



## **Consequences of Medical Insurance on Social Welfare; an Evidenced Based Study**

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**(Received 10 Aug 2013; accepted 28 Aug 2013)**

### **Dear Editor-in-Chief**

The Iranian Constitution Law has recognized social security as inalienable rights of people and government's duty (1). The establishment of a trustworthy system for providing healthcare expenses and access to an on time and efficient medical services are among the important concerns of governments. Some countries, depending on their status and economic and cultural growth, have made progress in this area. As one of those countries, Iran has formed a comprehensive system of social welfare and security based on the principles of public welfare and social security objectives. The fulfillment of these objectives constitutes an effective step towards social justice, as several studies revealed that inequality can negatively influence on health condition (2-4).

Identifying the degree of capability in achieving the goals and the quality of medical insurance system performance of the country could direct the future plans of the country in this area; the perception of authorities and officials of the country on the effects and success of these efforts will serve as grounds for better evaluation and promotion of processes, planning and executive actions for the optimization of medical insurance and responding to the inalienable rights of people (5-8).

This cross-sectional study conducted from February 2001 to February 2002 by using the non-random sampling method. The study population was 250 patients attended at Shahid Mostafa Khomeini, Shohadaye Tajrish and Imam Hossein hospitals in Tehran. Following data collection, the study population was divided into two groups, including insured and uninsured subjects. In this manuscript we are presenting our preliminary findings. One hundred and fifty seven of the study subjects were insured and ninety three were not under any insurance coverage. The insured subjects were individuals who had coverage from at least one of the medical insurance systems in the country whereas the uninsured subjects had no medical insurance coverage. Subsequently, the ability to pay and accessibility of the individuals of the two insured and uninsured groups were compared in different diagnostic and medical parts, including physicians, pharmacies, medical laboratories, radiology (plain-film radiograph), magnetic resonance imaging (MRI) and computed tomographic (CT) scan, hospitalization (for medical treatment) and internment in surgical wards. Of the 250 patients, one hundred and fifty five patients were male and the rest were female. The youngest and oldest patient had 15 year-old and

78 year-old respectively. The patients had medical insurance coverage from 6 months to 22 years. By comparing between the ability to pay medical costs in different diagnostic and medical sections, a statistically significant difference was found between the insured and uninsured subjects, the mean of those potentials in different sections was as follows: Twenty seven percent of the insured subjects expressed their ability to pay as very low, 68% as moderate and high and a very limited number mentioned very high. Whereas, sixty percent of the insured subjects expressed their ability to pay as very low, thirty two percent as moderate and high and a very limited number mentioned very high. The analysis showed significant difference ( $P < 0.05$ ) in mean of ability to pay between the insured and uninsured patients in different sections. By comparing between the accessibility to medical services in different diagnostic and medical sections, the analysis revealed no significant difference between the insured and uninsured people however, student *t* test showed significant differences between the frequencies of returning to physician ( $P < 0.05$ ) between the insured and uninsured subjects which represented a growth in frequency of returning to physicians in insured subjects.

Ninety seven percent of the insured subjects and 90% of the uninsured subjects believed that medical insurance brings peace of mind and reduces stress in the insured people; however, 18% of the insured subjects claimed that effect to be very low, 61% as moderate and high and 21% as very high. The Chi-Square test did not show any significant difference ( $P > 0.05$ ) in the opinion of the insured and uninsured subjects regarding the peace of mind. The results of this study shows the ability to pay medical costs in different diagnostic and medical sections in study subjects and also their mean shows significant differences among the insured and uninsured subjects. In addition, in assessing the access of the study subjects to different diagnostic and medical sections and their mean, there is no significant difference. Correspondingly, the result shows that the insured subjects were able to pay their medical costs with no reduction in their accessibility to the medical services centers. The

medical insurance allows insured people easy accessibility that is moderate to high. There is a gap between the insured people with very low ability to pay and people who had moderate and high ability to pay and accessibility. Furthermore, that gap has been seen in the studies which were performed in 1994 in the United States (8). In that study, there was a gap between those with poor, good or excellent circumstances. This gap shows that not all insured people benefit from medical insurance services equally; the reason might be due to difference between financial status of these people and every effort should be made to provide equitable medical services and eliminate that gap or minimize it as much as possible.

Also, in another study, majority of subjects interviewed in both the insured and uninsured groups believed that having no insurance coverage delays accessibility to a physician. This serves to illustrate that in addition to the positive effects medical insurance has on the insured people, they also have higher levels of health and hygiene than uninsured people (7-8).

Another effect of medical insurance was peace of mind in people because illness was seen as more of a manageable problem given their access to medical resources (5). In the current study, the highest percent of low ability to pay was for surgery and also the radiology departments (both for CT and MRI), which demonstrates that the insured subjects in surgical, radiology and hospitalization wards had some problems in terms of ability to pay and accessibility in those areas. As a result, attempting to improve medical insurance programs in those areas should be addressed as a priority.

The above mentioned results reveal that having medical insurance increases the patient's ability to pay for, and access, medical services. As a result, the patients with medical insurance had less stress and greater peace of mind than those without. Improvement to the quality of medical insurance in the country is definitely required for greater accessibility to the surgical, radiology and hospitalization wards.

## Acknowledgements

The authors declare that there is no conflict of interest.

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