healthcare providers, and create new jobs in the healthcare sector. Overall, respondents perceived that health insurance would increase the demand for outpatient services (4.10). Physicians were indifferent about the effect of health insurance on costs, efficiency, effectiveness, and quality the mean scores were in the range of 3.48 to 3.59 (**Table 2**). The mean score for providers induced demand of health services was 3.43 and over utilization of services by patients was 3.60. The mean score regarding other statements in the survey were in the range of 2.97 to 3.97. The lowest overall mean score was obtained for "health insurance will create an even distribution of health care services between rural and urban areas in the Kingdom" (2.97).

Table 3 shows the mean scores of Saudi and non-Saudi physicians and their relative *p*-value. There were no significant differences between Saudis and non-Saudis regarding the statement "everyone in the Kingdom should have access to healthcare services".

Table 2 - The respondents mean score and standards deviation for all of the statements in the survey.

Survey statements	Mean	SD
1. The main function of health insurance is to spread the financial risk among the population.	3.92	1.16
2. Health insurance will improve access to health care services for all citizens.	4.01	1.1
3. Health insurance will reduce health care costs for the health care system.	3.48	1.22
4. Health insurance will improve the efficiency of the health care system.	3.56	1.06
5. Health insurance will improve the effectiveness of the health care system.	3.59	1
6. Health insurance will improve the quality of health care services.	3.57	1
7. Health insurance will improve the health status of all citizens.	3.5	1.1
8. Health insurance will increase the demand for emergency room services.	3.25	1.31
9. Health insurance will increase the demand for outpatient services.	4.10	0.92
10. Health insurance will increase the demand for inpatient services.	3.42	1.14
11. Health insurance will increase the demand for more advanced diagnostic treatment procedures.	3.61	1.13
12. Health insurance will lead to more adoption of new technology	3.53	1.14
13. Health insurance will raise the standards of clinical practice.	3.49	1
14. Health insurance will improve the development of the private health care sector.	3.97	1.02
15. Health insurance will create more competition between healthcare providers.	4.14	0.8
16. Health insurance will create new jobs in the health care sector.	4.11	0.91
17. Health insurance will eventually make the health care system more private than public.	3.59	1.04
18. Health insurance will increase the administrative costs of the health care system.	3.73	1.09
19. Under health insurance providers will give patients unneeded services to make more money (induce demand of services).	3.43	1.1
20. Under health insurance, patients will demand more unneeded services.	3.61	1.05
21. Everyone in the Kingdom should have access to healthcare services.	4.68	0.65
22. Health insurance will exclude some people from getting healthcare services.	3.02	1.39
23. Health insurance will lead to more regulations and utilization review of service.	4.14	0.76
24. Under health insurance, more physicians and hospitals will seek professional liability insurance.	3.91	0.89
25. Health insurance will limit patients' freedom to choose doctors and hospitals.	3.23	1.26
26. Health insurance will increase the role of primary health care and prevention.	3.72	1.02
27. Under health insurance, patients have more responsibilities towards the service.	3.22	0.98
28. Health insurance will create an even distribution of health care service between rural and urban areas in the Kingdom.	2.97	1.28

Table 3 - The mean scores of Saudi and non-Saudi physicians and their relative *p*-value.

Survey statements	Mean	Mean	<i>P</i> -value
	Saudis	Non-Saudis	
1. The main function of health insurance is to spread the financial risk among the population.	3.63	4.07	0.025
2. Health insurance will reduce health care costs for the health care system.	3.81	3.3	0.011
3. Health insurance will improve the efficiency of the health care system.	3.91	3.39	0.004
4. Health insurance will improve the effectiveness of the health care system.	3.87	3.44	0.01
5. Health insurance will improve the quality of health care services.	3.81	3.43	0.023
6. Health insurance will lead to more adoption of new technology	3.91	3.31	0.002
7. Health insurance will raise the standards of clinical practice.	3.7	3.35	0.038
8. Health insurance will improve the development of the private health care sector.	4.26	3.85	0.014
9. Health insurance will create more competition between healthcare providers.	4.37	4	0.007
10. Health insurance will eventually make the health care system more private than public.	3.98	3.38	0.001
11. Health insurance will exclude some people from getting healthcare services.	3.39	2.82	0.015
12. Under health insurance, more physicians and hospitals will seek professional liability insurance.	4.13	3.8	0.029

Significant differences were found between Saudi and non-Saudi physicians concerning the main function of health insurance. For non-Saudi, the mean score for the statement “the main function of health insurance is to spread the risk among the population” was (4.07) compared with (3.63) for Saudi physicians (p -value 0.025). Saudi physicians reported a higher mean score for 11 items with significant p -values as compared with non-Saudi physicians, **Table 3** shows the mean scores and p -value for these items. As for comparison between other variables, no significant differences were found.

Discussion. This study is an attempt to understand physicians’ perceptions concerning health insurance and its effect on health care services in Saudi Arabia. The study was limited to physicians working in 2 major hospitals in Riyadh. The ideal situation is to survey all physicians in the Kingdom; this was not possible due to time and financial constraint. This may limit the general findings of this survey. However, with caution, this study does provide some insights into perceptions concerning health insurance. For future research, it is important to include public and private hospitals with a larger sample size, which would make it possible to compare different groups and formulate more universal inferences.

This study clearly shows that access to health care services is a major concern, more than 94% of the respondents agree that “everyone in the Kingdom should have access to healthcare services” and more than 75% of the respondents agree that health insurance will improve access to health care services. Meer and Rosen¹⁹ observed a positive correlation between the utilization of health care services and health insurance status, that policies, which increase the availability of health insurance, will likely increase utilization of health care services, on the other hand, this may possibly increase health care costs. They also suggest that greater utilization of health care services does not necessarily denote that health insurance will always lead to a better health status. In addition, the availability of health insurance does not necessarily mean equal access to health care or lower costs of services.²⁰ With this in mind a social health insurance system inadequately financed and overwhelmed by the demand for health care services is ineffective in providing universal access and controlling the costs of health care.^{21,22} On the other hand, a market oriented system has the potential to improve efficiency, freedom of choice, and the expansion of technology in health care. However, a market oriented system tends to focus on individuality, competition, and the ability to pay for health care services, thus producing higher

costs and inequity in the distribution of health and health services. Given these issues, policy specialists point out that the dichotomy between markets and government is untrue, that government often needs markets to help ensure efficiency and markets need government to ensure fairness and equity.⁴

Most of the respondents to this survey (84%) believed that health insurance would increase the demand for outpatient services and more than half of the respondents (65%) also believed that health insurance will increase the role of primary health care and prevention. Slightly more than half of the physicians in this survey believed that health insurance would not increase the demand for emergency or inpatient services. Other studies have shown that health insurance would reduce utilization of high costs services such as emergency departments’ visits and inpatient services. That health insurance would increase utilization of outpatient services, which will eventually decrease the demand for emergency and inpatient services.^{23,24} This could only be possible, if everyone in the population has access to health care services, which are not necessarily synonymous with health insurance.²¹ However, having no insurance affects accessibility to health care services; low income families who lack insurance coverage will also lack a consistent source of medical care and therefore are less likely to have screening and preventive care when they need it.^{25,26} As a result of being uninsured, individuals who lack adequate health insurance rely on emergency departments as their source of primary care. Inappropriate utilization of emergency services is inefficient and costly not only for the patients or the health care system, but also for society as a whole.²⁷ Mandatory enrollment into health insurance plans and “safety-net” expansion are some of the ways that can bridge the gap and remove the financial barriers to health care services.²⁶

More than half of the respondents (62%) perceived that health insurance will improve the development of the private healthcare sector. The majority of the respondents (82%) believed that health insurance will create more competition between health care providers and it will lead to more regulations and utilization review of services. This follows the global trend that started in 1970s to adopt the private sector strategy for achieving public sector objectives.²⁸ Yet, wherever the market-oriented strategy has been introduced greater government control where also introduced.²⁹ Managed competition which implies the need to extensively regulate health care providers through public or private review organization, was

suggested by the Jackson Hole Group in the United States, as an approach for providing reasonable and affordable access to health care services.³⁰ The policy movement of competition in healthcare policy had been spreading from the United States to Western Europe then to Eastern Europe and many developing countries as a way to tackle deep-rooted, inefficient, and unresponsive healthcare systems.⁹ Privatization of the health care sector is preferred to a social health insurance system to the extent that implies capitalization and the flexibility to adapt to new challenges and allows the healthcare system to expand.²⁹ However, it is important that the policy is seen not simply as a problem of financing and cost but as a real problem in the organization of the health care delivery system and the allocation of resources to health care services.²⁰

The proposed cooperative plan is more of a competitive mantle that will enable individuals to choose among competing health plans who would in return contract with competing providers. The consequences of this would be greater reliance on market forces in the financing and delivery of health care services, which would eventually increase third party control and government regulations.^{4,30} Physicians in this survey believed that accessibility is a major policy concern, and that health insurance will have a positive effect on access to the health care system. Yet, accessibility is an illusive term with many aspects that go beyond the identification of need for health care to the actual delivery of health care services and the organizational structures to match the needs of society. Cooperation as a national health system should be built on collaborative efforts rather than market competition in itself. It has been suggested that markets are stronger in the role of delivery than in the financing of health care, that markets tend to promote more expenditure on technological innovation rather than producing the most desired set of social outcomes. For most countries that rely on ability to pay rather than solidarity government involvement is predicted based on markets failure to establish an efficient system of care for the entire population.^{1,4,20} Reinhardt¹ describes the evolution of health care policy in the industrialized world as the conversion from expenditure driven financing to a budget driven delivery of health care. That, countries tend to structure their health insurance systems so that money flows through only one or a few large third-party payer to ensure that prices and budgets are controlled.¹ Cooperative health insurance can be an answer to the current problems facing the health care system in the Kingdom of Saudi Arabia as long as it remains cooperative rather than competitive.

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