
SUMMARY REPORT

**SEMINAR ON RESEARCH ON AGING
IN ASIA AND THE PACIFIC**


Singapore, August 31 to September 4, 1987

Sponsored by

East-West Population Institute
HelpAge International
International Association of Gerontology,
Asia/Oceania Region
U.S. National Institute on Aging
World Health Organization, Regional Office
for the Western Pacific

Cohosted by

Ministry of Health, Singapore
Department of Community, Occupational
and Family Medicine, National University
of Singapore
Gerontological Society of Singapore

 East-West Center
East-West Population Institute
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INTRODUCTION

The goals of the Seminar on Research on Aging in Asia and the Pacific, held in Singapore, August 31-September 4, 1987, were to review critically recent survey research on aging in the region and to expose participants to new methodologies for future research. Of particular interest were the recent multicountry survey projects on the elderly under the auspices of the Association of Southeast Asian Nations (ASEAN) and the Western Pacific Regional Office of the World Health Organization (WHO). Nevertheless, the papers and discussion reflected the experiences of all the 68 participants from 18 countries that attended the seminar and who are listed in the final section of this report.

As indicated on the agenda, which follows, after the opening ceremony in which we were honored to have as the keynote speaker Dr. Kwa Soon Bee, Permanent Secretary, Ministry of Health, Singapore, there was a session to review the recent ASEAN five-country and WHO four-country studies. The next three sessions then focused on how to improve measurement of the elderly's family and community relations, health and ability, and economic needs and resources. In each of these three sessions, a general, overview paper was followed by papers on individual countries. (Abstracts of the papers and summaries of the discussions can be found following the agenda in this report.)

On the middle day of the seminar, the participants visited a variety of facilities for the elderly of Singapore under the guidance of the local scientific committee, whose names are highlighted in the list of participants. The following day the paper presentations and discussion turned to policy implications of recent research and future research and data collection strategies. In the latter session, representatives of various national and international agencies outlined the research accomplishments and plans of their organizations.

The final day of the seminar was organized by the local scientific committee and held at the Ministry of Community Development. The morning session provided an update on research on aging for local professionals, while the afternoon session was a public symposium on the elderly of the future.

The seminar co-coordinators, Gary Andrews and Linda Martin, would like to express their great appreciation to the seminar cosponsors: East-West Population Institute, HelpAge International, International Association of Gerontology, Asia/Oceania Region, U.S. National Institute on Aging, and World Health Organization, Regional Office for the Western Pacific. We would also like to acknowledge the many efforts on behalf of the seminar by the Singapore local scientific committee and cohosts: Ministry of Health, Department of Community, Occupational and Family Medicine, National University of Singapore,

and the Gerontological Society of Singapore. We also want to thank the Singapore Chapter of the East-West Center Alumni Association and Sandoz Pharmaceutical Pte. Ltd. for their generous hospitality. Finally, we are very grateful to the paper writers, session chairs, discussion leaders, rapporteurs, and other participants for their contributions to the success of the Seminar on Research on Aging in Asia and the Pacific. We hope that this seminar will prove valuable to all in their future research on aging.

AGENDA

Seminar on Research on Aging in Asia and the Pacific
August 31 - September 4, 1987
Singapore

Monday, August 31st (Hilton Hotel, 3rd floor ballroom)

9:00 - 9:30

Opening Ceremony

Dr. Kwa Soon Bee, Permanent Secretary, Ministry of Health, Singapore
Dr. N.V.K. Nair, Regional Adviser, World Health Organization
Dr. J. David Curb, Associate Director, U.S. National Institute on Aging
Dr. Sylvester Yong, President, Gerontological Society of Singapore
Dr. Linda G. Martin, Research Associate, East-West Population Institute
Chair: Dr. Gary R. Andrews, Professor of Primary Care and Community Medicine, Flinders University of South Australia
Rapporteur General: Ms. Susan M. Carr, Flinders University of South Australia

9:30 - 10:00

Coffee break

10:00 - 12:00

Review of Recent Research on Aging in Asia and the Pacific

Dr. Chen Ai Ju, Ministry of Health, Singapore (ASEAN studies)
Dr. Gary R. Andrews, Flinders University of South Australia (WHO studies)
Chair/Discussion Leader: Dr. Lee Hin Peng, Department of Community, Occupational and Family Medicine, National University Hospital
Rapporteurs: Dr. John Campbell, University of Otago, and Dr. Phua Kai Hong, National University of Singapore

12:00 - 2:00

Group photograph followed by Chinese lunch in the adjacent ballroom

2:00 - 5:00

Family and Community Relations of the Elderly

(coffee break
approx. 3:15 -
3:45)

Dr. Ross Harris, Flinders University of South Australia (general paper)
Dr. Lita Domingo, University of the Philippines (ASEAN study)
Dr. Nii-K Plange, University of the South Pacific (WHO study)
Chair: Dr. A.M. Shah, University of Delhi
Discussion Leader: Mrs. Ann Wee, National University of Singapore

Discussion Topics:

Measuring Family Relations
Measuring Community Relations
Validating Data on Relations
Institutionalization

Rapporteurs: Dr. Peter Xenos, East-West
Population Institute, and Mrs. Masitah Mohd.
Yatim, National Population and Family
Development Board, Malaysia

Evening

Dinner and cultural show hosted by the East-West
Population Institute and the International
Association of Gerontology at Raffles Hotel
(Bus pickup at the Hilton at 7:00p.m. Drinks
at 7:30p.m. Show at 8:00. Dinner at 8:45.
Return to hotel at approximately 10:45.)

Tuesday, September 1st (Hilton Hotel, 3rd floor ballroom)

9:00 - 12:00

Health and Ability of the Elderly

Dr. Jersey Liang, University of Michigan
(general paper)

Dr. Paul C.Y. Chen, University of Malaya (WHO
study)

(coffee break
approx. 10:15 -
10:45)

Dr. Jong Huh, Seoul National University (WHO
study)

Dr. Jane C. Baltazar, University of the
Philippines (WHO study)

Chair: Dr. Edward Tock, National University of
Singapore

Discussion Leader: Dr. John Campbell, University
of Otago, New Zealand

Discussion Topics:

Life Style

Use of Medication—Traditional and Modern

Utilization and Gaps in Health Services

Screening

Causes of Disability

Rapporteurs: Dr. Elias Anzola-Perez, Pan American
Health Organization, and Dr. Edith M.C. Lau,
Chinese University of Hong Kong

12:00 - 2:00

Muslim lunch at the Tradewinds Poolside Restaurant
on the 24th floor of the Hilton

2:00 - 5:00

Economic Needs and Resources of the Elderly

Dr. Robert L. Clark, North Carolina State
University (general paper)

Dr. Hananto Sigit, Central Bureau of Statistics,
Indonesia (ASEAN study)

(coffee break
approx. 3:15 -
3:45)

Ms. Peggy Koopman-Boyden, University of
Canterbury (New Zealand study)

Dr. John McCallum, Australian National
University (Australian study)
Chair: Dr. Ling Sing Lin, Ministry of Health,
Singapore
Discussion Leader: Dr. Linda G. Martin, East-West
Population Institute
Discussion Topics:
Labor Force Participation and Retirement
Pensions (Public and Private)
In-kind Services
Rapporteurs: Mr. Campbell Rungie, Rungie and
Associates, and Dr. Abdus Samad, Economic and
Social Commission for Asia and the Pacific

Wednesday, September 2nd

Field Trip Organized by the Local Scientific Committee

9:15 - 9:45	Senior Citizen Health Care Centre at Kuo Chuan
10:15 - 10:45	Apex Day Care Centre for the Elderly
10:45 - 11:15	Henderson Senior Citizens Community Home
11:25 - 11:55	Tiong Bahru Befriender Service
12:25 - 2:00	Vegetarian Lunch at Tai Pei Old People's Home
Evening	High tea hosted by the Singapore Chapter of the East-West Center Alumni Association, followed by a visit to the Singapore Handicraft Centre.

Thursday, September 3rd (Hilton Hotel, 3rd floor ballroom)

9:00 - 12:00	<u>Policy Implications of Recent Research</u> Dr. Nachiro Ogawa, Nihon University (Japan study) Mrs. Masitah Mohd. Yatim, National Population and Family Development Board, Malaysia (ASEAN study) Dr. Paul P.L. Cheung, Ministry of Health, Singapore Chair: Senator Professor Prasop Ratanakorn, National Assembly of Thailand Discussion Leader: Mr. Finlay Craig, HelpAge International, Sri Lanka Possible Discussion Topics: Housing Economic Policy and Retirement Health Care Social Services Rapporteurs: Dr. Ling Sing Lin, Ministry of Health, Singapore, and Dr. John McCallum, Australian National University
(coffee break approx. 10:15 - 10:45)	

12:00 - 2:00 Buffet lunch in an adjacent ballroom

2:00 - 5:00 Research and Data Collection Strategies
Dr. Hana Hermanova, World Health Organization
Dr. J. David Curb, U.S. National Institute on Aging
(coffee break approx. 3:15 - 3:45)
Dr. Abdus Samad, United Nations Economic and Social Commission for Asia and the Pacific
Dr. Akiko Hashimoto, United Nations University, Japan
Chair: Dr. Shanta Emmanuel, Ministry of Health, Singapore
Discussion Leader: Dr. Mike Giles, Australian Bureau of Statistics
Possible Discussion Topics:
Censuses
Surveys
Case Studies
Data Bases
Rapporteurs: Dr. Lita Domingo, University of the Philippines, and Mr. Adrian Esterman, South Australian Health Commission

Friday, September 4th (Ministry of Community Development)

Program Organized by the Local Scientific Committee

Morning Update in Research in Aging: For Local Professionals and Seminar Participants
Dr. Hana Hermanova, "WHO Programme on Aging"
Dr. Linda G. Martin, "Review of Aging in Asia"
Dr. Paul Chen, "Malaysian Studies on Aging"
Dr. Fong Ngan Phoon and Dr. Rilly Ray, "Perception of the Elderly Towards Day Care Services: A Community-Based Survey in Singapore"
Dr. Kua Ee Heck, "Psychosocial Aspects of Families Caring for the Elderly"
Chairs: Dr. Gary Andrews and Dr. Anne Merriman

Lunch Hosted by Sandoz Pharmaceutical Pte. Ltd.

Afternoon Elderly of the Future: Public Symposium
Dr. John McCallum, "Aging and Work in Urban Societies"
Dr. Gary Andrews, "Health and Aging in Urban Societies"
Dr. Richard Hyde, "Architecture for an Aging Society"
Ms. Lim Hsiu Mei, "The Singapore Perspective"
Chairs: Dr. Sylvester Yong and Dr. Paul Chen

ABSTRACTS OF PAPERS AND DISCUSSION

Review of Recent Research on Aging in Asia and the Pacific

The ASEAN Studies

Chen Ai Ju

Under the project, "Socio-Economic Consequences of the Ageing of the Population," research was undertaken on the situation of aging and the aged in the ASEAN region. It was one of the seven projects of the Phase III ASEAN Population Programme, implemented by Indonesia, Malaysia, Philippines, Singapore, and Thailand. The project was planned specifically with the aim of providing an early signal to policymakers and planners of the potential problems that might emerge in the process of demographic transition from young to old dependency in each ASEAN country. In all countries, the research activities consisted of:

1. Review and analysis of existing data and literature;
2. Projections into the future of the size and characteristics of the elderly population, based on alternative assumptions of mortality and fertility;
3. Surveys and studies to fill the gaps in knowledge about the relationship between aging population and development.

In each participating country, household surveys on the elderly have been conducted. A core ASEAN questionnaire was supplemented in each country with questions specific to the particular situation and policy concerns of the country. The results of the research will be published nationally and at the ASEAN level, and national and ASEAN seminars involving policymakers and planners will be conducted.

The WHO Studies

Gary R. Andrews

Although aging is not yet a high priority issue for health planners, policymakers, and clinicians in most developing countries, there will be a growing need in coming years to pay more attention to the important health issues associated with population aging in the developing world. This paper reports some of the relevant findings of a crossnational study (sponsored by the World Health Organization) of the health and social aspects of aging in four developing countries—Korea, the Philippines, Fiji, and Malaysia. In very broad terms, the overall demographic, physical, mental health, and social patterns and trends associated with aging, as demonstrated by age

group and sex differences, were consistent throughout the four countries studied. The key findings are compared and contrasted with those of a similar eleven-country WHO study in Europe. The comparison underlines the fundamental universality of age-related changes in biophysical, behavioral, and social characteristics. However, the importance--both absolutely and relative to Europe--of the family in developing countries was evident with about three-quarters of those aged 60 and over in the four countries living with children, often in extended family situations. Another interesting difference is the higher proportion of respondents in the four-country study who report that they are healthy. Nevertheless, levels of adverse health-related behavior and the prospect of changing patterns of morbidity with further increases in the total and proportional numbers of aged persons point to a need for emphasis on preventive health measures and programs directed to the maintenance of the physical and mental health of the aging population.

Summary of Discussion

The oral presentations of the papers outlining the two major crossnational studies of the elderly in the Asian and Pacific region and the subsequent discussion highlighted a variety of methodological issues: sampling, difficulties in interviewing the elderly, crossnational comparisons, and dissemination.

Without an established sampling frame, such as was available for the Indonesian ASEAN survey, researchers in many cases have found it necessary to contact a large number of households in order to identify the desired number of elderly respondents--a process that takes valuable time and energy. There was also discussion of the extent to which the very frail and institutionalized elderly are missed in household surveys. As part of the Singapore ASEAN study, two other surveys were conducted: one among the elderly living in institutions and another among the elderly sick seeking medical treatment in hospitals and clinics.

Although response rates were high, occasionally the elderly respondents had difficulty understanding the questions and were slow in answering, and in some cases even expressed fear of the interview. Attention spans were sometimes short, and instances of the respondent wandering off in the middle of the interview were reported. Another challenge in some countries was administering a questionnaire in a variety of dialects or languages. In the WHO study, an attempt was made to supplement the main survey with case studies, but in general the interviewers did not have the skills or training necessary to do a good job.

There was considerable discussion of the tradeoff between using the same survey instrument and study design in all countries in a crossnational research project in order to do comparative analysis versus tailoring the study and questionnaire to address specific concerns in each country. One very basic issue is the definition of the elderly and choice of age groups. The results are obviously

influenced by the age group of subjects studied. Furthermore, where health and ability were being investigated there may be a need to stratify by age to increase the proportion of the very old. On the other hand, if the interest is in preparation for retirement, respondents in their forties or fifties may be sought.

Furthermore, a question that makes sense in one country may make very little in another. The validity of self-assessments by the respondent of issues such as health status and their comparability across cultures were questioned. For example, in the WHO study, Filipinos were more likely to report themselves healthy than respondents from the other three countries, but they also had the highest prevalence of health problems. The same sort of issue may arise in comparing the responses of different ethnic groups in the same country, of males and females, and so on. The validity of comparing the elderly in less developed countries with those in more developed countries was also questioned, and the suggestion was made that it may be more valid to compare the former with the elderly fifty years ago in what are currently the more developed countries. This point provides one of many arguments for longitudinal studies.

Finally, there was a general consensus that not only should results be published as quickly as possible, but also the raw data should be made available to other interested researchers in a timely fashion so that the full benefit of the investment in data collection can be obtained. Of course, care must be taken to ensure the confidentiality of individual responses. Among the further analysis suggested was comparison of survey results with data from censuses, and in the countries where there was both an ASEAN and a WHO survey, comparison of the survey results with each other.

Family and Community Relations of the Elderly

Assessing Family and Social Relations of the Elderly by Survey

Ross D. Harris

Family and other social participation is one of the most pervasive occupations of the elderly in all cultures. Yet it is only recently that attention has been directed to describing family and social relationships among the aging.

Large-scale epidemiological surveys provide limited models for question design, most having restricted information-gathering on issues of family structure. Furthermore, the notion that the experience of aging is strongly conditioned by the period of history in which one becomes old should influence all approaches to data gathering and analysis. The least successful people in aging will not be represented in a cross-section survey with a fixed lower age. Clearly, a longitudinal study is superior. Moreover, qualitative research should be an equal partner to quantitative research.

Three approaches to surveys of family and social relations have been represented in the literature. The first is the traditional approach of "how many," "how much," or "how often." Questions might include how many living children do you have and when did you last visit somebody. The personal significance of the relations is not ascertained. The second approach is the structural plus process approach in which an attempt is made to assess significance. The third is a system or social network approach that is based on social exchange theory. Using this approach the elderly are no longer viewed as passive, but rather as active, e.g., in making decisions and providing care for grandchildren. Social gerontologists are agreed that for meaningful findings, assessment of family and social relations should develop information on social structures, social behavior, and the significance to the individual of these social contacts.

Family Relations of the Elderly: Suggested Measures Based on the Philippine Component of the ASEAN Study

Lita J. Domingo

The paper examines data from the Philippine survey of the elderly that can be used to measure the status and position of the elderly in the household, as well as to provide an indication of the nature of their relationships with other family members. The household record is one basic source of information. Data on relationship to the household head from the household record indicates the relative position of the elderly in the household. The high proportion of elderly listed as "heads" is interpreted as reflecting the high esteem accorded the elderly in Philippine households. Other measures of household composition such as number of women 15 to 50 years of age

and number of workers may indicate the availability of caretakers in the household. Alternative classifications of type of living arrangement can also be derived from the household record together with supplementary information on other family members.

Some indication of the "quality" of family relations is derived from the pattern of responses to questions on when the respondent last saw any of his/her children, siblings, other relatives, and close friends. Flow of support to and from children is suggested as a measure of the economic aspect of the family relationship. Openness in communication between the elderly and married women, as well as teenagers, on specific issues is likewise identified as potentially valuable in the measurement of the elderly's family relations.

Within the Family and the Community:
Family and Community Relations of the Elderly in Fiji

Nii-K Plange

This paper addresses two important aspects of the aging experience in Fiji: the extended family and the community. These are examined as relational units within which daily life, including unforeseen emergencies, is lived. The relations provide assistance to the elderly in the form of both instrumental and emotional support.

It is emphasized that to a greater extent than in more developed countries, the extended family and community "solidarity" remain the loci of effective and active interaction by the elderly in Fiji. The networks of relations of support provided by the extended family embrace, in some cases, relations beyond Fiji to overseas. That is, relations and support are not necessarily within the given household of the elderly, but among households that remain open to each other and among which resources flow. Nevertheless, Fijian elderly are very unlikely to live alone or only with a spouse. Community relations are also underscored by complicated networks bound by a variety of economic relations especially in the rural areas of Fiji.

These effective relations notwithstanding, the two social contexts of interaction and support are threatened by changing socioeconomic situations leading to pockets of poverty, which can affect health detrimentally and spawn disease and sometimes disability, as well as destitution. It remains the research and policy challenge in the foreseeable future to explore and arrest some of these "crisis" situations to sustain the viability of family and community for the elderly, especially in the absence of state support through financial subsidies or other programs.

To succeed in this attempt, effective ways of measuring or ascertaining loneliness, isolation, and poverty in both rural and urban settings need to be arrived at with sensitivity to the given socioeconomic and cultural environment. While research to date has shown on the whole a favorable social condition of the elderly, the real problem resides in the minority who are poor and lonely in urban and especially rural settings.

Summary of Discussion

The oral presentations of the papers on family and community relations and the subsequent discussion covered a variety of topics: definition of family, problems of assessing social experience, and survey strategies.

In defining "family," it was suggested that we must extend our interest beyond kinship to a more general range of interactions. Particularly in reference to the elderly, a geographic view of the family is highly inappropriate since over the lifetime there is increasing contact with nonkin, and kin are often far away.

Several points were made regarding problems of assessing social roles of the elderly. First, it was noted that social experience is largely a matter of perceptions. Second, aging is more a matter of social change (period conditions and changes) than of personal chronology. Third, it is necessary to go beyond events to people's reactions to events, to causal linkages. Fourth, in light of this need we will have to turn to life histories of experience. Cross-section surveys are useful as a starting point, but they are very inadequate. Recommendations included repeated cross-sections and retrospective surveys, as well as longitudinal, panel studies.

Regarding surveys, it was also mentioned by several participants that survey research might be improved by integrating qualitative and quantitative research as equal partners in the research process. And, it was emphasized, transnational, transcultural studies are of special importance. The Fiji study provided an interesting example. Both the Indian (extended) and Fijian (communal) family systems in Fiji produce complex households built up from arranged marriages. In this context, and with a central research interest in assessing resource mobilization of households, the investigators turned to qualitative, in-depth methods of data collection. A random subsample of the Fiji WHO respondents was interviewed in sessions lasting sometimes several days. Of course, the use of open-ended questions and less structure in the interview presupposes that interviewers are knowledgeable and well-trained. There was also discussion of the use of random versus purposive sampling, such as oversampling the old-old.

One underlying research and policy question emerged: Is diminished caregiving by family members inevitable under modern conditions? It was generally emphasized that demographic change encourages this decline (by reducing the numbers of caregivers available among kin), but it was also emphasized that caregiving can also be provided by families in new ways under the new conditions. For example, with better health the demand for care would be lessened.

Health and Ability of the Elderly

Assessing the Physical and Mental Health of the Elderly

Jersey Liang and Nancy Whitelaw

This paper overviews the conceptualization and measurement of health as applied to the study of aging. In Section I, population aging for selected Asian and Pacific nations is described. The effects of population aging on health status and health service requirements are illustrated with data from the United States.

Section II examines current concepts and measures of physical and mental health for older populations, including the health measures used in the recent studies of aging by WHO and ASEAN. Among the reasons for measuring health status are: (1) to evaluate medical care, (2) to formulate priorities for action, and (3) to plan health services. Instruments measuring physical health can be grouped into three categories, medical, functional, and subjective. One problem with the first is that reports of suffering a particular illness are confounded with health service use and cognitive ability. Functional measures, such as those of activities of daily living, may possess adequate validity and reliability, but at the same time may not be able to discriminate the broad range of functioning among elderly in the community and thus produce highly skewed distributions. Global self-rating of health has gained wide acceptance among survey researchers. It is used most appropriately in conjunction with indicators of medical and functional health, but if only one health measure can be included in a survey, this is an excellent choice. Mental health instruments can also be grouped into three general domains, namely, cognitive functioning (orientation to person, time, or place), effective functioning (e.g., depression and anxiety scales), and positive well-being (general happiness). Criteria for selecting health status measures include practicality, validity, reliability, and crosscultural comparability.

In Section III, recent efforts to conceptually integrate various aspects of physical and mental health are presented. These efforts focus on the development and evaluation of models that delineate the underlying structural relationships among components of physical health, mental health, and health services utilization. Five models are described: (1) a model of self-reported physical health; (2) a revised model of physical health; (3) a model of mental health; (4) a model to evaluate crosscultural comparability of the FGC Morale Scale; and (5) a model of health care utilization.

Health and Functional Ability of the Elderly Malaysian

Paul Chen

As part of the four-country WHO study in the Asia-Pacific region, a purposive sample of 1000 elderly people were chosen in Malaysia to reflect its ethnic heterogeneity. Data were collected through personal interviews using a pretested standard questionnaire. Among several aspects of the elderly that were studied were five main aspects of health and functional ability: self-assessment of health status; accidents, injuries, and chronic illnesses affecting activities of daily living; prevalence of specific health problems; activities of daily living; and the use of health services.

Almost three-quarters of the respondents reported that they felt healthy, and only one-quarter reported a health problem that impinged on activities of daily living. Nevertheless, there was a substantial degree of disability, especially with respect to vision and chewing. Over half the sample showed evidence of cataracts, and a similar number reported difficulty chewing. Hearing and walking problems were reported by only about 15 percent.

Most of the elderly have little difficulty coping with the activities of daily living; 91 percent of the elderly were able to carry out the ten tasks mentioned. Over 40 percent indicated that they had consulted a doctor in the previous month, with women more likely to have done so than men. Half of the subjects also responded that they had used prescription medicine in the last month.

The cognitive function of the elderly was relatively good but declined with age and was lower for women and for rural elderly. Over half indicated that they were forgetful and over a third had sleep difficulties.

A total of 44 percent of males and 19 percent of females reported smoking at the time of the survey, while 15 percent and 7 percent respectively reported drinking.

Health Status of the Elderly in Korea

Jong Huh

A study was carried out in Korea to survey health status of the population 60 years and over during July 1984, as a part of the four-country study sponsored by the WHO Regional Office for the Western Pacific. In Seoul 560 and in eight provinces 417 elderly persons were surveyed.

Some of the results are summarized as follows:

1. A large number of the male elderly had living spouses (66 percent in Seoul and 82 percent in rural areas), whereas

- females were less likely to have a surviving mate (41 percent in Seoul and 45 percent in rural areas).
2. In self-assessment of their health, 54 percent of the males and 45 percent of the females answered that they were healthy. But 40 percent of the elderly complained of some health problems that caused difficulties in daily living.
 3. About 40 percent of males and 53 percent of females complained of insomnia, while 48 percent of males and 61 percent of females answered that they have memory loss.
 4. During the last one-month period, 21 percent of males and 17 percent of females visited medical doctors, while 29 percent used herb medicines.
 5. About half of the elderly (61 percent male and 36 percent female) were regular smokers and 40 percent were frequent drinkers.

Health and Functional Ability of the Filipino Elderly

J. C. Baltazar and J. P. Lopez

This paper presents part of the findings for the Philippines from a WHO four-country study on aging in the Western Pacific. The sample was comprised of 827 persons, aged 60 years and over, who were residents of urban and rural areas in the Tagalog region of the Philippines. A large majority (84 percent) reported themselves to be in a relatively good state of physical health. Almost two-thirds reported having had long-term illnesses or injuries that were affecting the performance of their daily chores; the disabilities, however, were mild. The most common specific health problem was vision with 81 percent having difficulty seeing. However, only about 20 percent showed evidence of cataract. Difficulty chewing was cited by 33 percent, and hearing problems were noted in one-quarter of the respondents.

A large majority (93 percent) were able to perform all the activities of daily living (ADL), except the very old (80 years and over) whose ability to do ADL had decreased considerably, the decline being more in females than in males. The data suggested that most of the elderly subjects had high performance on the cognitive test, but this cognitive ability declined with age. Smokers constituted 38 percent of the sample, and drinkers 18 percent. Unmet needs for medical care existed largely because of inadequate finances and/or transportation difficulties.

Problems encountered in the implementation of the survey related to the instrument, to the respondents, and to the local situation. The questions were kept short, simple, and to the point, plus they were translated to Filipino and back-translated to English to insure comparability of meaning. Despite these efforts, some shortcomings were noted, though most were resolved during the pretest. Some concerns include whether a housewife should be considered "working fulltime;" how to code multiple responses; and the cultural inappropriateness of some of the activities of daily living.

Interviewers had difficulty administering subjective questions, such as those designed to elicit symptoms of psychosis (e.g., hearing or seeing things that others could not.) These items were strongly culture-bound, so that the translation, the manner of asking the questions, and the social acceptability of the response largely determined the resulting data. Finally, the lack of an available sampling frame complicated the process of locating the elderly.

Future research might address the problems in assessing mental status in the community as well as in obtaining information on chronic conditions and sight problems, particularly cataracts. Also recommended is research on change in health status of the elderly over time.

Summary of Discussion

Among the issues highlighted in the oral presentations and following discussion were: selectivity of the sample by health status, cultural biases in assessment of mental health, use of traditional medicine, and directions for future research.

A very basic issue in using surveys of the community-based elderly to assess health is the extent to which respondents are self-selected for good health. Obviously, the institutionalized elderly are not included in these household surveys, but it could be that the more frail elderly in households are not represented either, through the household member answering the door failing to indicate their presence or through the difficulty of administering the questionnaire to a severely disabled person. The former case might be avoided where a sampling frame is available. A possibility in the latter case is to rely on an informant in the household to report on such a person, but some of the questions on the ASEAN and WHO surveys, for example, could not be asked since they are based on self-assessment, opinion, or cognitive functioning. Nevertheless, the future research agenda should include an attempt to estimate the extent of the selectivity bias. It was pointed out also that differences in the degree of disability of noninstitutionalized elderly across countries will be influenced by the availability of services inside and outside institutions and by culture and traditional practices.

Examples in addition to those in Dr. Baltazar and Dr. Lopez's paper of the cultural biases in some standard instruments for assessing mental health were given during the discussion. In Malaysia among some groups, it may be quite acceptable to report that one has heard things that surrounding people can not hear. In Singapore, while it may be appropriate to ask who the current prime minister, it makes no sense to go on to ask who was the previous one, when there has been only one in the history of the country. There was also the more general issue raised that mental capacity rather than actual behavior is usually measured and that it is the latter that is of policy concern.

There was also some questioning of the low incidence of use in the last month of traditional medicines reported in the three country papers presented in this session (29 percent in Korea; 21 percent in Malaysia; and 8 percent in the Philippines). One possibility is that the respondents did not understand that they could include self-medication. Another is that interviewers discounted some responses. For example, in Korea drinking "tonics" or mixtures of herbs and alcohol was not counted as using traditional medicine. Once again, the supply of and reliance on health services versus family care and self-help could influence responses to this question.

Follow-up studies of health status were among the suggestions made for further research. However, there was some concern that in areas of frequent migration, such follow-up would be difficult. There was also interest expressed in research on the interaction of health status and family support. In particular, a study of the circumstances under which families find that they are no longer able to care for the frail elderly members in their households was suggested. Also expressed was the opinion that studies of health of the elderly should be more focused and specific, e.g., on the causation of particular diseases. Such narrowness of focus does not rule out crosscultural research and in fact may facilitate it by removing some of the methodological problems of comparability when a wide range of issues is covered crossculturally.

Economic Needs and Resources of the Elderly

Economic Well-Being of the Elderly: Theory and Measurement

Robert L. Clark

A conceptual framework of well-being based on economic theory is reviewed to provide the structure necessary to evaluate data requirements for assessing the economic needs and resources of the elderly. The framework illustrates how families attempt to maximize utility through the consumption of the greatest amount of goods. These efforts are limited, however, by the availability of wealth or income. Therefore, one method of assessing the level of family well-being is to examine the income of the household. Such an assessment requires knowledge of all sources of cash income, as well as of any in-kind income received. Alternatively, the level of well-being can be ascertained by examining household consumption. This method requires knowledge of the consumption patterns of both durable and nondurable goods.

This framework is then applied to the income and consumption of older persons to indicate the types of data needed to measure the well-being of older families. The information obtained by the WHO surveys and the ASEAN survey in the Philippines (the only ASEAN survey available to the author at the time of writing) is examined and found to be insufficient to derive a comprehensive measure of well-being. Suggestions are made for specific data that future surveys should gather to enable analysts to measure the real and relative well-being of older households in the Asian and Pacific countries.

Economic Needs and Resources of the Elderly As Incorporated in the ASEAN Survey of Elderly in Indonesia

Hananto Sigit

The ASEAN Survey of the Elderly is the first comprehensive survey on aging conducted in Indonesia. Its main purpose was to obtain information on important aspects of life of the elderly living in households in Indonesia. The information is to supplement the existing scanty data from various population censuses and surveys.

Economic aspects are only one area covered in the survey, therefore complete information on economic needs and resources of elderly cannot be obtained from this survey. However, the limited available information are sufficient to assess the general economic condition or living standard of the elderly. Important information collected are housing conditions and facilities, possession of durable goods, source of and average household income, work activities, financial and material assistance, burden of dependents, problems of concern, preparation for old age, and current living condition. Almost half the respondents reported that they are employed, and of

those 50.3 percent reported working 35 or more hours a week. Not surprisingly, of those working, 50.9 percent work in agriculture, and 41.7 percent report that they are self-employed. Nevertheless, about 60 percent reported receiving support from their children or grandchildren.

Despite the belief that elderly surveys are difficult to implement, with careful planning the survey was successfully conducted in Indonesia. The 1985 Intercensal Population Survey (SUPAS) provided the sampling frame and facilitated locating households where elderly individuals reside. The response rate was high, more than 96 percent, and the answers, as highlighted in this paper, are reasonable. With additional tabulations now being prepared, a great deal of information on the economic aspects of aging in Indonesia can be obtained.

The Economic Circumstances of Newly Retired Older People in New Zealand

Peggy C. Koopman-Boyden

The aim of the study, part of a larger research project on the general lifestyle of the retired, was to investigate the economic resources and expenditure of the retired (especially those in the 60-65 age group) and relate these to current government policies on income maintenance for the elderly. Data from the nationally representative Household Expenditure and Income Survey (HEIS) were compared with data from a Retirement Survey that obtained qualitative information from 50 newly retired people in the Christchurch, North and Mid-Canterbury provincial area. It was found that on average the household income (including superannuation) of the 60-64 age group dropped by almost a third upon retirement, and that many of those retired at 60 years were forced out of the labor force by compulsory retirement policies and redundancies. Most of the retirees were reasonably accepting of retirement for reasons peculiar to the life histories of the specific age cohort: they had the experience of adapting to financial stringencies from the 1930s and 1940s, and their sense of intergenerational responsibilities extended from fighting in a war for the younger generation in the 1940s, to currently giving up their jobs once again for the younger generation.

The two surveys also found adjustments in expenditures in anticipation of retirement. The fall in expenditure between the 50-59 and 60-64 year age-groups found in HEIS was substantiated by the frequent comments of the Retirement Survey respondents that in the one or two years prior to retirement they had replaced major household items, including a car, and spent money on house maintenance in the hope that such expenditures would not recur in retirement. As a result of such adjustments and widespread home ownership, the retired people by and large found their income adequate for their needs.

Economic Needs and Resources of the Australian Elderly

John McCallum

The Australian retirement income system is a unique way of providing minimum adequate resources for the elderly that merits study as a low-cost public system. Research on it mainly uses Australian Bureau of Statistics publications and surveys. The definition of resources and income has varied over time subject to political forces, but the sources of income for the elderly are relatively stable, namely age pensions and private home ownership, supplemented by occupational pensions, with fringe benefits and universal health insurance as support. A minimum adequate standard of resources is available to all Australians, but income replacement is more difficult in old age. There are also severe disincentives to work and "poverty traps" at cut-off points for fringe benefits and pensions that are the consequence of means testing. More research is needed on the connections between wealth and income and between health and work. In the future more information on preferences will be needed to deal with the gaps between what elders want and what they accept as the reality of what they can get.

Summary of Discussion

As in the other sessions, the oral presentations highlighted some of the general difficulties of crosscultural surveys of the elderly: translation of questions, restriction of length of questionnaire, and interviewing the frail elderly. Nevertheless, there are very special challenges in collecting economic data on the elderly. This area of inquiry seems to have been neglected more than, or at least it is not as well-developed as, the areas of health and family relations of the elderly. Yet assessment of economic well-being of the elderly is crucial to dissipating stereotypes about the elderly, such as that they are all very poor or very rich, and critical to designing appropriate policies.

A very basic issue is measurement of income. Several of the recent surveys in the region were faulted for not collecting data on the amount of income of the elderly, but even where the question of income was asked, as in the WHO surveys, the results were so suspect that they were not tabulated. The challenge of assessing income is especially great in less developed countries, where many people may be self-employed in agriculture, where there may be seasonal variations in income, where the economy may not be monetized, and where household members may pool resources, so that individual income cannot be measured. Thus, the discussion focused on such issues as the appropriate reference period in asking income questions and possible proxies for economic well-being, such as type of housing construction, ownership of various articles, and availability of electricity and source of water. Given the questionable quality of income data, the suggestion was also made that absolute level of income should not be included in our analysis, but only income relative to other elderly or to other age groups. Although the more developed countries in the

region have been more successful in collecting income data, data on assets remain inadequate almost everywhere.

Other discussion topics included the importance of collecting health and economic data in the same survey, so that we can better understand the interaction of these types of variables; how retirement and pension regulations influence attitudes about work and retirement, thus making it difficult to interpret answers to hypothetical questions about wanting to continue working; and the value of a cohort perspective in understanding the economic well-being of the elderly.

Policy Implications of Recent Research

Policy Implications of Recent Research on Population Aging: The Case of Japan

Nachiro Ogawa

Using results from a long-term macroeconomic-demographic model, this paper discusses the impact of the aging of the Japanese population on: (1) total medical expenditure at the national level, and (2) manpower requirements for taking care of elderly patients at the familial level.

One of the primary findings of the model-based projections is that as a consequence of population aging, total medical care expenditure is likely to increase by 6.6 times between 1986 and 2025. Moreover, the percentage share of the aged in total medical care expenditure is expected to rise from 34.8 percent in 1986 to 54.2 percent in 2025.

It is also shown that the total number of bedridden elderly patients will grow by approximately three times in the next 40 years. The total number of senile dementia cases is also expected to increase by 3.3 times during the same period.

In the last part of the paper, the probabilities for nonworking women having to take care of these elderly patients are computed for six age groups, and the policy implications of the computed results are discussed.

Policy Implications of Aging in Malaysia

Masitah Mohd. Yatim

Population aging is still not a big problem in Malaysia, but the proportion ages 60 and over is expected to increase from 5.7 percent in 1980 to 11.8 percent in 2030. The Chinese Malaysian group is aging most rapidly. Longer life expectancy means the aged need to support themselves or be supported for a longer period. The question is "who bears the burden?" In Malaysia, there is not yet a policy specifically aimed at providing the needs of the aged who are mainly supported by their families. The limited existing welfare services are directed to the poor aged. The ASEAN study, "Socio-Economic Consequences of Ageing of the Population," was conducted to investigate broadly the basic needs of the aged for the purpose of providing awareness and information to policymakers, planners, and researchers. A survey of 1254 respondents in Selangor, Negri Sembilan, and Melaka formed the core of the study.

It was found that 89.8 percent of respondents received some support from their children and grandchildren, 25.2 percent from husband or wife, and only 9.0 percent from pension and provident funds. Although the extended family system is still the main feature of Malaysian society, there is no guarantee that it will be sustained in the future because of rapid social change. In this study, 41.8 percent of respondents live with their spouse and other family members and 39.5 percent with other family members, leaving 6.4 percent living alone and 9.7 percent living with spouse only. Approximately 65 percent of the aged in this study own their houses, helping them at least to be independent in terms of a place to live.

Since there is not yet a policy for the care of the aged, steps need to be considered and forwarded to the authorities about the housing and the financial support needs of the aged. Families looking after their aged relatives need to be given consideration in terms of perhaps income tax relief and housing needs and facilities. Also discussed is the need to review employment and pension programs for the elderly, and to encourage the elderly's involvement in social organizations.

Policy Implications of Research on Aging in Singapore

Paul P. L. Cheung

In light of Singapore's new pronatalist policy to ameliorate aging, the paper raises two major policy-related issues: (1) To what extent do we know for a fact that population aging is likely to be detrimental to a society's well-being? There are positive as well as negative consequences of population aging, though researchers have tended to emphasize the latter as occurred in the 1960s when there was first worldwide concern about the negative consequences of too rapid population growth. (2) How do we plan for the future, when the critical stage of population aging will occur? We do not know how technology will change and how the economy will grow, how the tastes of the elderly and their consumption patterns will change, and how public opinion toward the elderly and appropriate response to their needs will evolve.

Accordingly, research for policy formulation is suggested in two broad areas. The first is cross-sectional problem-mapping, such as has been presented throughout the seminar. More critical, however, is research on values. Among the questions on values that might be pursued are opinions with regard to the allocation of scarce resources, e.g., how should resources be allocated between young and old; values related to the provision of care, e.g., should filial piety be legislated; the value of marginal life, e.g., how long should heroic measures be used to maintain life; and the value of work, e.g., is retirement an entitlement? More information on society's values is necessary to plan for provision of the elderly in the context of socioeconomic structural changes.

Summary of Discussion

The discussion on policy implications focused on the question of increasing health care costs and the question that Dr. Cheung raised in his presentation about the positive aspects of population aging.

In response to Dr. Ogawa's model of demand for health care, the point was made that the supply of services most likely influences the demand for services. For several countries in Asia, there is evidence that provision of free services has affected demand and that the health care system is being abused by both suppliers and users. Among the ways of controlling costs are having users pay a set percentage of the costs and the implementation of a reimbursement system to physicians according to diagnostic related groups (DRGs).

A variety of positive implications of population aging were mentioned in the discussion. To the extent that rapid population growth is viewed as a problem, then aging, which has resulted primarily from lower fertility and slower growth, should be viewed positively. The lower mortality that also affects aging means that the probability of the different generations of a family surviving and being able to spend time together increases.

Population aging, at least in its early stages, usually implies that a larger proportion of the population will be in the prime-working ages, 15-64 years. Within that age group, there will also be aging and an increase in experience. In countries such as the United States where young people are relatively mobile, there will be less job turnover on average in the labor force with aging. To the extent that slowing population growth allows for greater investment in the education and training of each worker, productivity should also be positively affected.

An aspect of population aging in Asia that requires further research is the effect on public expenditures of changes in the composition of the dependency ratio, from youthful dependency to elderly dependency. In the United States, public spending per elderly person is greater than public spending per child (the reverse is thought to be true for private expenditures). Thus, population aging implies greater public expenditures, assuming that the amounts per person are not changed. Casual empiricism would lead one to believe that the public plays a smaller role in the care of the elderly in Asia. Nevertheless, the question is one that should be carefully investigated for the countries of the region.

Research and Data Collection Strategies

WHO's Research and Data Collection Strategies

Hana Hermanova

The World Health Organization (WHO) has in the past thirty years been involved in research and data collection on health of the elderly. In the future (1987-1993), research and data collection will be further developed and managed in the Special Program for Research on Aging (SPRA). The SPRA will focus on epidemiological research, dementia of old age, nutrition, and immune function.

In particular, epidemiologists have identified as important for future research in aging, the following issues:

1. Review of concepts (research methodologies, disability concepts, the risk-approach concept);
2. Review and evaluation of preventive/postponement measures;
3. Agreement on simple validated tools in assessment of functional activities (ADL, IADL) and their implementation in member states; and
4. Better utilization of existing data, and better utilization of data collected routinely (e.g., health statistics and census data).

International Activities of the U.S. National Institute on Aging

J. David Curb

The U.S. National Institute on Aging (NIA) supports biomedical, social, and behavioral research on the processes of aging and problems of older persons. In concert with institute priorities, the NIA is being encouraged by the U.S. Congress to pursue crosscultural and crossnational studies in various developed and developing countries around the world. A new WHO Special Program for Research on Aging, established at the NIA, also increases our commitment to such studies.

Through the NIA's prospective study of 15,000 older individuals in four sites in the United States, a model has been developed that may be useful in comparative studies among other ethnic groups. Crosscultural studies in a number of "ethnic groups" in Asia and the Pacific are under discussion. In order to facilitate such studies in the field of aging, the possibility has been raised of locating in Hawaii a field station, staffed by NIA employees, to carry out international research in Asia and the Pacific.

Thus, although the National Institute on Aging involvement in international research activities has been relatively limited in the past, important developments now suggest an expanding role in this area in the future. Collaborative relationships between NIA, WHO, the

U.S. Agency for International Development, and other countries and scientists hold the promise of exciting developments in crosscultural and crossnational research in the field of aging.

Emerging Issues of the Aging of Population:
A Regional Research Study

Abdus Samad

The paper presents a brief description and an outline of a regional research study undertaken by the United Nations Economic and Social Commission for Asia and the Pacific. Four countries of the region—China, Malaysia, Republic of Korea, and Sri Lanka—are participating in the project, whose long-term objective is to increase the awareness among policymakers and planners of the emerging problems of population aging and provide them with alternative policies. The studies will be implemented in three parts. The first part will provide background information on the socioeconomic and demographic situation of the aged. The second part will be a special sample survey gathering information on older people and resident care providers. The third part will include a review of existing policies and programs concerning the elderly, and an overall evaluation of these policies, programs, and issues based on the above findings. The resulting set of policy and program recommendations will address the issues of an aging population, as well as the needs of elderly individuals.

The survey has been designed to gather from 300 persons ages 60 and over information concerning family life-cycle, health status, economic situation, participation in family life, social and cultural aspects of community life, use of leisure time, perception of the aging situation, and sources of support. The information gathered from the resident primary care providers will cover pattern of interaction of the household members relating to the support of the aged persons, role of the elderly in the family and community life, perception of household members about their expected and actual roles, attitudes about the care of the elderly, formal and informal support programs used by the household, and spatial mobility of household members. A total of 30 in-depth qualitative interviews will also be carried out using an anthropological approach to identify individual factors and complexities that can assist in the interpretation of the main survey findings.

Cross-Cultural Research Design:
Methodology of the United Nations University Project on
Social Support Systems for the Aged

Akiko Hashimoto

United Nations University (UNU) is currently conducting a comparative research project that investigates the changing formal and informal social support systems in seven developing countries. Selected communities in Brazil, Egypt, India, Republic of Korea, Singapore, Thailand, and Zimbabwe are under study with combined quantitative and qualitative methods, to identify the changing support and welfare resources available in relation to growing demands.

Research sites have been selected for their diversity in urban/rural configuration and in their religious characteristics. Common denominators that underlie different forms of social support will be sought within this diversity. Multiple methods are being employed to obtain comprehensive data on support resources and the needs of the aged (historical survey, ethnographic study, household survey, and case studies). Resources are examined at five levels: family, extra-familial network, neighborhood, community, and state.

When systematically comparable results are sought, it is particularly important that specific foci of interest be built into the research design from the outset. The UNU study focuses on the complementarity of resources and the principles of reciprocity that govern support, and takes a provider-recipient perspective within each community investigated. This design has been tested in a previous study undertaken by Hashimoto at Yale University on the social support for the aged in Japan and the United States. The data analysis and synthesis of the UNU study are due to take place in 1987-88.

Summary of Discussion

After the presentation of the formal papers, presentations by Dr. Perez and Dr. Lin described recent data collection efforts on the elderly in Latin America and China respectively. The Pan American Health Organization is coordinating a Needs of the Elderly Study in thirteen Latin American and Caribbean countries, while in China the questionnaire from the WHO four-country study has been used to survey 1000 elderly.

The discussion leader provided a hierarchy of data collection strategies with each scenario building on the previous ones and allowing more complex analysis: (1) vital statistics; (2) census; (3) cross-section survey; (4) time series of cross-section surveys possibly supplemented by case studies; (5) integrated program of surveys addressing different aspects of the lives of the elderly, e.g., health, income, labor force participation; (6) administrative records; and (7) longitudinal panel survey.

In the first scenario, calculation of life expectancy and other health indicators would be possible. With the addition of census data, population projections and analysis of basic characteristics of the elderly and their households can be carried out. In the third scenario, the cross-section survey would provide important baseline information about problems and attitudes and would be valuable in raising the consciousness of policymakers and in making crossnational comparisons. Through a series of cross-section surveys, it would be possible to identify trends and isolate cohort from age and period effects. The addition of case studies or qualitative information would facilitate understanding of causes of and motivations for change. The fifth scenario of a fully-developed survey program requires careful design and standardization so that multivariate analysis can be done. Access to administrative records would make it possible to analyze the supply of, as well as the demand for, services. Finally, a longitudinal study allows the investigation of aging as a process.

Several participants suggested that in the future, hypotheses should be developed more carefully and be used to shape our data collection strategies. The goals of most of our research are twofold: to increase our basic knowledge about the elderly and to facilitate policymaking. Research and policy concerns should guide data collection rather than the reverse, i.e., researchers and policymakers should not be bound by the limits of the available data.

Update in Research in Aging: For Local Professionals

The Aging of Asia

Linda G. Martin

As a result primarily of declining fertility, the countries of Asia are beginning to experience aging of their populations. Although the elderly proportion of these populations is quite small in comparison to Western countries, the absolute number of the elderly will almost double in the next twenty years.

This paper reviews some of the demographic facts about aging and the elderly in fourteen Asian countries: health and life expectancy; sex ratio, marital status, and living arrangements; and rural versus urban residence, labor force participation, and retirement. It then focuses on current programs for the elderly in Asia and discusses three general issues of importance in the development of aging policies: (1) to what extent should the West be used as a model, (2) what should be the role of the family versus the government in caring for the elderly who cannot care for themselves, and (3) should eligibility for programs be based upon age or upon need?

Malaysian Studies on Aging

Paul C. Y. Chen

Traditionally the aged in Asia have been financially and socially supported by the family unit. The adherence to such a tradition is substantiated by the Malaysian finding that 62 percent of the elderly surveyed in the World Health Organization (WHO) Study depend upon the family for income, while 95 percent report that in case of illness they would be cared for by either the spouse, a daughter, or a son. It is therefore important to initiate measures to institutionalize social support systems directed at maintaining the family as the principal support unit of the aged. Involving the elderly in community activities and building up their social network is of mutual benefit to the elderly and to the nation, as such measures would have a positive psychological impact on the elderly. The physical needs of the elderly are also an important factor in maintaining their psychological well-being, and as such, the findings of the WHO study on mobility and living conditions of the elderly have important implications for transport and housing policies.

Perception of the Elderly Towards Day Care Services: A Community-Based Survey in Singapore

Fong Ngan Phoon and Rilly Ray

A study on the attitudes of the elderly living in an area within Toa Payoh toward services provided at day care centers (DCC) was conducted in May 1987. A total of 272 persons (133 men and 139 women), representing 80.0 percent of the persons aged 60 years and over in the area, responded to the survey.

The proportion of elderly interested in participating in specific DCC services were: 25.7 percent for rehabilitation, 28.7 percent for social activities, 28.3 percent for health education, and 44.9 percent for health screening. Overall, men were found to be more likely to express interest in each of the four services, whereas the reverse was true for the older age groups, especially those aged 75 years and above.

Only 57 persons or 21.0 percent of the respondents knew of the existence of the Kuo Chuan Senior Citizens' Health Care Center (SCHCC) that is located about one kilometer away from the survey area. Of these 57 persons, only four had visited the SCHCC. The main reasons cited for not visiting were "no necessity," "not interested," and "no transport."

Psychosocial Aspects of Families Caring for the Elderly

Kua Ee Heok

Due to shrinking family size and increasing female labor force participation, there is growing concern about providing care for an increasing number of frail elderly in Singapore. In 1985 the Department of Psychological Medicine of the National University of Singapore conducted a study of 35 elderly patients admitted to Singapore General Hospital and their relatives. The majority of patients were female, over 75, and suffering from heart disease, stroke, and dementia. Nine of the caregiving relatives reported changes in their work and 15 reported changes in their leisure time as a result of their responsibilities to the elderly. Over one-quarter showed signs of anxiety and depression, which were found to be associated with lack of additional family support for the elderly.

Summary of Discussion

A theme running throughout the diverse presentations and the discussion was the role of the family in caring for the elderly. Of particular concern is how Asian families will adjust to the expected increased need for care of the frail elderly. Opinions ranged from

optimistic to pessimistic. Even in countries where traditional values place great emphasis on respect for the elderly, there are signs of stresses in caring for the elderly. The Singapore studies provide valuable information on the effects on caregivers and the utilization of services. One important topic for future research is the process of institutionalization. It was pointed out that in some cases, family care may be more expensive than nursing home care, but of course economic factors are not the only consideration. A major public issue is how can the government support and encourage the family in its efforts to sustain the elderly in the community.

Elderly of the Future: Public Symposium

Aging and Work in Urban Societies

John McCallum

Problems of older workers exist in all countries but in very different forms. In some countries older workers are in demand because of labor shortages, while in others they are in excess supply because of poor economic performance. Nevertheless, in all developed societies where people are living longer and healthier lives, labor force participation rates have declined, but much faster in some than others. At the same time, there is concern about burdens on social security systems caused by earlier retirement and population aging.

The reactions to these changes are very different in European countries, North America, and Japan. In Europe, a wide array of early retirement policies are encouraging even earlier retirement or phased retirement. In the United States, legislation prevents discrimination against workers on the basis of age, i.e., it makes mandatory retirement unlawful, but this legislation has not prevented further declines in labor force participation at older ages. On the other hand, some European early retirement policies have been withdrawn because they were too costly, e.g., in France.

The medical evidence is that most older workers are able to work. However, it is difficult to implement government policies that run counter to the actual preferences of older workers. Consequently, flexibility with respect to potential labor market changes is best achieved through policies, such as phased retirement, that allow more rapid response to changed conditions.

Architecture for an Aging Society

Richard Hyde

The presentation focused on changing architectural values, changing cultural values, and the implications of these changes for the aged. Among the ideas discussed were: new forms of architecture, such as sheltered housing schemes; the development of a supportive environment, e.g., through barrier-free design; and participatory design.

The Elderly of the Future: The Singapore Perspective

Lim Hsiu Mei

The population of Singapore has aged and will continue to age rapidly until 2030. The aged population (60 years and above) will increase from 7.2 percent of the total population in 1980 to 27.9 percent in 2030. The proportion of "old-old" (75+) among the aged

population will increase from 18.0 percent to 27.7 percent over the same period.

This paper examines the marital status, educational level, health, mobility status, living arrangements, and financial security of the aged in Singapore. It then goes on to describe the community-based and institutional care programs and facilities for the aged and to discuss future plans of action.

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