



THE REPERCUSSIONS OF PREDISPOSING, ENABLING, AND NEED FACTORS IN UTILIZATION OF HEALTH SERVICES AMONG RURAL HOUSEHOLDS OF KERALA

Krishnan Kutty. V

Assistant Professor of Economics, Government College, Kodanchery, Kozhikode. Kerala, India.

Abstract

The health is a fundamental right of every human being and it's provided by the state governments. The utilization of healthcare service determined by the accessibility and affordability on one side, the level of income, education, households' size, gender, age etc. On the other side. There is no association between the utilization of healthcare facility and hospitalization with gender, religion, but an association with the age. There is no association between the utilization of physicians visits and the level of education and the family members and an association were existed with the time to reach the healthcare facility.

Key words: *Health, Healthcare utilization, Affordability, Accessibility.*

Introduction

Healthcare in Kerala were a well-structured and functioning compared to other states in India. In spite of that, a number of socio- economic factors and health conditions were affects the accessibility, affordability and the utilization of healthcare services in rural areas. There is an inequality exist in the affordability and the utilization of public and private healthcare services. Andersen behavioural model is a best fitted model and useful to access the association of healthcare service utilization on the basis of predisposing, enabling and the need factors. The main content of the study is the utilization of healthcare facility of the household members. To measure the utilization of healthcare facility; one part examines the utilization of physicians visit last two weeks and the other part is hospitalization in past half year (that is inpatients and the outpatients). The basic variable for the study were selected from the Andersen health utilization model.

Objective

To examine the association of health service utilization with predisposing, enabling, and need factors.

Hypothesis

There is no significant association between the utilization of healthcare facility and the variables in the predisposing, enabling and the need factors

Methodology

A household survey was conducted for the data collection, by using the structured interview schedule, all family members were sampled and interviewed separately. Therefore, 896 respondents out of 275 households. The main contents of the questionnaire related to the utilization of healthcare facility based on predisposing, enabling and the need factors (factors were selected from the Andersen behavioural model). The predisposing variable includes the age (year), gender (male and female), religion (Hindu, Muslim and Christian) and the marital status (single, married, separated and widowed). The enabling variables consider the level of education (primary, secondary, high school and college or more), households' size, time to reach the nearest healthcare facility on one side, the other side, closest healthcare facility, reasons for the use of healthcare facility, mean expenditure for treatment. The need factor examines the physicians visit for the chronic diseases during the last three-week period. To test



the significant association between the utilization of healthcare facilities and the predisposing, enabling and the need factors, the test statistic chi-square were used frequently.

Review of literature

Li, YN., Nong, Dx., Wei, B. *et all* (2016), 'the impact of predisposing, enabling, and need factors in utilization of health services among rural residents in Guangxi, China' shows, According to Andersen, Healthcare utilization depends upon certain conditional function like predisposing, enabling and the need factors. A household survey was conducted by using cross-sectional, multi-stage stratified cluster random sampling for each member in the family. The average age is lies between 21.76 to 32.72, the average size of family was 6.02, the average travel time to the nearest to the healthcare facilities was 10.52 and the average expenditure for treatment is RMB 4242.16. There is a positive association between the hospitalization and the Physician visits. Exists a positive association between self-reported health problems and the healthcare utilization. That the chronic diseases affected respondent were greater willing to use outpatient and inpatient health service. Compared to single, married people were more use healthcare facilities.

Daniel I. Rhon et all (2018) 'Leveraging healthcare utilization to explore outcomes from musculoskeletal disorders: methodology for defining relevant variables from a health services data repository' discussed about the challenges related to the use of data, like the source of data, organising that data for clinic references, putting codes in best and descriptions path, missing values, outcomes, data that's for clinical veracity and decrease the analytical errors. As s results of the study, many of the additional analysis were arises like the utilization pattern of opiate medications in the surgery, opiate medication for costs etc...

Marjolein van der Vlegel et all (2021) 'Health care utilization and health-related quality of life of injury patients: comparison of educational groups' examines the socio-economic inequality in the utilization of the health sector, as an important challenges in public health sector. Socio economic variable loke, educational and occupational resources are the main component of economic status, and it's associated with the health outcomes like the morbidity and the mortality. In this study, patients have low educational status, finds more chronic condition compared to patients with high level educational statuses.

Jeremy Mattson (2010) 'Transportation, Distance and healthcare utilization for older adults in Rural and small Urban areas', transportation is an important issue in the access of healthcare and its utilization in rural areas. This study, based on the health behavior model, that the transportation and distance are two enabling factors for the utilization of healthcare facility. Distance and transportation are not significantly factor. If the distance and the access to transportation affect the utilization when someone miss or delay in the travel. Major problems, that the people approach public transportation facility, that are in inconvenient schedules.

Data Analysis

Predisposing factors and its characteristics

The sample size consists of 896 respondents with an average age (year) were 31.937. The proportion of male and female are 494 (55.1%) and 402 (44.9%), on the religious classifications, 426 (47.5%) Hindu, 282 (31.5%) Muslim and 188 (21%) respondents were Christian. In the marital status, 374 (41.7% is single and 522 (58.3%) were married.



Enabling factors and its characteristics

Education wise analysis shows that 40 (4.5%) primary school, 94 (10.5%) secondary school, 392 (43.8%) were high school and 370 (41.2%) were college and more. The classification on the basis of family members indicates that the 14 (1.6%) in 2 member, 128 (14.3%) in 3, 340 (37.9%) in 4, 284 (31.7%) in 5 and 130 (14.5%) in 6 members. About 234 (26.1%) of the members needed 5 minutes to reach the nearest healthcare facility followed by 376 (42%) for 10 minutes, 134 (15%) for 15 minutes, 96 (10.7%) for 20 minutes and 56 (6.3%) needed 30 minutes. Around 572 (63.8%) of members have public and private hospitals which are the closest to the home followed by 204 (22.8%) in public hospital and the 120 (13.4%) of them in private hospitals and its percentage were same as the use of medical facilities; that are the closest to the home. The short distance 554(61.8%) is the most reasons to use the healthcare facilities, followed by 260 (29%) in excellent attention and 82 (9.2%) were the advanced medical equipment and drugs. The mean expenditure for healthcare per year was 2553.72/-, 95.01 % of the respondent were covered the health insurance.

Need factors and its characteristics

There are 13.3% of the respondents suffered from chronic diseases. (119 – 13.3% yes, 777 (86.7 no); the respondent diagnosed with chronic diseases like the back pain, blood pressure, cholesterol, arthritis, stroke, cardiac problems, cancer etc...

Predisposing factors and the utilization of physician's visits and the hospitalization

There is no association between the utilization of physicians visits and the gender, indicates that 103 male members out of 494 and 83 female members out of 319 visits the physicians for the utilizations (Chi-square value 0.006, $p = 0.940$) and also no association with the hospitalization (Chi-square value 3.083, p value = 0.079)

There is no association between the utilization of physicians visits and the religion, which shows that 146/426 Hindu, 110/282 Muslim and 74/114 Christian members were visits the physicians to the utilizations (Chi-square value 2.290, p value = 0.318) and no association with the hospitalization (Chi-square value 5.456, p value = 0.065).

There is an association between the utilization of physicians visits and the age, that the age wise analysis shows; that the Chi-square value 180.182, p value = 0.000 and an association with the hospitalization with Chi-square value 76.175, p value = 0.000.

There is an association between the utilization of physicians visits and the marital status, indicates that out of 40/334 of the single and 146/376 of the married members visits the physicians to the utilizations (Chi-square value 39.525, p value = 0.000) and no association with the hospitalization (Chi-square value 0.620, p value = 0.410).

Enabling factors and the utilization of physician's visits and the hospitalization

There is no association between the utilization of physicians visits and the level of education, indicates that 14/40 primary school, 22/94 secondary school, 160/392 high school and 134/397 college and more, members visit the physicians to the utilizations (Chi-square value 10.07, p value = 0.018) and no association with the hospitalization (Chi-square value 3.76, p value = 0.023).

There is no association between the utilization of physicians visits and the family members, indicates that 8/14 two, 24/128 three, 132/340 four, 118/284 five and 48/130 members visits the physicians to the



utilizations (Chi-square value 3.121, p value= 0.056) and no association with the hospitalization (Chi-square value 4.514, p value = 0.341).

There is an association between the utilization of physicians visits and the time to reach the nearest healthcare facility, indicates that 98/232 five minutes, 195/369 ten minutes, 28/134 fifteen minutes, 7/103 twenty minutes and 2/58 minutes we revisiting the physicians to the utilizations (Chi-square value 152.87, p value = 0.000) and no association with the hospitalization (Chi-square value 35.93, p value = 0.021).

Conclusion

The utilization of healthcare services depends upon number of socio-economic factors like the age, gender, level of education, occupation etc. these variables are included in the predisposing, enabling and the need factors. The main content of the study is the utilization of healthcare facility of the household members. To measure the utilization of healthcare facility; one part examines the utilization of physicians visit last two weeks and the other part is hospitalization in past half year (that is inpatients and the outpatients). There is no association between the utilization of healthcare facility and hospitalization with gender, religion, but an association with the age. There is no association between the utilization of physician's visits and the level of education and the family members and an association were existed with the time to reach the healthcare facility.

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