

Accessibility and utilization in variable geographical registration of universal coverage scheme at referral hospital, Bangkok

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Background The ultimate objective of health care system is efficiency, quality and equity. The accessibility to care is adequate by decentralization of multi-level health care system and referral system. Diabetes is common chronic disease that occurs in universal coverage (UC) scheme patients. The accessibility and utilization is outpatient and inpatient was different by variable geographical registration of this coverage system at one of the sample of referral hospital in Bangkok.

Objective To examine whether the pattern of accessibility and utilization related to health outcome in diabetes patients which had different geographical registration of universal coverage system.

Method A cross-sectional study collected data from outpatient electronic medical record from referral hospital and inpatient claims data from National Health Security Office (NHSO). The data was collected from fiscal year 2007–2011. The accessibility and utilization were measured by outpatient utilization rate, hospitalization rate, level of admitted hospital and regional of admission. Health outcome was measured by hospitalization rate of diabetes related conditions.

Results A total of 20,490 outpatients, 49 % (9,903) registered to referral hospital whereas 51 % (10,587) registered to other hospitals. The utilization rate of who registered to referral hospital was 4.7 times compared to other registrations. (8.5 : 1.8) Diabetes hospitalization rate of referral hospital was 29.39 per 1,000 of total as well as of other registration was 97.95 per 1,000. The hospitalization rate of related diseases in other registrations was greater than in referral hospital. (20.4 per 1,000 and 0.4 per 1,000) The hospitalization in each level of admitted hospital was classified as community hospital (1.59 per 1,000), general hospital (0.94 per 1,000), regional hospital (0.48 per 1,000). For other hospital registrations, the rate was 56.37 per 1,000, 18.95 per 1,000 and 11.03 per 1,000 as followed by the same level of admitted hospital. The hospitalization was also occurred at private hospitals for the rate of 4.97 per 1,000 in referral hospital and of 29.47 per 1,000 in other hospital registration. The regions of admission were varied as the central, the northeast, the east, the south and the west. (81.1%, 7.7%, 5.5%, 4.4% and 1.3%)

Conclusion: The UC patients who accessed to outpatient health service of their own registration hospital would have adequate utilization more than who registered to other hospitals. The coverage would not be adequate for hospitalization which could be found in private hospitals. For diabetes, multi-level health care function has capacity for provide outpatient service as same as referral hospital. This aspect can promote better health outcome and lower health problems from related diseases in the future.

Keywords : Utilization, Geographical registration, Universal Coverage Scheme, Referral hospital