ANALYSIS OF THE RELATIONSHIP BETWEEN THE LOCATIONOF HOSPITALS AND POPULATION DISTRIBUTIONIN THAILAND

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ABSTRACT

The location of hospitals plays a major role in health care of population. As the foundation of peoples' health and life safety, hospitals are the most important public service facilities, their spatial allocation rationality guarantees an equal opportunity for people to have necessary medical treatments.Urban population can access to hospitals more easily than rural population. This is because the hospitals are located close to them while rural population live in remote areas where hospitals are few and poor. The low accessibility becomes an obstacle for the rural population to get health-care services from hospitals, especially high quality hospitals. Thus,the urban population tends to have good health, compared to the rural population. Based on location theory, people will travel to get services at a place that is located close to them according to the principle of minimum amount of effort. The purposes of this study are to analyze the location of hospitals and the relationship between the location of hospitalsand population distribution in Thailand. The study area as a spatial framework is seventy-seven provinces located in six geographical regions of Thailand. The provinces are the spatial units.For methodology, the data used are the secondary data collected fromLocal Directory Year2010. The quantitative and statistical techniques used to analyzed are mean ($\bar{X}$), density index, rank, and percentage. For analyzing spatial patterns of hospitals, the cartographic technique is applied. The researchfindings are thatthe province whosehospitals were located the most was Bangkok (13.03%),followed by ChonbureeProvince (3.75 %) andChiangmai Province (2.81%) as ranked second and third, respectively.The province whose hospitals were located the least was Samootsongkram Province (0.24 %).In terms of analyzing the locational pattern by geographical region,it is found that the region which mostcontained hospitals wasthe Central Region(12.38%). The Northeast Region (12.38 %)and the South Region (12.38 %)ranked the second and the third,respectively.With respect to analyzing the relationship between the location of hospitalsand population distribution in Thailand, it is found that the location of the hospitals was significantly positively correlated with the population distribution factor at $\alpha = 0.05$ ($r = 0.910$). This indicates that when the population increases, the hospitals will also increase. On the contrary, if the population decreases, the hospitals will also decrease.

Key Words: Location of hospitals, Locational Pattern, Geographical region,