QUALITY OF LIFE OF INDONESIAN SENIOR CITIZENS: LIVING IN EXTENDED FAMILY AS A DETERMINANT FACTORS OF MENTAL HEALTH STATUS

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ABSTRACT

Objective: To determine contribution of socio-demography determinants and functional status associated with the mental health among the Indonesian geriatric population. Methods: The study was composed of 52,223 individuals aged 65 years and older from the 2007 Riskesdas (Indonesian National Household Health Survey) conducted by the National Institute of Health Research and Development, and covering the entire Indonesian archipelago. The dependent variable was "psychological well being" defined by mental health question from the Self Report Questionnaire (SRQ) by score less than 6. The independent variables were: demographic characteristic, and individual functional status. Cox regression model was applied to identify the most determinant variable of "psychological well being" of the geriatric population. Results: The "psychological well-being" of the geriatric population of Indonesia was associated with status as household head (RR = 1.47; 95% CI = 1.4–1.6), have occupation (RR = 1.14: 95% CI = 1.9–1.37) living in extended family (RR = 1.22; 95% CI = 1.18–1.4), with at least one under five kid in house (RR = 1.16; 95% CI = 1.1–1.23) and functioning (RR = 1.12; 95% CI = 1.06–1.33). Living arrangement emerged as significant determinant of "psychological well being." Conclusions: living in extended family provides significant contribution to the sense of " psychological well-being" among the Indonesian geriatric population.

Key words: Indonesia, geriatric health issues, determinants of "wellness"

ABSTRAK

Tujuan penelitian ini menentukan kontribusi determinan sosial demografi dan status fungsional terhadap kesehatan mental pada kalangan lanjut usia di Indonesia. Responden penelitian terdiri dari 52,223 individua berusia 65 tahun keatas merupakan responden Riskesdas (Riset Kesehatan Dasar) 2007 dilaksanakan oleh Badan Litbangkes RI di seluruh wilayah Indonesia. variabel penyerta adalah kesejahteraan psikologis diukur melalui pertayaan kesehatan mental dari the Self Report Questionnaire (SRQ) dengan skor kurang dari 6. Variabel bebas terdiri dari karakteristik demografi dan status fungsional individu. Model Cox regression model diterapkan untuk mengidentifikasi determinan terkkuat dari kesejahteraan psikologis di kalangan lanjut usia. Hasil penelitian menunjukkan kesejahteraan mental di kalangan lanjut usia Indonesia berasosiasi dengan status sebagai kepala rumah tangga (RR = 1.47; 95% CI = 1.4–1.6), memiliki pekerjaan (RR = 1.14: 95% CI = 1.9–1.37) tinggal dalam keluarga besar (RR = 1.22; 95% CI = 1.18–1.4), dengan sedikitnya 1 balita dalam rumah (RR = 1.16; 95% CI = 1.1–1.23) dan fungsi fisik yang baik (RR = 1.12; 95% CI = 1.06–1.33). Pola hidup tampil sebagai determinant penting terhadap kesejahteraan psikologis. Kesimpulan adalah tinggal dalam keluarga besar memberi kontribusi penting pada kalangan lanjut usia di Indonesia.

Kata kunci: Indonesia, kesehatan lanjut usia, determinants kesejahteraan/kebahagiaan

INTRODUCTION

Indonesia is undergoing a demographic[1] and economic transition, which is increasing life expectancy and the proportion of the population over 65 years of age. Indonesia's population pyramid is beginning resemble that of a developed country. Still has a large pre-school aged population at the base of its population pyramid, Indonesia geriatric

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population, defined as adults at least 65 years of age or older, is increasing, and is currently about 5% of the total population.[2] The government of Indonesia has developed Primary care and has fielded special services for senior citizen, and the private sector has established special programs for senior citizens such as discount for air transportation, and other senior related benefits.

Successful aging theory defined that physical health and functional status, cognitive efficacy, material security, social support resources, and life activity as important components.[3] It is multidimensional, encompassing the avoidance of disease and disability, the maintenance of high physical and cognitive function, and sustained engagement in social and productive activities.[4] Depression is a major obstacle to successful aging,[5] and can results in a reduced functional status,[6] and increased self destructive behavior which can in turn contribute to reduction in functional status and "well-being". If populations feel helpless they are more likely to be hypertensive and this too can lead to a deterioration of "well-being".[7] Maintaining high activity levels and good physical fitness reduces the risk of chronic disease and maintains a good mental health.[8] Mental and physical well-being is key factors determining successful aging.[3]

Since psychological wellbeing is among the key factors determining positive perception of aging which is necessary to support promoting aging well, it important to identify risk of psychological wellbeing among Indonesian geriatric population.

In 2007 the Indonesian Ministry of Health conducted a survey with multiple domains of health indicators among them are "psychological well-being". Using this health survey, we intend to describe the relationship of "psychological well-being" among the Indonesian geriatric population with various social variables and functional status. The result is expected identified various risks to the "psychological well-being" of the Indonesian geriatric community.

METHODS

Riskesdas 2007 sampling frame was exactly the same as that of Susenas 2007 representing district level. Total sample from 438 districts/cities are 258,284 household consisted of 972,989 members. The sample for analysis, were respondents aged at least 65 years at the time of the 2007 RISKESDAS (basic health status) survey. The variables of interest are "psychological well-being", social support, relationships with household head, education and occupation representing social factors.

Geriatric "psychological well-being" is defined as having score less than 6 in the Self-Reporting Questionnaire- 20 (SRQ-20). The questionnaire was developed by the World Health Organization (WHO) as a screening tool for common mental disorders [9] (Spencer 1986). It was primarily developed for use in primary health care settings, especially in developing countries [10] (Mari 1985) . The questionnaire consists of 20 yes/no items related to neurotic symptoms and had been tested in Indonesian primary care centre setting. The Indonesian Basic health survey used this questionnaire to obtain information on emotional distress among population over the age of 15 years.

Social support is defined as number of persons with whom the senior age live with. While relationship to household head is relationship of the geriatric member of the household with the head of household in which she/he lives. The head of the household could include various family members, or the respondent could be considered the head of household, partner of the head of the household, parents, child or other. Occupation is the main occupation reported by respondent, and consists of 7 categories, namely: farmer/fishermen, military, service, government employee, blue collar worker, and housewife, which is then recoded into 5 categories. Since living in extended family is common in many parts in Indonesia, living with under- five children is considered as indicators of it.

Hearing difficulty defined as scoring of limitation admitted by respondents on 2 questions. First question is 'in the last month how difficult to hear someone's speaking with normal voice and standing at another side in one room although using hearing aid', and ' in the last month how difficult to hear somenone's speaking to another person in a silent room although using hearing aid'. The scoring of answer are 1 = none, 2 = mild, 3 = moderate, 4 = severe, 5 = serious.

RESULT

Since the survey is cross sectional, and those who had "good well being" more than 10%, to exploring association of social factors with "psychological well-being" analysis using Cox regression is applied with

age as duration time of exposure to identify the most determinant variables on the psychological well being of senior citizens.

RESULTS

Well Being, Health Status and Demographic Characteristic of the Respondents

There are 52,223 respondents, aged 65–98 years that met the criteria for inclusion within the analysis. Prevalence of emotional distress among the senior age citizens is 26.5%, meaning there is about 74 out of 100 of senior age feel they have good "psychological well-being".

The Proportion of young geriatric populations age 65–69 is the highest while the oldest geriatric population old is the smallest population cohort. The proportion senior citizens that did not finish elementary school is the highest, more than 60%, while those with higher education are the smallest group (6.5%). Most senior ages lived with more than 3 people in their households, while the rest either live alone or with their spouse. Although more than 60% of the geriatric population lived with 3 or more people in their house, more than 70% of the senior age is the head of household, implied that all senior age are household head. Fishermen/farmer/blue collar and jobless are the highest current occupational status of the senior age, 11% housewife, while only 10% is professional. Living without limitation is only experienced by 30% of Indonesian geriatric.

Table 1. Demographic, Socio Economic and Health Characteristic

Variables	f (%)
Education	
No schooling	18939 (36.4)
Unfinished elementary	15309 (29.4)
Finished elementary	11730 (22.6)
Finished junior high	2618 (5.0)
Finished senior high	2502 (4.8)
Higher education	887 (1.7)
Occupation	
No job	19976 (38.4)
Housewife	5790 (11.1)
Professional	4860 (9.3)
farmers/fisherman/blue colar	19022 (36.6)

Variables	f (%)
Others	2352 (4.5)
Relationship with household head	
head or wife	38044 (72.8)
Parents	12427 (23.8)
Relative	93 (.2)
Others	1659 (3.2)
Family member in house	
one member	5999 (11.5)
two members	13948 (26.7)
3 thru 7 members	30143 (57.7)
eight or more members	2133 (4.1)
Number of U5 in in house	
No kid	43345 (83.0)
1 kid	7528 (14.4)
2 kids	1247 (2.4)
3 kids	98 (.2)
4 kids	5 (.0)
Functional status	
no hearing difficulty	16176 (31.0)
hearing difficulty score = 1	7583 (14.5)
hearing difficulty score = 2	5482 (10.5)
hearing difficulty score = 3	14775 (28.3)
hearing difficulty score = 4	3511 (6.7)
hearing difficulty score = 5	2239 (4.3)
hearing difficulty score = 6 (0)	2456 (4.7)
Total	52223

Association of "well-being" with demographic characteristics

In the bivariate analysis, all variables of interest have significant association with well being. The Geriatric population with the characteristic of professionals, head of household or their spouse, living with spouse, finished high school or higher education, in the youngest senior age category, have higher rates of "psychological well-being" than those with other characteristics.

Contribution of demographic socio economic factors to psychological well being

The contribution of demographic toward well being is quite significant. Having higher education, occupation including housewife, living in extended family, and having status as head or spouse in the family, gives advantage for the geriatric population in "psychological well-being".

Table 2. Bivariate Analysis of Demographic Characteristics on Psychological Wellbeing

Variables	Wellbeing + f (%)	Wellbeing – f (%)	Crude RR	P
Occupation				0.000
No job	12921 (64.7)	7055 (35.3)	Reference	
Housewife	4192 (72.4)	1598 (27.6)	1.12	
Professional	4075 (83.8)	785 (16.2)	1.30	
farmers/fisherman/blue colar	15133 (79.6)	3889 (20.4)	1.23	
Others	1907 (81.1)	445 (18.9)	1.25	
relationship with household head				0.000
Others	1125 (67.8)	534 (32.2)	Reference	
head or wife	28915 (76.0)	9129 (24.0)	1.12	
family member				0.000
one member	4103 (68.4)	1896 (31.6)	Reference	
two members	10505 (75.3)	3443 (24.7)	1.10	
3 or more members	23768 (73.6)	8508 (26.4)	1.07	
Number of <5 in house				0.261
No kid	31796 (73.4)	11549 (26.6)	Reference	
2 or more kids	990 (73.3)	360 (26.7)	1.00	
functional hearing b				0.000
hearing difficulty score = 6 (0)	794 (32.3)	1662 (67.7)	Reference	
no hearing difficulty	14578 (90.1)	1598 (9.9)	2.79	
hearing difficulty score = 1	5899 (77.8)	1684 (22.2)	2.41	
hearing difficulty score = 2	3994 (72.9)	1488 (27.1)	2.26	
hearing difficulty score = 3	10381 (70.3)	4394 (29.7)	2.18	

Table 3. Significant determinants of psychological wellbeing

Variables	Wellbeing + F (%)	Wellbeing – F (%)	Adjusted RR	95% CI	P
Occupation					
No job	12921 (64.7)	7055 (35.3)	Reference		
Housewife	4192 (72.4)	1598 (27.6)	1.5	(1.5;1.5)	0.000
Professional	4075 (83.8)	785 (16.2)	1.4	(1.4;1.5)	0.000
farmers/fisherman/blue colar	15133 (79.6)	3889 (20.4)	1.3	(1.3;1.4)	0.000
Others	1907 (81.1)	445 (18.9)	1.2	(1.2;1.3)	0.000
relationship with household head					
Others	1125 (67.8)	534 (32.2)	Reference		
head or wife	28915 (76.0)	9129 (24.0)	1.4	(1.3;1.5)	0.000
family member					
one member	4103 (68.4)	1896 (31.6)	Reference		
two members	10505 (75.3)	3443 (24.7)	1.2	(1.1;1.2)	0.000
3 or more members	23768 (73.6)	8508 (26.4)	1.3	(1.2;1.3)	0.000
Number of U5 in in house					
No kid	31796 (73.4)	11549 (26.6)	Reference		
2 or more kids	990 (73.3)	360 (26.7)	1.2	(1.1;1.2)	0.000
functional hearing b					

Variables	Wellbeing + F (%)	Wellbeing – F (%)	Adjusted RR	95% CI	P
hearing difficulty score=6 (0)	794 (32.3)	1662 (67.7)	Reference		
no hearing difficulty	14578 (90.1)	1598 (9.9)	1.8	(1.7;1.8)	0.000
hearing difficulty score=1	5899 (77.8)	1684 (22.2)	1.6	(1.6;1.7)	0.000
hearing difficulty score=2	3994 (72.9)	1488 (27.1)	1.4	(1.3;1.5)	0.000
hearing difficulty score=3	10381 (70.3)	4394 (29.7)	1.4	(1.3;1.4)	0.000

Contribution of physical health status and sensory function toward well being

Contrary to the first assumption, health status represented by number of chronic illness admitted by respondents does not contribute significantly to the psychological wellbeing of Indonesian geriatric. Functional status represented by sensory function explains quite significantly of the variation of "psychological well being".

DISCUSSION

This analysis represents the first exploring the "psychological well-being" of geriatric Indonesians using a national sample. Analysis of 2007 Indonesian Health survey data to explore association of socio demographic factor with well being shows that living arrangement is significant determinant for the geriatric groups of "well-being".

It showed that having income, autonomy, living in extended family especially with grand children and good functional status increase the risk of psychological well being among the Indonesian geriatric. Advantage of living in extended family for "well being" is in line with finding in India.[11] Number of living children, which could probably as proxy for social support and extended family, is risk factor for successful aging among the geriatrics in Brazil.[12] The older the member of the geriatric community, the more likely they are to be suffering from depression especially for those living alone.[13] The contribution of death of spouses and long term friends among the oldest members of the geriatric population is also a contributory cause of depression.[14]

As an agricultural country, living in extended family is common in Indonesia. Traditionally Indonesians respect senior citizens, requesting seniors to make decisions and treating them as parents, even if they are not related. "Father" or "uncle" is an affectionate

title in addressing a superior in a administrative setting. Aging still brings respect and community position, in rural areas, meaning that in rural areas the geriatric population still have authority, own land, have autonomy, and make decisions not only concerning their welfare, but others as well. But in urban populations, aging brings retirement and reduced income and increases dependence on the extended family for financial support and social activities.

As urbanization continues to accelerate due to industrialization, traditionally extended family living arrangement is replaced by nuclear family living arrangement, which already experienced in the developed country as 'empty nest' phenomena. Therefore, the government should begin to anticipate how to provide similar atmosphere as the importance of extended family living arrangement among the Indonesian geriatric population.

Another problem facing the geriatric population is that as they get older their risk for degenerative disease increase. Recognizing the increasing population of senior citizen and their needs, special program already provided in the Primary Health Care to monitor their health, expected that the senior citizen can perform their daily life independently. PHC also educate technique to maintain their health to the senior citizen group.

CONCLUSION

Although several demographic variables are important, living in extended family provides significant contribution than socio-economic characteristics in defining "well being" among the Indonesian geriatric population. Indonesian Government already takes several measures for the advantage of its geriatric population.

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