

HEALTH EQUITY IN THAI AGEING

Bhumisuk Khananurak

Abstract

This study intends to explore equity in health care utilization of Thai ageing by using secondary data from the Health and Welfare Survey, the National Statistical Office, from 2003 to 2006 to represent national level. Comparisons of income quintiles, concentration curve and concentration index are conducted. This study found that more than 90% of Thai people got health insurance through universal health coverage. The universal health coverage can increase more access and utilization of health service among the poor elderly. Moreover it found that the equitable trend of out-patient health care utilization at standard hospital is also increase. When considering the trend in health care utilization at primary and secondary health care level it found that the poor elderly who are the out-patients utilized health services at primary and secondary health care level more than the rich elderly as a result of the pro-poor policy.

HEALTH EQUITY IN THAI AGEING

Bhumisuk Khananurak

Introduction

By 2025, 58 percent of the world's projected 1.2 billion people over 60 will be in Asia. Among this group, 11 percent are expected to be over 80. Thus Asia can expect to have nearly 700 million elderly persons, of whom about 77 million will be over 80. This population will contain more women than men (ILO 1997). These projections should be at the core of the region's long-term approach to social protection for the elderly. Aging is proceeding more rapidly in East Asia and the Pacific.

Studied in health sector by Mapelli (1993) measured inequality in developing countries have found that the distribution of public health services is unequal. For example, in Indonesia, only 12% of government spending for health was for services for consumed by the poorest 20 % of households, while the wealthiest 20% consumed 29 % of the government subsidy in the health sector. Including Thailand, wealthier population groups have a higher probability of obtaining health care when they need it (Makinen, 2000)

The evidence on public spending for health summarized by Filmer (2003) shows that the services (loosely categorized primary health care) which tend to focus on infectious diseases and on other maternal and child health issues that are particularly prevalent among disadvantaged groups favor the better off less than is the case for secondary and tertiary care.

The proportion of elderly in Thailand has been increasing gradually due to a rapid and extensive decline in fertility and a substantial increase in life expectancy since the 1960s (Knodel & Saengtienchai, 2005).

The changing age structure of Thai population was by having rapid increasing aging rate since the previous decades had resulted from decreasing population's fertility from high to low fertility, from the past to present and low replacement rate within a short time. In the meantime, the death rate also continually decreases.

Health care services in Thailand, particularly voluntary insurance, are yet in an early stage of development; the question of equity has been seriously addressed. Health care expenditure in the last five years has increased rapidly (Supakankunti 1997) but there is widespread debate as to whether this has been accompanied by increased quality of health care. The increase in provision of private health services has raised questions on the high cost of health care and the efficiency of resource allocation. Only high income groups could afford to access a better quality of health care. This widens the equity gap. Health care systems are by nature complex and the State needs to play an appropriate role in the health care sector. Although Thailand has a variety of health insurance schemes with objectives of financing health care costs and providing health security, a large proportion of the population, especially of lower income group, is not covered by any insurance, and the variety in health insurance schemes creates problems in terms of equity and efficiency. It is difficult to unify these schemes.

Government establishes the holistic health integration so as to achieve the objective. All Thai people should have access to good health service standard on equitable basis. In Thailand health services have 3 main schemes; 1). Universal Health Coverage Card under 30 baht cures all disease projects; 2) the Health Welfare for State Employees' scheme (including the Civil Service Medical Benefit scheme, Civil Servant's Pension and Pension Fund); and 3) the compulsory Social Security Scheme for private employees in medium and large firms.

The welfare programs including 3 main schemes have already covered everyone by law but not in actual practice. In reality, some people are still not receiving any scheme. It is difficult to specify which groups have not get any scheme yet, especially in informal sector. This study analyzes health equity in Thai ageing.

Methodological Framework

This study intends to measure deviation from equity in various dimensions. To quantify the variations, comparison among income quintile will be conducted. The result calculated in this manner and presented both numerically and graphically, is readily comprehensible. All data come from Health and Welfare Survey from 2003 to 2006 ,

National Statistic Office. Subsequently, all results will be analyzed and evaluated by counting, percentage, means, concentration curve and concentration index using SPSS package program for WINDOWS and STATA program.

Conceptual Framework

This study considers “Are there any equity still exist among Thai elderly in national and specific levels?” If yes, however government should arrange increasingly public services to reserve for especially the elderly which increase rapidly in the future in order that the elderly can get the health services more.

Moreover, this study also examine the influence of income factor influencing the health care utilization of the Thai elderly at the national level by using Health and Welfare Survey data from 2003 and 2006..

Results

Thai people have increased the health insurance from 2003 to 2007. In 2007 they mostly have Universal Health insurance card (UC) by 76.6 percent and following Social Security Scheme (12.7%) , Civil servant medical benefits scheme (9.5%), respectively. From 2003 to 2006, their overalls are the same pattern with 2007.

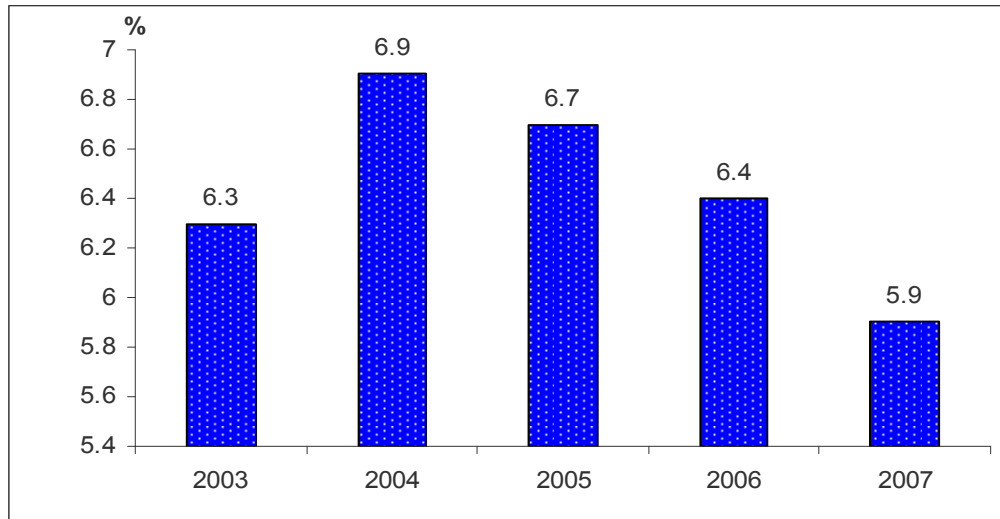
Table1 1 : Number and Percent (have health insurance) of Total population

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|----------|----------|----------|----------|----------|
| Total population | 63,884.6 | 65,112.7 | 65,287.7 | 65,183.0 | 65,644.4 |
| Have health insurance | 60,637.7 | 60,804.6 | 62,064.0 | 62,546.8 | 63,242.9 |
| % of total population have health insurance | 94.9 | 93.4 | 95.1 | 96 | 96.3 |
| Types of Health insurance | | | | | |
| Universal Health insurance card (UC) | 80.4 | 78.8 | 76.4 | 77.8 | 76.6 |
| Social Security Scheme (SSS) | 9.7 | 11.2 | 11.9 | 12.2 | 12.7 |
| Civil servant medical benefits scheme (CSMBS) | 9.4 | 10 | 10.6 | 9.5 | 9.5 |
| Private insurance | 2 | 4.4 | 2.8 | 2.3 | 2.3 |
| Health insurance covered by employer | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 |

From figure 1, in 2007 the in-patients during last 12 months have about 3.9 millions or 5.9 percent of total population. Between 2003 and 2004, the percent of the in-patients

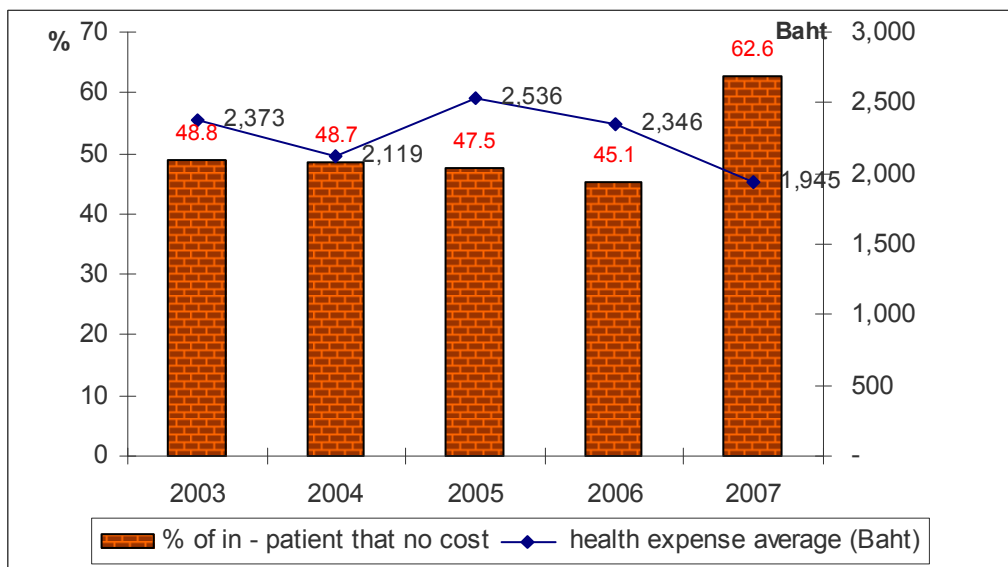
slightly increases from 6.3 to 6.9 respectively. The trend of the in-patients declines since 2004.

Figure 1 : Percent of in-patient in the last illness during last 12 months



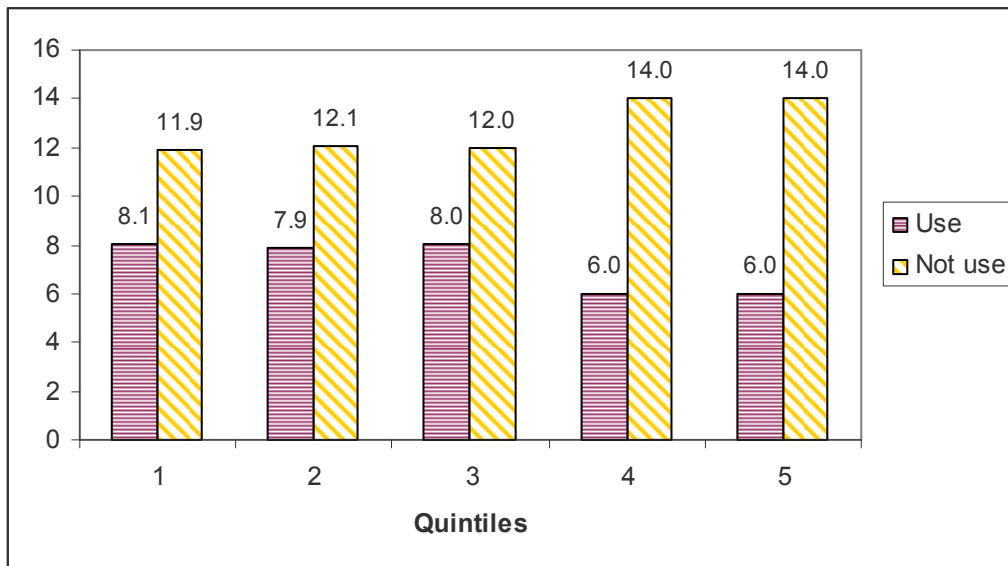
In 2007, the percent of in-patients get free of charge equals about 62.6 and the health expense average is 1,945 baht. The trend of health expense average decreases continuously since 2005

Figure 2 : Health expense of in-patient in the last illness during last 12 months



After 2001, Thai government provides the universal coverage (UC) , thirty baht scheme. It effects to elderly poorer who can more access and utilizes the health services. In 2007, the percent of elderly who have chronic disease in the first quintile use the health service about 8.1 percent more than elderly richer, equal 6.0 percent.

Figure 3 : The percent of the elderly who have chronic disease and use the health service in 2007



Assessment of Equity in Health Care Utilization

In this study equity means poor elderly use health care utilization more than rich elderly as pro-poor because Thailand have a income distribution problem. The richest in the fifth quintile has proportion more than 50 % of total income share. It means most of Thai people is rather poor as presented in Table 2.

Table 2 : Percent of Income Share by Quintiles

| Income Quintile | Income share of Population (Percent) | | | | | | | | | |
|-------------------------|--------------------------------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|
| | 1988 | 1990 | 1992 | 1994 | 1996 | 1998 | 2000 | 2002 | 2004 | 2006 |
| Quintile 1 (Poorest) | 4.58 | 4.29 | 3.96 | 4.07 | 4.18 | 4.3 | 3.95 | 4.23 | 4.54 | 3.84 |
| Quintile 2 | 8.05 | 7.54 | 7.06 | 7.35 | 7.55 | 7.75 | 7.27 | 7.72 | 8.04 | 7.67 |
| Quintile 3 | 12.38 | 11.7 | 11.11 | 11.67 | 11.83 | 12 | 11.5 | 12.07 | 12.41 | 12.12 |
| Quintile 4 | 20.62 | 19.5 | 18.9 | 19.68 | 19.91 | 19.82 | 19.83 | 20.07 | 20.16 | 20.08 |
| Quintile 5 (Richest) | 54.37 | 56.97 | 58.98 | 57.23 | 56.53 | 56.13 | 57.45 | 55.91 | 54.86 | 56.29 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Proportion Q5/Q1 | 11.88 | 13.28 | 14.9 | 14.07 | 13.52 | 13.06 | 14.55 | 13.23 | 12.1 | 14.66 |

The details of health equity compose of out-patient part. In each part will analyze at standard health services, tertiary level, secondary – primary levels.

The standard health services consist of Primary care level such as health centers and primary care unit (PCUs) ,Secondary care level such as community hospitals , small private hospitals and private clinics and Tertiary care level such as regional/ general hospitals, provincial hospitals, large hospitals, specialized hospitals.

The details of health equity compose of out-patient part and in-patient part. In each part will analyze at standard health service, tertiary level, secondary – primary levels and types of the health care service.

The standard health services consist of Primary care level such as health centers and primary care unit (PCUs) ,Secondary care level such as community hospitals , small private hospitals and private clinics and Tertiary care level such as regional/ general hospitals, provincial hospitals, large hospitals, specialized hospitals.

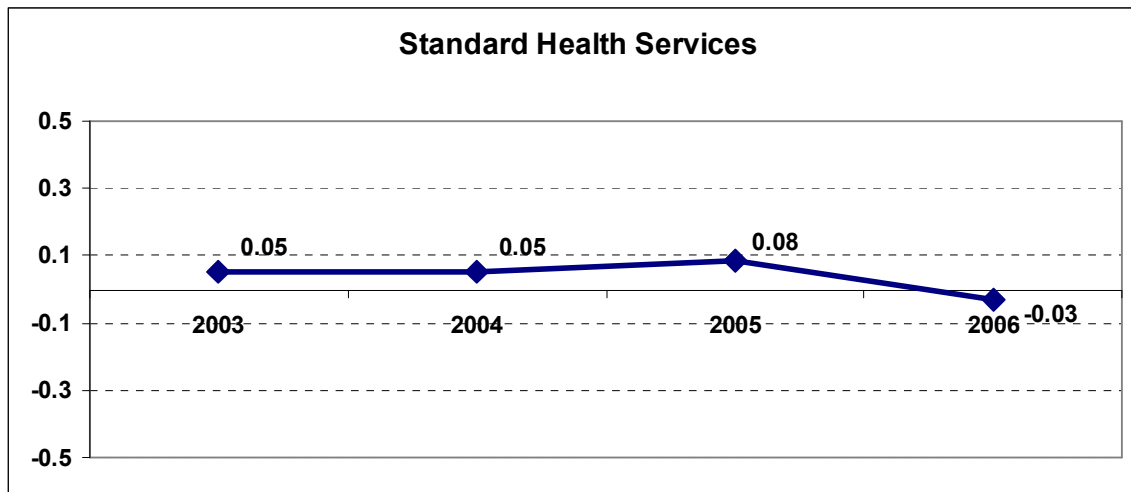
The types of the health facility consist of health center, community hospital, regional/provincial hospital, university hospital, other public hospital, private clinic and private hospital

National level :Elderly’s out-patient

Standard health service

Overall, trends in health utilization are equitable at standard health service because from 2003 to 2005 the concentration indexes is very close approximately zero. It means rich elderly and poor elderly can use health service rather equitable. Nonetheless, a little negative values are in 2006 and 2007. They mean that the poor elderly use the health service more than rich elderly as the pro-poor as presented in figure 4.

Figure 4 : Concentration indexes of out-patient using at standard health services from 2003 to 2007



The tertiary level

In figure 4 , from 2003 to 2007 , the rich elderly who are the out-patients utilized health services at the tertiary level such as such as regional/ general hospitals, provincial hospitals, large hospitals, specialized hospitals more than the poor elderly as pro-rich

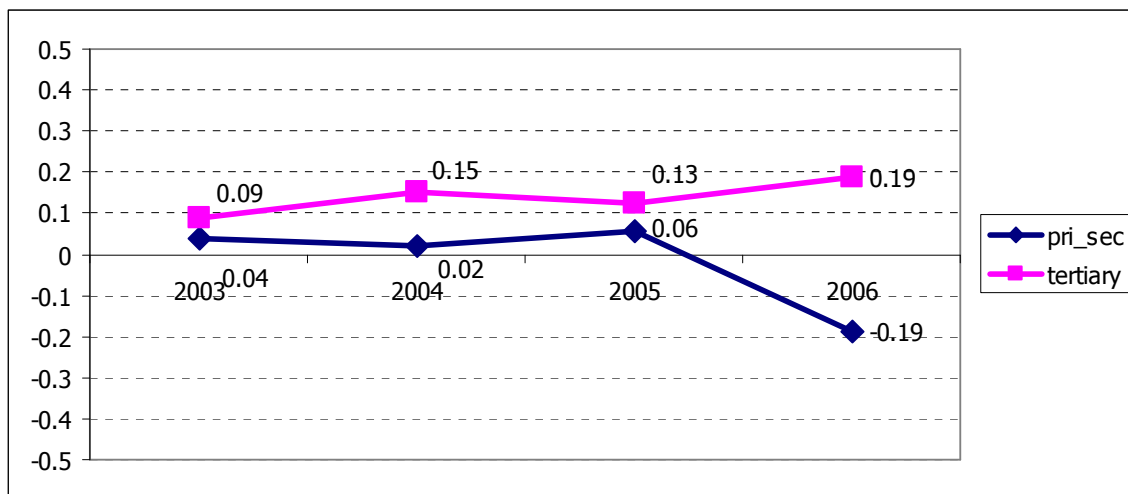
(positive concentration index) .The trends in health utilization are inequity at the tertiary level. The pro-rich nature of health care will use more service at the higher health care levels especially the tertiary care level and the private health care providers

The Primary and Secondary levels

For trends in health utilization are equitable at primary level and secondary level because from 2003 to 2005 the concentration indexes is very close around zero line. It mean rich elderly and poor elderly can use health service rather equitable.

The negative values of concentration index form 2006 to 2007 confirm that it for the elderly poorer as pro-poor. When considering the trend of health care use at the primary level and secondary level, it found that the poor elderly use at the primary level and secondary level more than rich elderly. It is the pro-poor.

Figure 5 : Concentration indexes of out-patient using at Primary level , Secondary level and Tertiary level from 2003 to 2006



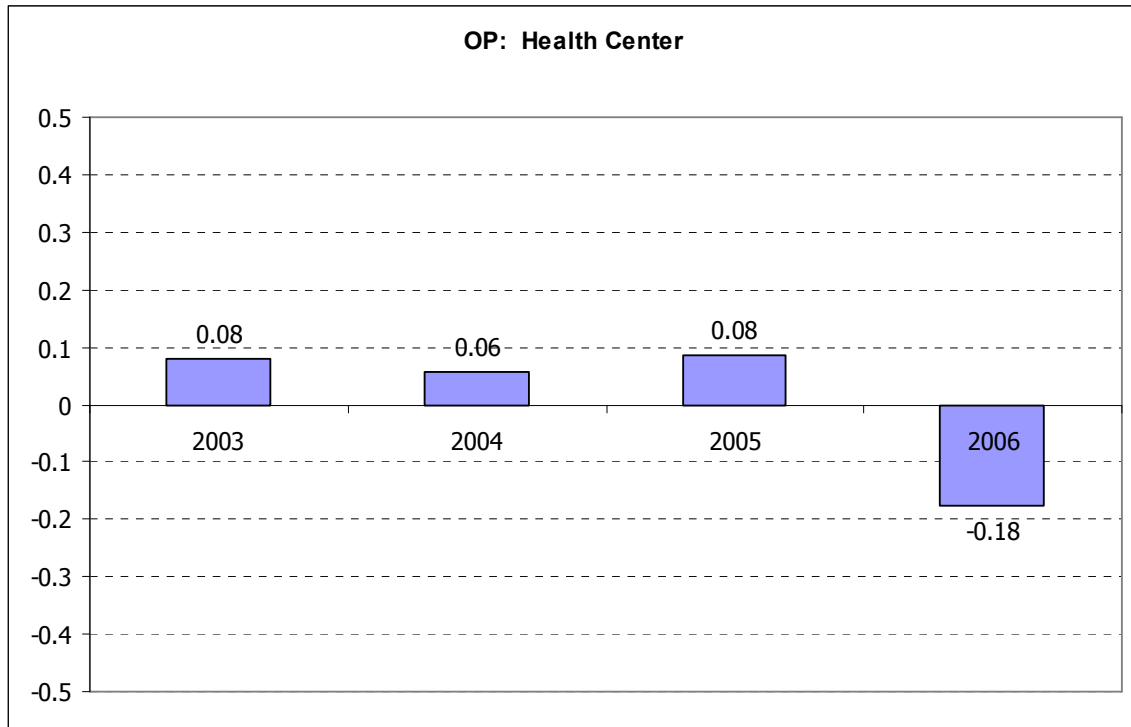
Health Center

For trends in health utilization are equitable at health center because from 2003 to 2005 the concentration indexes is very close around zero line. It means rich elderly and poor elderly can use health service rather equitable.

The negative values of concentration index form 2006 to 2007 implied that it means for the poor elderly as pro-poor. When considering the trend of health care use at health

center, it found that the poor elderly use at health center more than rich elderly. It is the pro-poor as presented in figure 6.

Figure 6 : Concentration indexes of out-patient using at Health Care Centre from 2003 to 2006

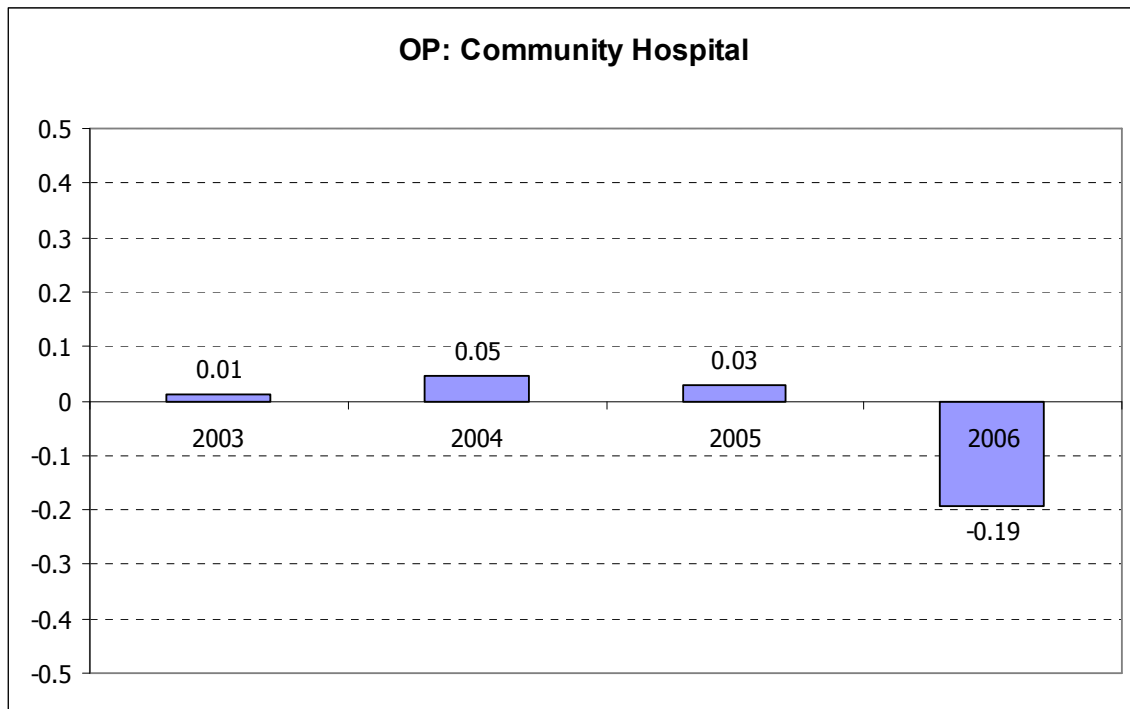


Community hospital

For trends in health utilization are equitable at the community hospital because from 2003 to 2005 the concentration indexes are very close around zero line. It mean rich elderly and poor elderly can use health service rather equitable.

The negative values of concentration index in 2006 indicate that it means for the poor elderly as pro-poor. When considering the trend of health care use at community hospital, it found that the poor elderly use at the community hospital more than rich elderly. It is the pro-poor as presented in figure 7.

Figure 7 : Concentration indexes of out-patient using at community hospital from 2003 to 2006

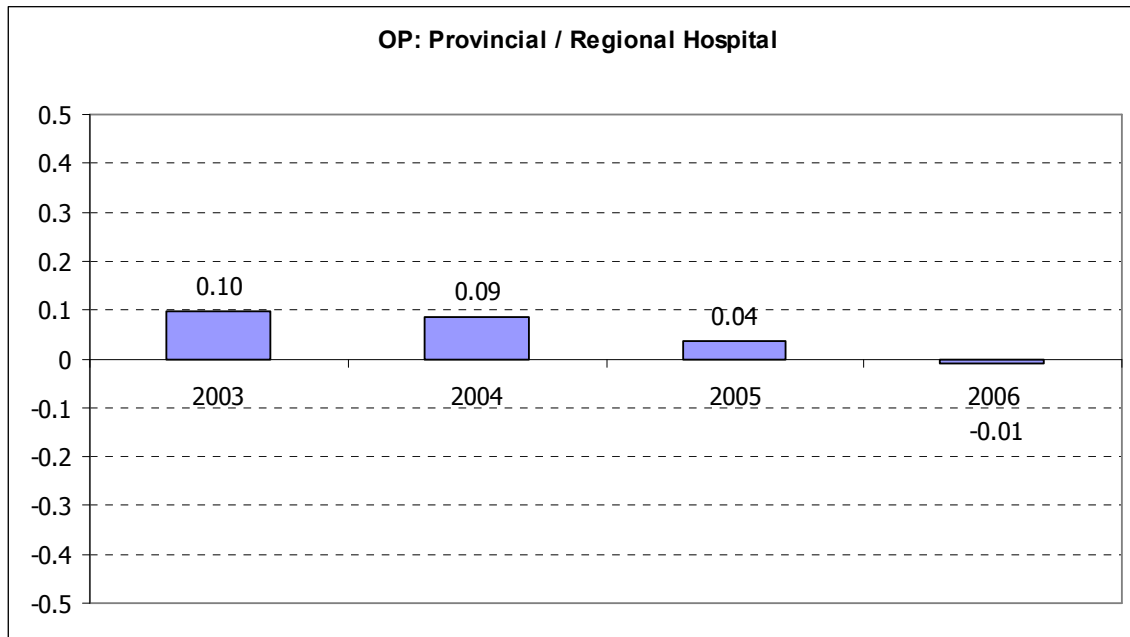


Provincial / Regional hospital

For trends in health utilization are equitable at provincial / regional hospital because from 2003 to 2005 the concentration indexes are very close around zero. It mean rich elderly and poor elderly can use health service rather equitable.

The negative values of concentration index in 2006 confirm that it for the elderly poorer as pro-poor. When considering the trend of health care use at provincial / regional hospital, it found that the poor elderly use at provincial / regional hospital more than rich elderly. It is the pro-poor as presented in figure 8.

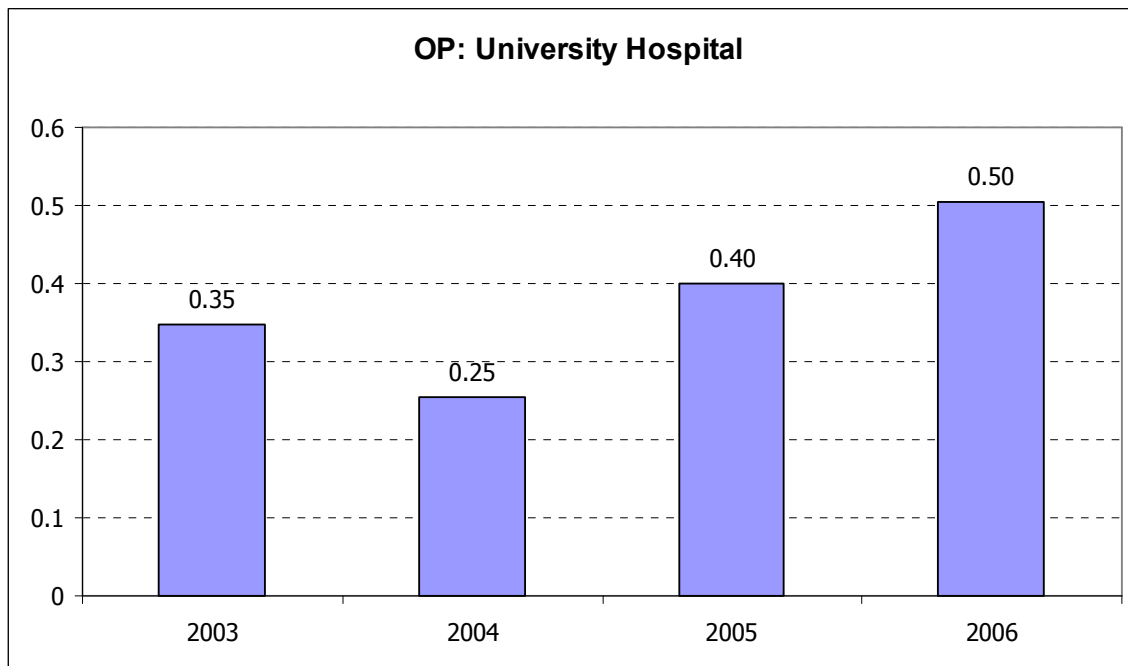
Figure 8 : Concentration indexes of out-patient using at provincial / regional hospital from 2003 to 2006



University hospital

From 2003 to 2006, the rich elderly who are the out-patients utilized health services at the university hospital more than the poor elderly as pro-rich (positive concentration index). The trends in health utilization are inequity at the university hospital. The pro-rich nature of health care will use more service at the higher health care levels. It is the pro-rich as presented in figure 9.

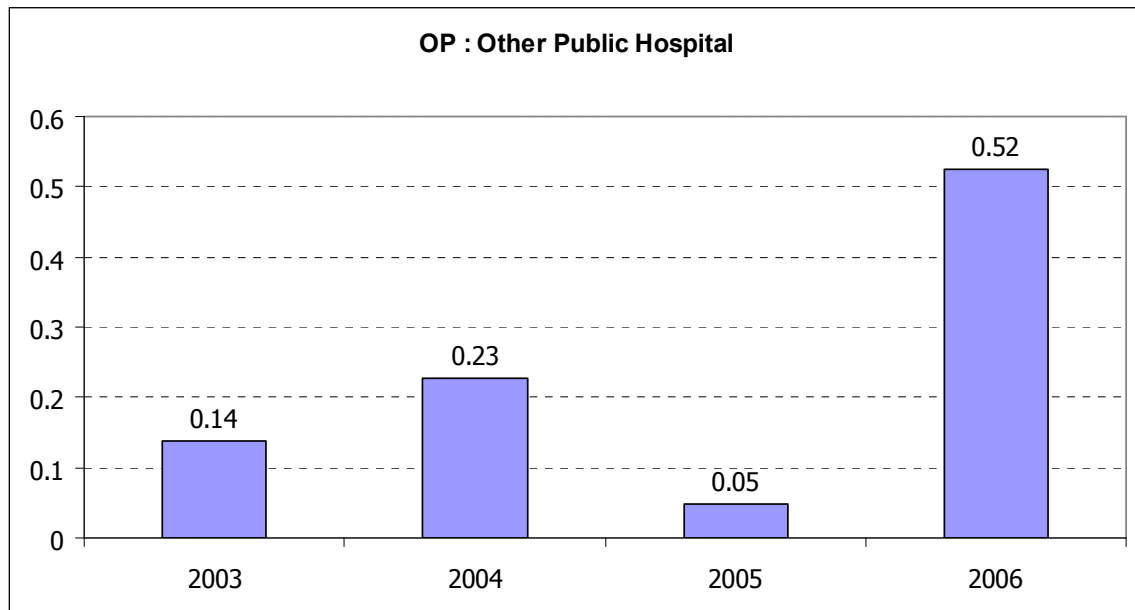
Figure 9 : Concentration indexes of out-patient using at university hospital from 2003 to 2006



Other public hospital

From 2003 to 2007, the rich elderly who are the out-patients utilized health services at the other public hospital more than the poor elderly as pro-rich. The trends in health utilization are inequity at the other public hospital. The pro-rich nature of health care will use more service at the higher health care levels. It is the pro-rich as presented in figure 10.

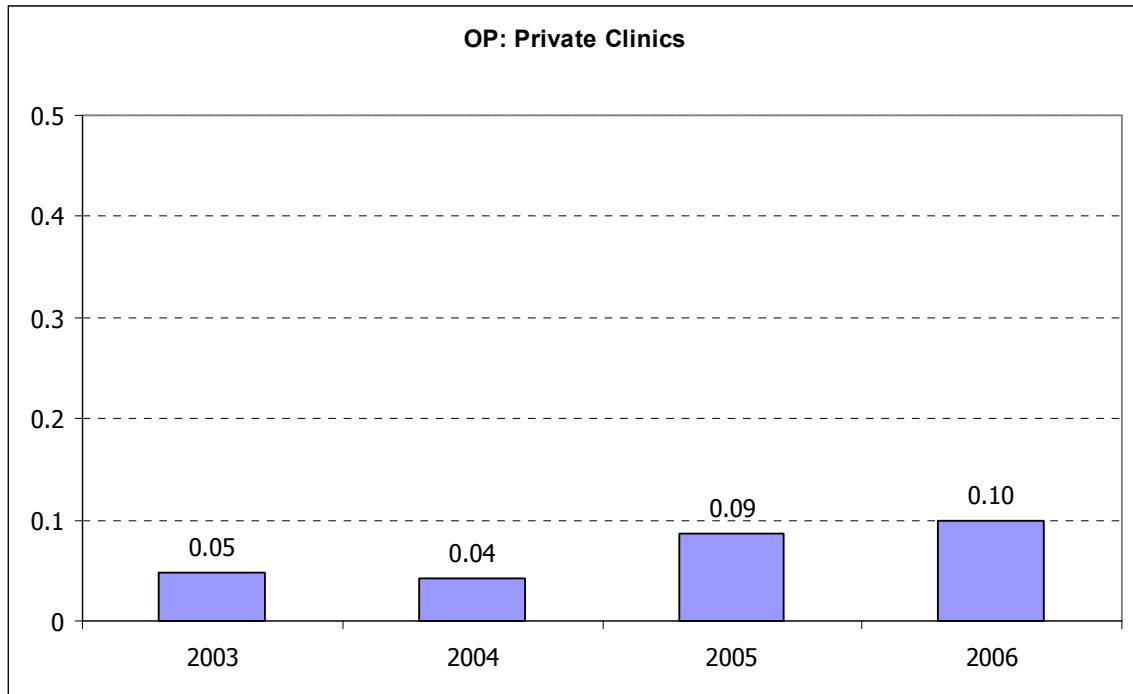
Figure 10 : Concentration indexes of out-patient using at the other public hospital from 2003 to 2006



Private clinic

From 2003 to 2006, the rich elderly who are the out-patients utilized health services at the private clinics more than the poor elderly as slightly pro-rich. The trends in health utilization are inequity at the private clinics. It is the pro-rich as presented in figure 11.

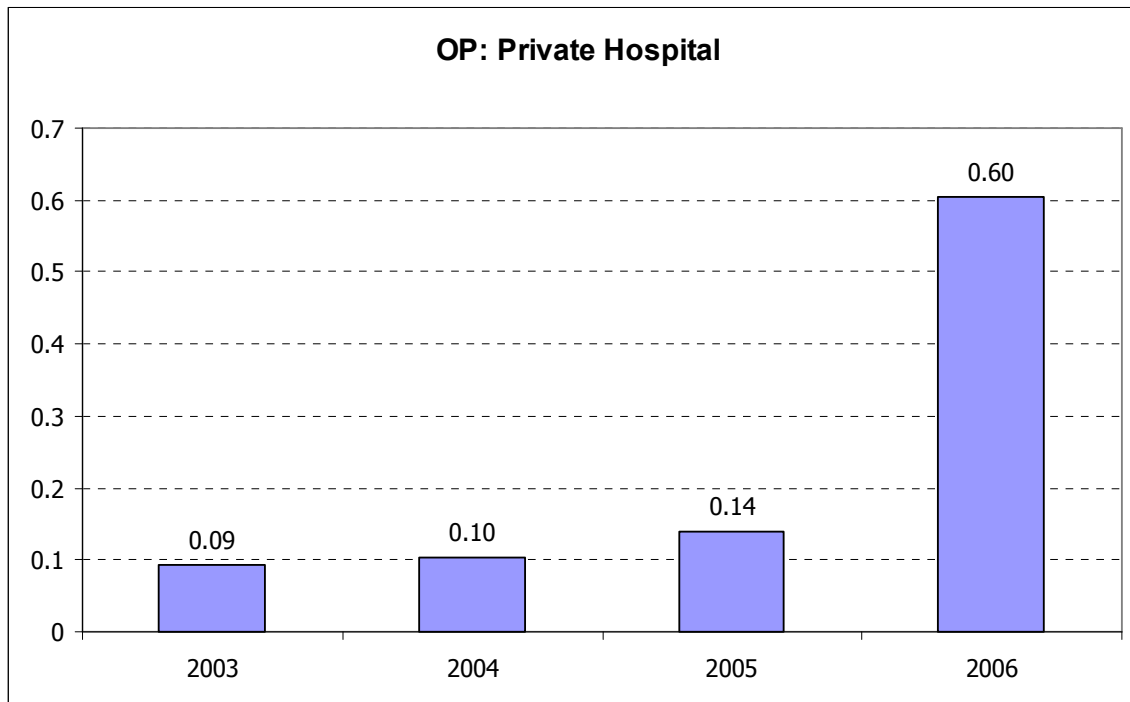
Figure 11 : Concentration indexes of out-patient using at Private Clinics from 2003 to 2006



Private hospital

From 2003 to 2006, the rich elderly who are the out-patients utilized health services at the private hospital more than the poor elderly as strongly pro-rich. The trends in health utilization are inequity at the private hospital. It is the pro-rich as presented in figure 12.

Figure 12 : Concentration indexes of out-patient using at Private hospital from 2003 to 2006



Findings

Assessment of health equity

Elderly : Out-patient

When considering the trend of health care use at standard health service it found that the poor elderly who are the out-patients utilized health services at the standard health services more than the rich elderly as the pro-poor.

When considering the trend of health care use at primary and secondary levels it found that the poor elderly who are the out-patients utilized health services at primary and secondary levels more than the rich elderly as the pro-poor.

In this research, equity it means poor elderly use health care utilization more than rich elderly as pro-poor. Therefore they are equity at standard health services and primary and secondary levels

General Discussion

The research findings of changes in health insurance coverage show that the poor elderly income quintiles mainly relied on public-subsidized health insurance schemes the Universal Coverage scheme (UC scheme) since 2003. Thai government could achieve its policy goals in providing public health insurance and financial risk protection to the poor. The analysis also shows that private health insurance, the Civil Servant Benefit Scheme (CSMBS) and the Security Scheme (SSS) , were health insurance schemes for the better-off. High insurance premium of private health insurance and the employment-specific nature of SSS and CSMBS are limitations in employing these health insurance schemes as a means to achieve universal coverage. This is because the poor are largely in the informal sector and in the rural areas, generally lack financial resources for paying either premiums or contributions and are disadvantaged in access to the formal sector and civil service employment.

The UC policy has made further progress in expanding health insurance protection and improving equity in health service use by using the strategy of universal access to essential health services and the removal of financial barriers to health care. This has primarily benefited the poor and those in rural areas. The removal of financial barriers to health care from UC policy is likely to be another factor allowing individuals to express their illness or feeling unwell and increase their demand for health care. Evidence indicates that lack of money and financial barriers to health care are the main reasons preventing people from seeking care, particularly in poor households (Russell 2005)

Since 2003, change in health seeking behavior of out patients, which significant shifted from tertiary to primary and secondary levels (may be reverse) are explained by two key factors. The first one is the clear objective of the UC policy in promoting primary health care through resource allocation. The UC scheme contracted a network of primary care

unit, known as the contracting unit of primary care (CUP), to be the main contractor and provide health services to the population registered with network. According to the number of registered people, government resources are allocated to CUP through the capitation contracting model which is expected to improve efficiency and accountability of health care provider (Tangcharoensathien, Supachutikul et al. 1999). The removal of financial barriers to health services at registered health facilities is likely to have encourages UC beneficiaries to use primary and secondary care services as their first choice. As a result, UC beneficiaries who formerly decided to pay user fees for seeking health care from tertiary care facilities appear to have changed their health seeking behavior to seek care from primary and secondary health facilities.

In addition, it is the design of the UC policy in using primary care as the gate-keeper and promoting the use of primary and secondary care at the district level to improve access to health care, especially for the poor in rural areas. Hence, this is likely to explain the more equitable and pro-poor health service system after UC policy was implemented.

Acknowledgments

The author is gratefully acknowledge kind support from Prof. Dr. Pramote Prasartkul , Assoc. Prof. Dr. Kusol Soonthorndhada ,Asst. Prof. Dr. Patama Vapattanawong and Dr. Viroj Tangcharoensathien who always provide motivation and guidance.

References

- Filmer Deon. (2003). The incidence of public expenditures in health and education. *Background note to World Development Report 2004, World Bank, Washington, DC, USA.*
http://www.ds.worldbank.org/servlet/WDS_IBank_Servlet
- ILO (International Labour Office). (1997). Ageing in Asia : The Growing Need for Social Protection. *Regional Office for Asia and the Pacific, East Asia Multidisciplinary, Advisory Team Bangkok.*
- Knodel, J. & Saengtienchai, C. (2005). Rural parents with urban children: Social and economic implications of migration on the rural elderly in Thailand. *Population Studies Center Research Report.* Institute for Social Research. University of Michigan.
- Makinen, M. (2000). Inequalities in Health Care Use and Expenditures: empirical data in eight developing countries and countries in Transition. *Bulletin of the World Health Organization.*
- Mapelli, V. (1993). Health needs, demand for health services and expenditure across social groups. *Social Science and Medicine.*
- Russell, S. (2005). Illuminating cases: understanding the economic burden of illness for household research. *Health Policy and Planning.*
- Supakankunti, Siripen. (1997). Future prospects of voluntary health insurance in Thailand. *Takemi Research Paper No. 130. Takemi Program in International Health,* Harvard School of Public Health.
- Supakankunti, Siripen. (2000). Future prospects of voluntary health insurance in Thailand. *Centre for Health Economics,* Faculty of Economics, Chulalongkorn University.
- Tangcharoensathein, V., Supachutikul, A., Lertiendumrong, J.(1999). The Social Security Scheme in Thailand : what lessons can be drawn? *Social Science and Medicine*