Active Life Expectancy and Functional Health Transitions Among Filipino Older People
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Objectives

The study provides a better understanding of health and aging issues and the way in which such experiences vary across genders and socio-economic background of the older people in the Philippines. It brings focus on their functional health and health transition experiences and the possible factors that come into play. Recent methodological developments on active life expectancy (ALE) are employed to provide a benchmark on the quality of remaining life of the older people in the country.

In particular, the study has the following objectives:

1. To determine the level of health expectancy among older Filipinos aged 60 years and over and the extent to which it varies across various background characteristics.
2. To determine the functional health transitions of older people and the factors that influence transitions among health states.
3. To contribute to the methodological progress in Active Life Expectancy (ALE) research by assessing the feasibility of employing the concept of functional health in a developing country setting like the Philippines.
4. To explore if there is any variation in level of health expectancy and health status between older males and females.

Data and Methodology

Data for the paper came from two elderly surveys: (1) 1996 Philippine Elderly Study (1996 PES) and the (2) 2000 Philippine Follow-up Survey on the Elderly (referred to as the Panel Study). The 1996 PES employed a multi-stage sampling design to generate a nationally representative sample of 2285 respondents aged 50 years and older although the study limited itself to the subsample aged 60 years and older (1, 264 cases). Based on the known refusal and eligibility data, it is estimated that the survey achieved an 85 per cent overall response rates (Hermalin ed, 2001). The panel data covered 932 respondents which account for 46 percent of the total respondents in the 1996 PES.

Data from the 1996 PES was used to establish the benchmark estimates of active life expectancy (ALE) in the country using Sullivan method while the panel data set was employed to estimate ALE levels and differentials (using multistate Life Table method), health transition rates, patterns and their determinants. Qualitative data derived from eight in-depth interviews of panel respondents were also collected to provide inputs for the conceptualization of the study. It helped in putting into context the older person's definitions of health particularly disability.

ALE was derived using two approaches including (1) Prevalence-based Life Table or the Sullivan Method and (2) Multistate Life Table Method (MSLT) using the 1996 PES and the 2000 panel data respectively. This paper presents the results of both methods although a direct comparison is not feasible given the differences in sampling structure.

The study operationalized the concept of health status using a dichotomous definition of 'healthy' (or active or without disability) and ' unhealthy' (or inactive or with disability). A person was considered disabled if he or she could not perform at least one of the 4 ADL activities (walking around the house, eating, putting on clothes/dressing, and taking a bath/going to bathroom) or 5 IADL activities (preparing one's own meal, shopping for groceries or personal items, managing own money, doing light housework like doing dishes, straightening up or light cleaning, using transportation to get to places beyond walking distance) by oneself because of health reason.

This multi-state approach of computing ALE was performed with the aid of a computer program called IMaCH (version 0.96), a maximum Likelihood Computer Program using Interpolation of Markov Chains developed by Dr. Nicolas Brouard and his colleagues at INED (Brouard and Lievre, 2002) using methodologies pioneered by Laditka and Wolf (1998).

To establish the risk factors associated with health transition, a multinomial logistic regression (MNLR) was employed using the panel data. Two separate models were considered representing the transition that originated from the two initial states of functional status (i.e. those initially healthy and initially unhealthy). Those who remained in a healthy state in both interviews and those who remained in an unhealthy state were used as baseline probabilities for the two models, respectively. A multiple classification analysis (MCA) was done to show the marginal effects of the independent variables for each of the transition probabilities. The multinomial logistic regression analysis was performed using the STATA program (version 6).

Findings:

The study revealed a substantial proportion of Filipino elderly who exhibited some difficulty in performing basic social activities necessary for self-care and independent living with the disability burden increasing with advancing with age. Females generally showed higher disability levels compared to males for all age groups except in the extreme old age (80+years) where a crossover was noted.

Aging proceeds at different rates across different sectors of the population. Most notable is the gender differential in ALE with the females more likely to outlive their male counterparts although they can expect to live a greater part of that life in a state of physical disability. Because males experience higher mortality rates in all age groups except in the extreme old age (80+ years), they can anticipate a truncated life expectancy but the period lived in impairment is relatively compressed compared to the

females. Apparently, the higher male mortality rates curtail the period spent with health impairment accounting for the relatively shorter proportion of remaining life lived in disability. Such gender differentials imply that while the Filipina elderly have experienced greater longevity gains in the past decades, longer life does not necessarily mean better health for them. This supports the frailty model which posits an expansion of morbidity accompanying a decline in mortality.

When initial health condition is taken into account, unhealthy males are found to be least advantageous not only because they live the shortest duration of life but also because a greater part of it is in disability. Significant to note is the observed ALE crossover in the advanced old age (80+) with the oldest females enjoying a greater part of their remaining life in active state compared to the male. This runs counter to the pattern observed in the younger age groups. The crossover is consistent with the disability and mortality patterns which also show similar breaks in the same age group tending to confirm the existence of a genuine health crossover in the 80+ age bracket.

Findings also underscore the heterogeneity across SES groups with the ALE estimates indicating the disadvantageous position of those belonging to the higher SES bracket. Particularly, those in the higher educational category were shown to outlive their less educated counterparts although the former can expect a relatively greater proportion of their live in an inactive state. Urban residents also tend to be more disadvantaged since they are found to live shorter life and a greater relative proportion in disability compared to their rural counterpart. A 60 year old rural resident for instance can anticipate to live almost 15 more years on the average or two years longer than the urban counterpart. The former can also expecting to live 22 per cent of his/her remaining years in an inactive state as compared to about 36 per cent for his/her urban counterpart with the disparity increasing with advancing age. The foregoing findings show that longer life means poorer health for the better educated while in the rural areas means longer and better quality of life for older people. Thus both the expansion and compression of morbidity theses are played out in the various sectors of the population.

Health transition analysis revealed that aging does not necessarily imply a continuous health decline. Of particular interest is the result showing a fair amount of recovery in functional disability (about 20% among those 60+ years old). Females in a state of disability are more likely to remain disabled compared to the males which help explain their poorer health profile. Among the healthy elderly, a complex of demographic and health behaviors including age, sex, place of residence, drinking, instrumental support and social participation figured as significant risk factors of mortality. On the other hand, increasing age and urban residence are associated with elevated risk of health deterioration. Among their unhealthy counterparts, age, sex and exercise posed as significant mortality risk factors. Self-assessed health figured significantly as a determinant for recovery with those having a positive self health assessment more likely to experience a reversal from their inactive state. This augurs well with prior findings which established SAH to be a strong predictor of changes in health and mortality (Ofstedal et al, 2002).

Findings also indicated a substantial proportion of lost cases in the follow-up study with about 15 per cent of the active and 7 per cent of the inactive reportedly lost in the follow-up study. This is expected since the former were are expected to be more mobile compared to those less healthy. Among the initially healthy, urban residents were 52 percent more likely than rural residents to be lost in the follow-up

Implication of health transition in terms of the shifts in status from independence to dependence and from a provider to a recipient of care spells tremendous implications on the Filipino family which is mandated by the constitution to care for the elderly. This is particularly in the context of initial signs of stresses experienced by the family as a result of increased labor migration involving women who are the traditional care givers of older people. In the face of the looming fiscal crisis coupled by the young population structure, low government priority for the older sector of the population is expected. Worth mentioning however are the initial intervention efforts at the policy arena to improve the older people's welfare. This includes two major legislative milestones aimed at improving the welfare of the older people an important provision of which is the 20 per cent discount that can be availed of by the senior citizens in the purchase of medicines among others and free medical and dental services in government hospitals anywhere in the country (Nolledo, 1994). However, inadequacies and gaps in the implementation arrangements were noted particularly at the local level which have affected the medical and dental service access for older people (DSWD, 2003).

In terms of methodology, the study demonstrated the relevance of employing functional health as an alternative measure for assessing the health status of older people. This was buttressed by the elderly's definition of old age which leaned largely on health considerations. In-depth interviews revealed the premium placed on physical ability to perform particular roles as a predominant consideration in their definition of old age. Older people associated old age with diminishing social roles and functions as a result of their inability to perform their usual tasks and functions. These results along with the heterogeneous health status across different sectors of the older population imply the difficulty of lumping people from varying stages of aging under the category which is usually what happens when older age is anchored on some arbitrary marker such as age 60 and over.

The study likewise revealed certain limitations of the measures. Particularly, the gendered nature of some IADL indexes highlights the possible role of culture in the definition of health which may pose some impediments on the standardization and the harmonization of these health indicators. The study likewise illustrated the significance of employing a cohort perspective as an approach for analyzing old age issues particularly health transitions. Also highlighted are the emerging methods of data collection such as the longitudinal studies that are found useful to address transition issues which the traditional cross-section data fail to deliver.