

## HEALTH AND SATISFACTION AMONG THE ELDERLY WITH CHRONIC CONDITIONS: DEMOGRAPHIC DIFFERENTIALS

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**This study examines the state of health (physical and mental health) and avowed satisfaction (toward hospital services and towards life-as-a-whole), among 172 elderly subjects (108 outpatients from a family medicine clinic and 64 community residents) with chronic conditions living in Kaohsiung city. Results indicated that (a) the elderly did not perceive any great impact of illness(es) upon their lives and both their physical and mental health were satisfactory; (b) the elderly were generally satisfied with both the hospital services and life as a whole; (c) there were meaningful group differentials in health and satisfaction: older, male, single and financially-dependent elderly had poorer physical and mental health; female, single and financially dependent elderly avowed lower life satisfaction.**

**Key words:** health, satisfaction, elderly

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Aging is a pressing problem for many countries in this century and the next. In Taiwan, advance in medical sciences, promotion of health care, material prosperity, coupled with the gradual demise of traditional Chinese family values and lifestyle, have sent the birth rate downward, but the life expectancy upward. Consequently, in September 1993, Taiwan was officially declared an "aging society as its proportion of senior citizens has exceeded 7%". However, systematic research on aging topics is still in its infancy, and relies heavily upon Western theories and findings. One purpose of this study, therefore, was to explore a basic issue in social gerontology: Are there significant demographic differences in health and satisfaction among the Chinese elderly in Taiwan?

### Health of the elderly and medical services

The recent "National survey of the elderly

in Taiwan" conducted by the Ministry of Internal Affairs<sup>(1)</sup> found that 55.5% of those aged above 65 had at least one chronic condition. Furthermore, within the three months of the survey period, only 45.4% of the elderly reported good health and 50.3% reported unsatisfactory health, although not life limiting. In addition, 4.3% reported disabling illnesses and were dependent on others' care.

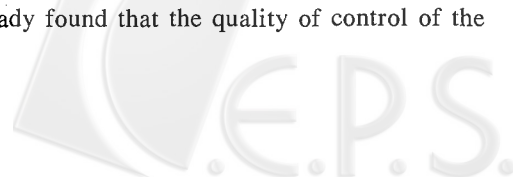
In terms of the actual use of medical services, within the same three months, 65.76% of the elderly had visited doctors, in average 5.07 times; 4.75% had been hospitalized, on average 1.2 times for 16.6 days. In addition, 45.3% had taken shelf medicine, on average 2.67 times. It can be concluded that a majority of the elderly in Taiwan reported poor health and frequently used medical services, especially hospital-based ones.

More careful scrutiny of the health statistics reveal that major illnesses causing hospitalization among the elderly in Taiwan are, stroke, accidents, cancer and cardiac problems in that order<sup>(2)</sup>. Chronic illness seems to be the main reason for using medical services among the elderly. Although a chronic condition is long-lasting and irreversible, it can be managed with medical treatment. Research in Taiwan has already found that the quality of control of the

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chronic illness greatly influences self-reports of health and even life satisfaction of the elderly in Taiwan<sup>(3)</sup>.

In summary, statistics and empirical research correspond to depict an increasingly salient social phenomenon, namely the elderly in Taiwan are in great need of medical services, and "health" is a pressing concern for them. As a matter of fact, the elderly with chronic conditions are the main recipients of medical services. Therefore, understanding their satisfaction towards services received could serve as a starting point to realign the health care system and to better accommodate specific needs of the aging population.

### **Health and satisfaction of the elderly: A uniform phenomenon?**

Is aging a uniformed phenomenon? This is the question attracting increasing attention and debate among gerontologists and social scientists. However, theories and research on the issue are still lean, notwithstanding the fact that most are Western products and their cross-cultural generalizability is yet to be tested.

When deliberating possible age differences in health and life satisfaction, late adulthood is often contrasted with early and middle adulthood: the elderly are treated as if they were a homogenous group. For instance, the role theory of aging<sup>(4)</sup> developed upon the two focal concepts of "status" and "role", suggested that personal well-being is likely to be more positive in early adulthood and to decline with age. However, theories committed to the adult maturation perspective<sup>(5)</sup> propose a dramatically different account: as one negotiates with specific "developmental tasks" through the course of life, the process of aging should not necessarily be detrimental to personal well-being; there even exists a possibility of positive change.

As mentioned earlier, these theories tend to regard the elderly as a homogenous group, hence, overlooking the fact that age may still be a very important factor accounting for differences among the elderly in terms of health and satisfaction. Within the elderly population, increased age was found to correlate with poorer physical and mental health, as well as lower life satisfaction in a recent community study<sup>(6)</sup>. It would be interesting to replicate this finding in a sample of elderly with medical conditions.

However, the analysis of the relationship

between age and well-being may be further complicated by the influence of gender. Social scientists generally believe that males and females assume psychologically different roles in most societies. Baken<sup>(7)</sup> depicted them as a sense of agency versus a sense of communion. It is well documented that women suffer more psychological distress<sup>(8)</sup>. As for physical health, the picture is more complicated; women tend to avow poorer health than men without substantial grounding in objective indicators of physical health<sup>(6,9)</sup>. However, the research findings are not consistent, Huang<sup>(10)</sup> found no gender difference on any of the five dimensions, including daily activities, physical health or mental health, among a group of the elderly with chronic conditions. The debate as to whether women are more vulnerable seems far from resolved.

Apart from age and gender influences in the aging process, two other factors may be indigenous to the present Taiwanese society. One is an elderly person's origin of birth--"mainlander" or "islander" and the other is the main source of personal finance in old age. Due to the large scale migration (mainly military and government personnel and their families) fleeing from the communists in mainland China at the end of the civil war some 47 years ago and various political maneuvering as well as a series of critical events in the political arena, a subtle division between the "mainlander" (the political immigrants) and the "islander" (native residents at the time of the immigration) has become a valid social phenomenon in Taiwanese society. It is therefore, meaningful to compare these two social groups in terms of health and satisfaction to present a more complete view of aging in Taiwan.

Traditionally, the Chinese family system shoulders almost all the responsibility for caring and supporting the young, the old, the ill and the dependent. Filial piety is upheld as one of the highest moral virtues and social values. However, in the current wave of social change, both the family structure and family functions are under dramatic transformation. For instance, the nuclear family is more and more prevalent and an increasing number of women remain at work after marriage. The Chinese family system has been relieved of many of its traditional functions, completely or partially, in aspects such as agency of religion or material production. In the same "National survey of the

elderly in Taiwan<sup>(1)</sup>, most elderly people admit that their source of living expenses still comes from their offspring, especially their sons. However, the percentage is decreasing year by year. Against the background of lack of comprehensive state social welfare mechanisms for the elderly, the changing reality of family life and societal attitudes will undoubtedly affect the elderly's well-being. Therefore, the present study attempted to contrast the financially dependent elderly with their financially independent counterparts, in terms of health and satisfaction.

In a nutshell, focusing on the Chinese elderly with chronic conditions, this study had two purposes: (a) to investigate the elderly's avowed satisfaction with life in general, as well as with medical services, including medical resources, services, information provided and practitioner-patient interactions; and (b) to explore possible demographic differentials in health and satisfaction.

## MATERIALS AND METHODS

### Subjects

Eligible respondents in this study were senior citizens over 65 years old, living in communities in Kaohsiung city, southern Taiwan. Two strategies for recruiting respondents were used. First, those coming to the clinic of the Department of Family Medicine in a medical centre in Kaohsiung were invited to participate in the study. The criteria for sample selection were: (a) elderly people over 65 years of age; (b) living in the city of Kaohsiung; (c) having a chronic condition of physical disease, but (d) excluding life threatening conditions, e. g. cancer, and intellectually debilitating conditions, e. g. severe stroke, or dementia.

Second, those reporting one chronic condition in a previous community study were followed up. The sampling was conducted by adopting a multi-stage probabilities proportional to size systematic random procedure<sup>(11)</sup>. First, amongst the eleven metropolitan administrative districts in Kaohsiung, three were randomly chosen; second, four areas within each chosen district were randomly selected; finally, according to the official registration lists of senior citizens compiled by the city's social welfare department, appropriate numbers of respondents were

randomly selected from each area. The final valid sample was composed of 108 and 64 elderly respondents recruited from the above two sampling strategies respectively.

### Measurements

Since the present research focused upon subjective perceptions and feelings of the elderly, a brief cognitive test was first conducted with each prospective respondent to screen out those with severe cognitive impairment. The Short Portable Mental Status Questionnaire (SPMSQ)<sup>(12)</sup> was used to assess orientation, short-term and long-term memory and those de-selected were replaced by respondents from the remaining list. In cases of failure to locate a prospective respondent due to incorrect information on the register, residential moves, death or decline of participation, names were also drawn from the remaining list as replacements.

Data came from responses to a four-part questionnaire described below:

(a) *Demographic variables.* Respondents' age, gender, education, marital status, and main sources of personal finance were recorded.

(b) *Physical health.* Two indicators were used: (1) Activity of Daily Living (ADL) and Instrumental Activity of Daily Living (IADL)<sup>(13)</sup> were widely used to assess elderly people's self-care ability, such as cooking, bathing, shopping, banking and taking medicine. The Chinese version was devised by Huang<sup>(10)</sup>. A higher summation score indicated better living ability, hence better physical health. Cronbach's alphas for ADL and IADL were 0.87 and 0.88 and that for the aggregated scale was 0.91 in this sample. (2) In the *Illness Impact Scale*, 25 medical conditions of high prevalence among the elderly population were listed, and respondents were instructed to rate on a 3-point scale the severity of each condition he/she had. A higher summation score indicated a higher level of physical ill-health. The Cronbach's alpha was 0.75 in this sample.

(c) *Mental health.* Depression, anxiety and somatic symptoms were measured by the SCL-90-R<sup>(14)</sup>. Cronbach's alphas for the three subscales were 0.77, 0.80 and 0.75 respectively, and that for the aggregated scale was 0.86 in this sample. A higher summation score of symptoms indicated a higher level of mental ill-health.

(d) *Satisfaction.* (1) *Life satisfaction* was

reported by respondents using 5-point faces scales<sup>(15)</sup>. Five aspects were evaluated: life-as-a-whole, relationships with family members living together, relationships with offspring, personal finance and overall health. The Chinese version was devised by Lu and her associates<sup>(16)</sup>. A higher summation score indicated a higher level of overall satisfaction with one's life. Cronbach's alpha for the aggregated scale was .81 in this sample. (2) *Satisfaction with medical services* was reported by respondents using 4-point Likert scales, including satisfaction over hospital time, the appointment system, hospital procedures, attitudes of hospital staff, practitioner-patient interactions, illness information provided, effectiveness of medical treatment, health education and community services. A higher summation score indicated a higher level of subjective overall satisfaction with the medical services. Cronbach's alpha for the aggregated scale was 0.83 in this sample.

### Procedure

All potential respondents, both outpatients from the family medicine clinic and community residents, were home interviewed by trained interviewers (3rd- and 4th-year undergraduate students from Kaohsiung Medical College) during December 1995 to January 1996. Although the questionnaire was in self-report format, interviewers were instructed to administer every measure to achieve the standardization of testing condition.

## RESULTS

### Sample characteristics

The final sample of 172 elderly respondents was composed of 91 males (52.9%) and 81 females (47.1%). This preponderance of males in the aging population is a valid social phenomenon in Taiwanese society, attributable to the above mentioned large scale political migration (males over-represented) from mainland China around 1949. The mean age of the sample was 70.79 (SD=6.47), with 51.1% aged between 65-70 years old, another 23.8% aged between 71-75, 18% aged between 76-80 and 7.1% aged 81 and above. The mean education received (in years) was 6.55 (SD=4.65), with 24.4% illiterate respondents, 38.9% having

partial or complete primary school education, 14% having partial or complete junior school education, and 22.7% having partial or complete senior school education or above. Most of the respondents (73.9%) were married (or had living partners), 45 respondents (26.1%) had either never married or were widowed.

Since respondents in this study were recruited by two different methods, the outpatients group and the community residents group were first compared on focal variables using T tests. Consequently, no statistically significant differences were noted on physical health, mental health and satisfaction. These two groups were then pooled to form the final research sample (N=172) for all subsequent analyses.

### Levels of health and satisfaction

In accordance with the first purpose of this study, levels of health and satisfaction were examined in this sample of elderly.

For *physical health*, item mean on the aggregated daily activities scale was 1.73, which was close to the 0-2 scale position of "2" ("not needing any help"), indicating a high level of daily function. In the ADL scale, the most needed help was "bathing" (7%), followed by "walking around" (5.2%) and "eating", "dressing", "getting in and out of bed" (all at 4.1%). In the IADL scale, the most needed help was "household chores" (23.8%), followed by "getting to places out of walking distance" (23.3%), "preparing meals" (22.1%), "financial management" (21.5%) and "shopping" (13.4%).

Item mean on the illness impact scale was 0.27, which was close to the 0-3 scale position of "0" ("very little impact"), indicating a low level of illness interference on daily life. Hypertension was by far the most prevalent chronic condition in this sample (69.2%). ADL and IADL were significantly correlated with each other ( $r=0.65$ ), whereas their correlations with illness impact were markedly weaker ( $r=-0.13$  and  $r=-0.22$ ).

For *mental health*, item mean on the aggregated scale was 0.30, which was close to the 0-2 scale position of "0" ("not at all"), indicating a low level of symptomatology. Among the three subscales, level of somatic symptoms was the highest, followed by depressive and anxiety symptoms. All the three subscales were significantly correlated with one other ( $r=0.42$  to  $r=0.58$ ), whereas their correlations with the aggreg-

gated scale were markedly higher ( $r=0.77$  to  $r=0.83$ ).

For *satisfaction*, item mean on the aggregated life satisfaction scale was 2.93, which was close to the 0-4 scale position of "3" ("satisfied"), indicating a high level of overall life satisfaction. Not surprisingly, the most unsatisfactory aspect of life was "health" (19.8%), followed by "finance" (8.7%).

Item mean on the aggregated medical services satisfaction scale was 2.99, which was close to the 1-4 scale position of "3" ("satisfied"), indicating, too, a high level of satisfaction with medical services. Table 1 lays out a more detailed look at the avowed unsatisfactory aspects of medical services. As can be seen, dissatisfaction with "community services" and "hospital time" top the list.

At this point, descriptive analysis suggested that the elderly had satisfactory physical and mental health and were generally satisfied with both life in general and medical services they received.

### Group differentials

As there has yet been no widely recognized way of setting age tiers within late adulthood in gerontology, age was still treated as a continuous variable in the present study. Pearson correlation analysis showed that age did not correlate with mental health, illness impact, or any of the satisfaction measures. However, it did correlate significantly with the composite score of ADL and IADL ( $r=-0.36$ ,  $p<0.05$ ). In other words,

increased age was related to decreased daily functions.

Other demographic differentials were examined along four dimensions: gender, birth of origin, marital status, and financial dependence. These four demographics were recorded as categorical variables in this study and were thus not eligible for correlation or regression analysis. Another concern was the pattern of variance distribution for some focal variables. A quick scan through pairs of means and SDs hinted that some of the variables may not have ideal normal distributions. In fact, variables such as mental symptoms, by nature, have skewed distributions, hence data transformation would distort the reality. On the other hand, although nonparametric tests are distribution-free in assumption, they are generally less powerful than their parametric counterparts. As tests in this study were intended to be exploratory, T tests were used to facilitate comparisons with existing literature, but t values should be interpreted with caution.

Significant *gender differences* were found on education, illness impact and global life satisfaction. Females received less education, but were generally less satisfied with life as a whole. Results are presented in Table 2.

Since no indigenous elderly and very few members of other minority groups were interviewed (a total of 9), the comparison between people of different *birth origins* was restricted to "mainlanders" versus "islanders". Results are presented in Table 3. The two groups were not different in any of the health or satisfaction indicators. Nonetheless, the mainlanders were older and better-advantaged in education.

There were *marital differences* in almost every aspect of health and satisfaction. Results in Table 4 show that the elderly living with spouses were younger and better educated; they perceived lesser illness impact and retained better daily functions; they complained of fewer psychosomatic symptoms; and they were more satisfied with life as a whole, especially where personal finances and health were concerned.

*Financial dependence* also evoked many significant differences between the two groups as shown in Table 5. The financially independent elderly were better educated; they perceived less illness impact and retained better daily functions; they complained of fewer depressive and psychosomatic symptoms; they were more satisfied with life-as-a-whole, especially where

Table 1. Rank order of dissatisfaction toward aspects of hospital services

| Services                | Rank | %    | n  |
|-------------------------|------|------|----|
| Community services      | 1    | 29.2 | 31 |
| Hospital time           | 2    | 28.8 | 49 |
| Hospital procedure      | 3    | 20.1 | 34 |
| Health education        | 4    | 17.9 | 22 |
| Treatment effectiveness | 5    | 15.2 | 25 |
| Appointment system      | 6    | 13.6 | 23 |
| Illness information     | 7    | 11.8 | 20 |
| Attitude                | 8    | 8.2  | 14 |
| Interaction             | 9    | 5.3  | 0  |

Note: % is the percentage of those endorsing "3" (dissatisfied) or "4" (very dissatisfied).

Table 2. Gender differences

| Variables        | Males (n=91) |      | Females (n=81) |      | t       |
|------------------|--------------|------|----------------|------|---------|
|                  | Mean         | SD   | Mean           | SD   |         |
| Age              | 71.09        | 5.98 | 70.46          | 7.00 | 0.46    |
| Education        | 7.86         | 4.03 | 5.10           | 4.90 | 4.04*** |
| Illness impact   | 6.95         | 7.36 | 6.27           | 4.51 | -0.55   |
| IADL             | 12.82        | 2.54 | 11.89          | 3.11 | -2.10   |
| ADL              | 11.77        | 1.53 | 11.75          | 1.83 | -0.08   |
| Depression       | 1.47         | 2.08 | 1.73           | 2.03 | 0.81    |
| Anxiety          | 1.09         | 1.87 | 1.31           | 2.05 | 0.74    |
| Somatic symptoms | 2.24         | 2.06 | 2.79           | 2.16 | 1.68    |
| Medical sat.     | 26.64        | 3.81 | 27.31          | 2.77 | 0.94    |
| Global life sat. | 2.96         | 0.95 | 2.66           | 0.97 | -1.99*  |
| Family sat.      | 3.25         | 0.79 | 2.30           | 0.73 | 0.44    |
| Children sat.    | 3.23         | 0.85 | 3.32           | 0.71 | 0.73    |
| Financial sat.   | 2.67         | 0.86 | 2.62           | 0.98 | 0.38    |
| Health sat.      | 2.58         | 1.14 | 2.41           | 1.08 | -0.97   |

Table 3. Differences between groups of different birth origins

| Variables        | Islanders (n=114) |      | Mainlanders (n=45) |      | t        |
|------------------|-------------------|------|--------------------|------|----------|
|                  | Mean              | SD   | Mean               | SD   |          |
| Age              | 69.81             | 6.64 | 74.22              | 5.2  | -4.44*** |
| Education        | 5.96              | 4.43 | 8.16               | 5.06 | -2.68**  |
| Illness impact   | 6.73              | 7.35 | 6.29               | 4.60 | 0.33     |
| IADL             | 12.41             | 2.78 | 12.00              | 3.34 | 0.78     |
| ADL              | 11.86             | 1.08 | 11.42              | 2.82 | 0.99     |
| Depression       | 1.59              | 2.16 | 1.73               | 1.97 | -0.39    |
| Anxiety          | 1.19              | 2.13 | 1.33               | 1.64 | -0.40    |
| Somatic symptoms | 2.44              | 2.11 | 2.84               | 2.24 | -1.06    |
| Medical sat.     | 26.44             | 3.28 | 27.57              | 3.71 | -1.54    |
| Global life sat. | 2.79              | 1.00 | 2.78               | 0.95 | 0.10     |
| Family sat.      | 3.21              | 0.73 | 3.37               | 0.89 | -1.12    |
| Children sat.    | 3.20              | 0.82 | 3.36               | 0.76 | -1.06    |
| Financial sat.   | 2.63              | 0.92 | 2.51               | 0.92 | 0.75     |
| Health sat.      | 2.43              | 1.11 | 2.58               | 1.16 | -0.75    |

personal finances was concerned.

The present paper focused on unraveling systematic variations of health and satisfaction within the elderly population, using demographics as grouping criteria. Nonetheless, it is worth reporting that health and satisfaction were related with each other in this study. Pearson

correlation analysis revealed that mental symptoms negatively correlated with life satisfaction ( $r=-0.51$ ,  $p<0.001$ ) and satisfaction with medical services ( $r=-0.31$ ,  $p<0.001$ ), whereas perceived illness impact negatively correlated with life satisfaction ( $r=-0.41$ ,  $p<0.001$ ).

Table 4. Marital differences

| Variables        | No spouse (n=45) |      | With spouse (n=127) |      |          |
|------------------|------------------|------|---------------------|------|----------|
|                  | Mean             | SD   | Mean                | SD   | t        |
| Age              | 73.29            | 7.3  | 69.90               | 7.93 | 3.09**   |
| Education        | 4.55             | 4.68 | 7.24                | 4.45 | -3.42*** |
| Illness impact   | 8.52             | 8.07 | 5.91                | 5.18 | 1.95*    |
| IADL             | 11.57            | 3.32 | 12.66               | 2.63 | -1.96*   |
| ADL              | 11.64            | 2.09 | 11.81               | 1.15 | -0.48    |
| Depression       | 1.93             | 2.38 | 1.47                | 1.93 | 1.29     |
| Anxiety          | 1.44             | 2.04 | 1.10                | 1.92 | 1.01     |
| Somatic symptoms | 3.30             | 2.29 | 2.22                | 1.99 | 2.96**   |
| Medical sat.     | 27.17            | 3.91 | 26.82               | 3.28 | 0.43     |
| Global life sat. | 2.42             | 1.06 | 2.96                | 0.89 | -3.30*** |
| Family sat.      | 3.24             | 0.79 | 3.29                | 0.76 | -0.35    |
| Children sat.    | 3.19             | 0.83 | 3.30                | 0.77 | -0.75    |
| Financial sat.   | 2.38             | 0.98 | 2.74                | 0.88 | -2.31*   |
| Health sat.      | 2.16             | 1.15 | 2.62                | 1.08 | -2.46*   |

Table 5. Differences between the financially-dependent and financially-independent elderly

| Variables        | Independent (n=75) |      | Dependent (n=97) |      |         |
|------------------|--------------------|------|------------------|------|---------|
|                  | Mean               | SD   | Mean             | SD   | t       |
| Age              | 70.58              | 6.08 | 71.38            | 6.67 | -0.76   |
| Education        | 8.40               | 4.42 | 5.14             | 4.49 | 4.51*** |
| Illness impact   | 5.14               | 3.80 | 7.80             | 7.42 | -2.31*  |
| IADL             | 13.42              | 1.17 | 11.52            | 3.49 | 4.82*** |
| ADL              | 12.11              | 0.37 | 11.50            | 2.17 | 2.81**  |
| Depression       | 1.28               | 1.64 | 1.89             | 2.32 | -1.94*  |
| Anxiety          | 0.89               | 1.52 | 1.45             | 2.24 | -1.90   |
| Somatic symptoms | 2.00               | 1.86 | 2.89             | 2.23 | -2.61** |
| Medical sat.     | 26.68              | 3.51 | 27.13            | 3.46 | -0.61   |
| Global life sat. | 3.14               | 0.78 | 2.60             | 1.01 | 3.78*** |
| Family sat.      | 3.34               | 0.83 | 3.20             | 0.72 | 1.11    |
| Children sat.    | 3.29               | 0.91 | 3.24             | 0.70 | 0.32    |
| Financial sat.   | 2.84               | 0.80 | 2.48             | 0.93 | 2.62**  |
| Health sat.      | 2.70               | 1.07 | 2.38             | 1.13 | 1.80    |

## DISCUSSION

Aging is both a personal passage through life and a social phenomenon, shaped by values and practices in a wider society. Elsewhere, we have examined the intriguing roles of some psychosocial variables in aging, such as personal-

ity, life stress, social networks and social support<sup>(6,11,16)</sup>. The present paper, however, attempted to answer a fundamental question: is aging a uniformed phenomenon in a given society? Phrasing it more specifically, are there meaningful group differentials in terms of health and satisfaction among the elderly with chronic

conditions?

Since demographic characteristics of the elderly, such as age and gender may substantially affect their health and satisfaction, it is appropriate to review the sample characteristics before preceeding to further discussion.

The present sample had more males than females. The mean age was around 71, with the largest proportion being 65-70 years old (the so-called "young-old" group). Most elderly had living spouses. The average length of formal education was 6 years, equivalent to graduation from primary school. However, there seemed to be a polarizing effect on education: the numbers of illiterates (24.4%) and those who had senior schooling or above (22.7%) were almost the same. Finally, all the elderly had at least one chronic condition but were still living in communities.

### **Health and satisfaction among the elderly: A general picture**

The present study used multiple indices for health. In physical health, the elderly generally had good functions in daily activities. The most prevalent chronic condition was hypertension, but illness(es) did not cause great interference with normal life. In mental health, the elderly, too, generally had good functions, however, the most prevalent psychological symptoms were somatic ones.

The present study also used multiple indices for satisfaction. Results showed that elderly people were generally satisfied with life as well as medical services they received. Among the complaints of dissatisfaction in the latter, community services topped the list. With rapid social change in the wider society as well as advances of medical sciences, people are expecting ever more from our medical services. Consumerism is certainly on the rise in every section of the population, but dissatisfaction can also be caused by genuine discrepancies between needs and gratification. Although satisfaction indexed in the present study was a subjective evaluation, which may or may not be based on objective facts, we can not dismiss the finding offhand. On the contrary, as we introduce ever more programmes of hospital modernization in all aspects, the needs of our "customers", especially the frail and disadvantaged elderly, should not be sacrificed.

Based on the above results, several points

could be raised. First, chronic disease is a major challenge to the health of the elderly, which was evident in the national survey<sup>(1)</sup>. Our previous study in Kaohsiung with randomly selected community elderly also found that most of them had at least one chronic condition<sup>(11)</sup>, with hypertension as the most prevalent chronic disease (36.7%). Furthermore, when comparing the lists of the top ten diseases yielded from the two studies, we saw 80% of them were exactly the same. Although most of the respondents in the present study (62.79%) came from a particular clinic in a particular medical centre, the distribution of their chronic conditions seemed to be reasonably wide and was quite similar to that of the community survey either in the same area<sup>(11)</sup> or those of the national surveys<sup>(1)</sup>. Consequently, the present sample of the elderly with chronic conditions, albeit a small one, still had reasonable representativeness. With due cautions, results should be able to generate to a wider elderly population.

Second, although some research has claimed that as many as 85.2% of those aged over 65 years old had at least one chronic condition<sup>(17)</sup>, they are, however, not necessarily disabled or limited by diseases. The elderly people interviewed in the present study all had at least one chronic condition, but not only did they maintain good functions in daily activities, and perceived little interference with normal life, but they also were in fairly good psychological states. Of course, those were community elderly and they have been shown to have better functions and health compared with their institutionalized counterparts<sup>(10)</sup>. Nonetheless, community elderly are still the majority in a Chinese society. As aging is an irreversible social trend, allowing for normal aging, the satisfactory physical and mental states of the community elderly perhaps point to a pool of largely untapped but potentially fruitful human resources. At least, aging and chronic illness do not inevitably lead to disability and helplessness and the outlook for an aged life need not be gloomy.

Third, the self-report method of health evaluation used in the present study raised questions about its own validity. Previous research has shown that self-reported health states corresponded fairly well with physician's evaluations, degree of disability and number of illness<sup>(18)</sup>, as well as more objective measures, such as number of visits to doctors, number of hospital



days, medication, medical diagnosis and degree of disability<sup>(19)</sup>. In fact, self-reported subjective health and satisfaction could be viewed as an integration of both objective and subjective evaluations<sup>(20)</sup>, taking into account not only health and illness-related information, but also psychosocial factors, such as family interaction and social support.

### **Health and satisfaction among the elderly: Group differentials**

A note of caution is needed before discussing evidence of group differences. Following the academic convention, alpha was pre-set at 0.05. However, multiple tests conducted to reveal group differentials may threaten to unduly inflate this level. In order to preserve comparability with other studies in this area, we refrained from adopting a more restrictive alpha, instead, we urge readers to treat our results as exploratory and interpret them with due caution.

Like most Western societies, Chinese women are socially disadvantaged from a very early stage of life; unlike most Western societies, Chinese women in Taiwan today still suffer from many injustices, explicitly or implicitly. For example, unfair property rights and employment rights based on gender are still present in laws and acts. At home, women alone bear the burden of homemaking and child-rearing, with little recognition and minimal power. Furthermore, being a female and an elderly person is almost a double vulnerability. The gender differentials in education and life satisfaction mirror just this gloomy social reality.

Living with a spouse and being financially independent seem to have produced a lot of benefits for the elderly, in terms of physical health, mental health and life satisfaction. The financially independent elderly were notably more satisfied with their financial states. Living with a spouse enhances social support and companionship, which have been repeatedly found protective of physical and mental well-being<sup>(21,22)</sup>. Retaining financial independence, on the other hand, may preserve a sense of personal worth and respect and a sense of continuity with regard to a role of family supporter, especially for men. Against the irreversible trend of increasing numbers of the elderly in the society and decreasing family support due to various reasons, more and more men and women have realized the

importance of early financial planning for late adulthood and regard financial independence in old age as a desirable and attractive option<sup>(1)</sup>.

In the cultural context of a Chinese society, three assets seem to be a guarantee of a happy life in old age: a living spouse, good health and secure finances. The Chinese are socially conditioned to rely primarily on the immediate family for all sorts of support<sup>(6)</sup>. For the elderly, a living spouse is becoming an increasingly important source of support, now that grown-up children may migrate in search of jobs. The weight of health on life satisfaction is unequivocal, as well as the benefit of a secure personal finance<sup>(23)</sup>

These three assets may provide practical references for future research in gerontology as well as government policy planning.

### **SUMMARY**

Based on the results of this study, several tentative conclusions can be drawn:

First, although all the elderly interviewed had at least one chronic condition, they did not perceive a great impact of illnesses upon their lives.

Second, the elderly were generally satisfied with life as a whole, as well as medical services they received.

Third, being of older age, male, single and financially-dependent put subjects at higher risk of physical and mental ill-health.

Fourth, being of female, single and financially-dependent put subjects at higher risk of lower life satisfaction.

Overall, the aging process was not necessarily a negative one for the elderly in Taiwan. However, there were meaningful group differentials in health and satisfaction.

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# 慢性病老人的健康與滿意：人口學上的差異

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本研究檢視了172位患有慢性病的高雄市社區老人的健康（含身體健康和心理健康）及滿意（含生活滿意和醫院服務滿意）的狀況。結果發現：(1)慢性病老人自認疾病對其生活的衝擊並不大，且仍能保持良好的身體和心理健

康狀態；(2)老人對整體生活和醫院服務均大體滿意；(3)在慢性病老人中的確存在有意義的組群差異：年長、男性、無配偶和財務依賴別人者，身、心健康較差；而女性，無配偶和財務依賴別人者，對生活較不滿意。

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