WHY THE ELDERLY WORK: A CASE STUDY OF ELDERLY WIDOWS IN CENTRAL SULAWESI, INDONESIA

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ABSTRACT

This study analyzes the factors that influence the elderly widows in Central Sulawesi to work. The sample of this study based on the number of elderly widows with SAKERNAS for the August 2017 period in Central Sulawesi who are 60 years and over of 361 people. The results showed that the tendency of the elderly widows to work was influenced by the variables of age, household status, school participation and health status. Age and school participation have a negative effect on the work participation of the elderly widows. Old age and low education (≤ SLTP) elderly widows have little opportunity to enter the labor market. Meanwhile, household status and health status had a significant positive effect. Elderly widows with status as the head of household and in good health are likely to enter the labor market.

Keywords: Elderly widow; Labor market; Productive ageing; Indonesia.

INTRODUCTION

The phenomenon of increasing the number of elderly people occurs in almost all over the world due to a good quality of life, advances in medical technology and modern health services. Population aging, as the most important development trend in the 21st century, has broad implications for all aspects of social, economic, health, and even political life. Worldwide in 2012 there are 2 people who have their 60th birthday every second, and 1 in 9 people are 60 years old or older; The year 2050 is projected to be 1 in 5 people. If in 2012, only Japan has an elderly population of more than 30 percent, by 2050 it is estimated that there will be in 64 countries (Hartono, 2012).

Indonesia, like other countries in the Asia Pacific region, will experience population aging very quickly. In 2012, Indonesia was among the third Asian countries with the largest absolute population of over 60 years, after China (200 million), India (100 million) and following Indonesia (25 million). In fact, it is estimated that Indonesia will reach 100 million elderly people in 2050 (Abikusno, 2013). Based on data from the Central Statistics Agency (BPS), the elderly population in Indonesia in 2000 was 14,439,967 people (or about 7.18 percent of the population), then increased to 23,992,553 people (9.77 percent) in 2010, and is predicted to reach 28,822,879 people (11.34 percent) in 2020.

Central Sulawesi Provincial data shows that in 1980 the elderly population was 48,710 people (4.17 percent) to 64,286 people (4.52 percent) in 1990, to 100,291 people (4.98 percent) in 2000, to 174,900 people (6,6 percent) in 2010 and became 200,121 people (6.96 percent) in 2015 (BPS, 2016). The condition of the elderly in Indonesia has not received adequate attention. Suweno (2014), revealed that from an estimated 19 million elderly people in 2014, 2.8 million elderly people are disadvantaged or under the poverty line and 2.2 million people are categorized as vulnerable to poverty. In line with that, the 2014 Susenas recorded the economic status of elderly households as measured by per capita expenditure, it is estimated

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that 46.33 percent occupy the lowest household economic status, even 11.98 percent live in almost uninhabitable houses and 5.51 percent live in uninhabitable livable (BPS, 2015).

Elderly people who have lost their spouse either due to death or divorce face more serious problems. They face economic, social and psychological problems. Many of them live poorly in economic constraints. BPS data (2018) reveals that 2.28 percent of all elderly people are divorced and 38.80 percent are divorced. When viewed by gender, the percentage of elderly widows is 57.67 percent, which is three times that of elderly people with widowers, 16.50 percent.

Elderly with widow status face bigger problems than elderly with other status. The results of Panda's research (2013) state that the problems often faced by elderly widows include mental tension, loneliness, difficulty adjusting to environmental changes. Lee et al. (2012) stated that the elderly experience the two strongest pressures associated with perceived depression, namely health stress and financial stress. In line with Putri (2015), elderly widows experience more difficulties in adjusting to reduced family income. The condition of the elderly with various problems, especially the elderly with widow status, must work to survive in an effort to meet the demands of life and meet the needs of their dependents. The results of Parinding (2019) research, 46.37 percent of elderly people in Indonesia who are still working to make ends meet, and 17.42 percent of them are elderly with widow status.

Wirakartakusumah and Anwar (1994) stated that there are at least three reasons that influence the elderly to enter the labor market. First, there are still many elderly people who remain strong physically and mentally, so there is no reason to leave the job market. Second, the elderly is plunging into the job market due to economic pressure. Third, reasons that are not based on economic motives, but are based more on self-actualization or emotional motives. In line with the results of research conducted by Komnas Lansia in 2008, it was found that the most common reason elderly people still work is due to insufficient economy, another reason is because they want to remain active and independent, while the reason for the elderly not working is because of deteriorating health (BPS, 2010).

Taking into account the above phenomena, it is interesting to examine the demographic, social and economic characteristics of elderly widows in Central Sulawesi and what factors make them enter the labor market.

LITERATURE REVIEW

Aging is a natural and natural process. Azwar (2006) emphasizes that old age is a natural process that cannot be avoided and must be accepted as a reality and a biological phenomenon. Life moves with the aging process which ends in death (Hutapea, 2005). Therefore, this period is a critical period for spiritual development with issues related to the end of life, such as death and its dying process (Nelson, 2009). Santrock (2002) states, there are two views on the definition of the elderly or elderly population: First, the view which states that those who are classified as elderly are those who are aged 65 years and over, where this age will distinguish a person who is still adult or elderly. Second, the view that the elderly population is people aged 60 years and over. At the age of 60 years a person has started to show the characteristics of aging. Furthermore, the World Health Organization (WHO) classifies the elderly into four, namely: middle age (middle age) 45 -59 years, elderly (elderly) 60-74 years, elderly (old) 75-90 years and very old age (very old) over 90 years.

In this study, the limitation of the elderly population refers to the Law of the Republic of Indonesia Number 13 of 1998 concerning the Welfare of the Elderly (seniors), which states that an elderly person is someone who has reached the age of 60 years or more. This is in line with the

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concept of the Central Statistics Agency which states that the elderly are residents aged 60 years and over.

Widows and Poverty Elderly Population Most of the poor elderly are members of poor families before they reach old age, so that when they are older, they really do not have economic capability. Their life is very dependent on the people in their environment such as children, relatives or neighbors. When the poor elderly is still in their productive age, they did not have their own production factors, generally they worked as laborers. If they work in the agricultural sector, they work as agricultural laborers, if they work in construction, they generally work as construction workers. Some of these poor elderly work in the informal sector which does not have old age security, because their income is only enough to support their needs at that time, so it is not possible to save for old age. They do not have an adequate level of education and skills making them at productive age do not have access to economic resources

Yusuf's research results (2016) show that based on the gender dimension, there are still gaps in several aspects of the life of the elderly in Indonesia, especially in the aspects of health insurance work owned by the elderly and marital status. Elderly women generally work less, have health insurance and live longer as a widow. This allows the vulnerability of poverty to the elderly population of women compared to elderly men. The same findings Espinoza-Delgado and Klasen (2018) in a gender-based multi-dimensional poverty study in Nicaragua, found that women live in very intense poverty when compared to men. In addition, there is also evidence that households headed by women are more vulnerable than those headed by men in terms of poverty (Ulwan, 2021; Bukhori, 2021; Soetjipto et al., 2021).

Being widowed and not working are two other demographic characteristics inherent in older women. The longer life expectancy of elderly women not only increases the chances of life for elderly women, but also increases the chances of older women being abandoned by their partners who have died earlier. The facts show that Indonesian women whose spouse has left behind, usually prefer not to remarry, compared to men whose spouse has left. This is reflected in the number of elderly male with widower status in 2017 which only amounted to 17.52 percent, while female elderly with widow status amounted to 58.71 percent almost three times as much (Ainistikmalia, 2019). Based on the 2017 Susenas data, Ainistikmalia also found that (2019) variables not working, illiteracy and widow status had an influence on poverty experienced by elderly women.

RESEARCH METHOD

This study used a quantitative approach with a cross-section design. The location of the research was conducted in Central Sulawesi, with the time used adjusted to the data from the National Labor Force Survey (SAKERNAS). The data used is in the form of micro data from Sakernas results by BPS so that the entire sampling process consisting of a sample adequacy framework, sample representation, and area selection relies fully on the Sakernas sampling technique carried out by BPS.

The number of samples selected for the Sakernas in Central Sulawesi was 10,939 people. The proportion of elderly (population 60 years and over) from the total sample is 10.89 percent or as much as 1,192 people. The sample in this study was 361 elderly people who were widows netted in the national labor force survey (Sakernas) in Central Sulawesi for the period of August 2017.

In conducting an empirical review, analysis was carried out using a multiple logistic regression approach. Logistic regression is a nonparametric statistical method for testing hypotheses. The logistic regression method is a mathematical method that describes the relationship between one or more independent variables and one dichotomous dependent

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variable whose variable is considered to have only two possible values, namely 0 and 1 (Hosmer, 2000). If it is known that there are p independent variables, it can be represented by a vector:

$$X' = (X1, X2, \ldots\ldots, Xp)$$

It is assumed that some variables are interval scale, so the probability can be written as:

$$P(Y = 1|X) = \pi(X)$$

Multiple logistic regression models are as follows:

$$g(x) = \beta 0 + \beta 1X1 + \beta 2X2 + \cdots .. + \beta pXp$$

The logistic regression model built in this study is as follows:

$$PElder = \beta 0 + \beta 1Usia + \beta 2ART + \beta 3DSDRT + \beta 4DDom + \beta 5DPasek + \beta 6DSKes + \varepsilon$$

Information:
β0 = Constants
β1, β2, β3, β4, β5, β6 = Regression coefficient
PElder = Work participation of the elderly
Age = Elderly age
ART = Number of household members
DSDRT = Status in the household
DDom = Elderly residence
DPasek = School participation
DSKes = Health status

The dependent variable symbolized by PElder is the involvement of elderly widows in economic activities which at the time of the survey were working at least one hour continuously a week ago, in categorical form: 1 if working and 0 if not working. The independent variables consist of: age, number of household members, status in the household, place of residence, school participation and health status. The age of the elderly is calculated based on the birthday at the time of the interview (ratio scale); The number of household members is the number of household members of the respondent at the time the survey was conducted. The other independent variable is a dummy variable. Household status is differentiated between elderly whose status is the head of the household and household members: 0 = member of the household and 1 = head of the household; residence is the domicile of the respondent at the time of the survey: 0 = village and 1 = city; school participation is differentiated between elderly people who never go to school until they finish junior high school and elderly people who have graduated from high school to tertiary education: 0 = no school - junior high school and 1 = senior high school - PT; and health status is categorized as healthy if there is no visual, hearing impairment, walking / climbing stairs, moving fingers / hands, talking and / or understanding / communicating with other people: 0 = unhealthy and 1 = healthy.

RESULTS AND DISCUSSION

Demographic Description of Elderly Widows

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Some of the characteristics of the elderly widow population, the results of data analysis are shown in Table 1. Of the 361 elderly who were selected as the research sample, 25.21 percent (70 people) entered the labor market and 74.79 percent did not have a job.

When differentiated according to age groups, the number of elderly widows aged 60-69 years was 56.79 percent, the 70-79 age group was 30.25 percent and the group ≥ 80 years was 12.46 percent. Most of those who work are in the age group 60-69 years at 83.52 percent, followed by the 70-79 year age group at 16.48 percent and there is no longer the age group ≥ 80 years who work. In line with the findings of Bellante and Jackson et al.(1983); Arfida (1996); and Sumarsono (2003); that increasing age is pushing the elderly out of the labor market.

It was also detected 14.41 percent or 52 people from elderly widows who live alone. 40.38 percent or 21 of them entered the labor market, the remaining 59.62 percent did not have a job. Their group really needs attention. Judging from the status in the household, more than half or 56.79 percent of them have the status of the head of the household, 36.61 percent live with children / daughter-in-law and 3.60 percent of other status. Three-quarters more of those who are in the labor market, namely 79.12 percent are those with the status of the head of the family and 20.88 percent are those with the status of family members. The results are consistent with the findings of Andini et al., (2013) that the elderly household head has a greater responsibility requiring them to work. Most of the elderly widows live in rural areas, namely 68.14 percent and only 31.86 percent live in urban areas. Almost all of them have low education, from no school to junior high school at 93.91 percent. It is not surprising that those who enter the labor market are dominated by those with low education amounting to 97.80 percent. The same result was found by Giles et al., (2011) that an increase in the length of time in education has a negative effect on the work participation rate of the elderly.

TABLE 1
DESCRIPTION OF RESPONDENTS BASED ON ELDERLY WORK PARTICIPATION (60+)

	Workless		**Works**		**Total**	
	Person	Percent	Person	Percent	Person	Percent
Age						
60–69	129	47,78	76	83,52	205	56,79
70–79	96	35,55	15	16,48	111	30,75
80+	45	16,67	0	0,00	45	12,46
Number of Household Members						
Alone	31	11,48	21	23,08	52	14,41
2–3	86	31,85	33	36,26	119	32,96
4–5	89	32,96	22	24,18	111	30,75
≥ 6	64	23,71	15	16,48	79	21,88
Household Status						
Head of household	133	49,26	72	79,12	205	56,79
Parents/parents-in-law	127	47,04	16	17,58	143	39,61
Other family	10	3,70	2	2,20	12	3,32
Domestic helpers	0	0,00	1	1,10	1	0,28
Domicile						
Rural	184	68,15	62	68,13	246	68,14
Urban	86	31,85	29	31,87	115	31,86
School Participation						
No school + SLTP SLTA Higher	250	92,59	89	97,80	339	93,91
Education	20	7,41	2	2,20	22	6,09
Health Status						
Not healthy	174	64,44	34	37,36	208	57,62
Healthy	96	35,56	57	62,64	153	42,38
Social Security Status						
Not get social security	270	100,00	87	95,60	357	98,89

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Get social security	0	0,00	4	4,40	4	1,12
Income Status						
Have not Income	270	100,00	36	39,56	306	84,76
Have Income	0	0,00	55	60,44	55	15,24
Total	270	100,00	91	100,00	361	100,00

In terms of health, more than half of the elderly widows who have poor or unhealthy health status are 57.62 percent. This situation is of course closely related to the income status and social security status of the widow's elderly. The data shows that the number of elderly who do not have income is very large, namely 84.76 percent and very few recipients of social security, namely 1.12 percent.

Multiple Logistic Regression Analysis Results

There are two variables that are not discussed further with multiple logistic regression analysis because they do not meet the requirements, namely: (1) social security status because the number of social security recipients is only 4 people; and (2) income because only 55 people have income from the 361 elderly widows.

The multiple logistic regression model produces the estimates presented in Table 2. The estimation results show four independent variables that have a significant effect on the work participation of the widow elderly population, namely: age (age), household status (SDRT), school participation (Pasek) and health status (SKes).

TABLE 2
VARIABLES IN THE EQUATION

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Age	-0.140	0.028	25.509	1	0.000	0.870
	ART	-0.055	0.072	0.575	1	0.448	0.947
	SDRT	1.050	0.351	8.954	1	0.003	2.858
	Dom	-0.173	0.301	0.330	1	0.566	0.841
	Pasek	-1.971	0.794	6.168	1	0.013	0.139
	SKes	0.813	0.275	8.733	1	0.003	2.254
	Constant	7.658	1.963	15.226	1	0.000	2118.369

a. Variable(s) entered on step 1: Age, ART, SDRT, Dom, Pasek, SKes

The age of the elderly population plays a role in determining the supply of labor for the elderly. The increasing age of widows makes the opportunity to participate in the labor market decreasing. This trend is shown by the logistic regression coefficient of -0.140 and a significant value of 0.000 (<0.01). Increasing age encourages them to leave the labor market, because getting older means that their physical condition also deteriorates. These findings concur with Bellante and Jackson et al. (1983); Arfida (1996); and Sumarsono (2003).

Status as the head of the household also influences the decision to enter the labor market. Table 1 shows that more elderly people with the status of the head of the household enter the labor market. This result is reinforced by the logistic regression coefficient of 1.050 and a significant value of 0.000 < (0.05), which means that elderly widows with the status of the head of the household have a greater opportunity to enter the labor market than those with the status of household members. This result is consistent with the findings of Andini et al., (2013) that the elderly household head has a greater responsibility requiring them to work.

School participation also has a negative effect on elderly widows' decisions to enter the labor market. This is indicated by the logistic regression coefficient of -1.971 and a significant value of 0.003 (<0.05). The negative results mean that elderly widows with higher education (SLTA - Higher Education) have a smaller chance of entering the labor market compared to those

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with low education (Not in school - Complete SLTP). This finding is consistent with the research of Giles et al., (2011) that an increase in the length of time in education has a negative effect on the work participation rate of the elderly.

It was also found that elderly widows with good health made the decision to enter the labor market. Obtained logistic regression coefficient value of 0.813 with a significant value of 0.003 (<0.05) means that elderly widows with healthy status have a greater chance of entering the labor market compared to those with unhealthy status. This result is consistent with the findings of Affandi (2009), the elderly who work supported by good health conditions allow them to enter the labor market. It is also in line with Mette and Schultz (2002) that the elderly population with poor health will make decisions to reduce their participation in the labor market.

Two other variables that did not have a significant effect were the variable number of household members (ART) and domicile (Dom) with a logistic regression coefficient of -0.055 each and a significant value of 0.448 (> 0.05); and -0.173 and a significant value of 0.566 (> 0.05). It can be interpreted that these two variables do not have a significant effect on work participation.

CONCLUSIONS

Based on the discussion, the results of this study revealed that the condition of elderly widows in Central Sulawesi, namely: there are still 14.41 percent or 52 elderly people who live alone, 93.91 percent have low education (not in school - junior high school), 57.62 percent have health and 84.76 percent no longer have income. 2) Four variables that have a significant effect on the work participation of the elderly widows, namely age, household status, school participation and health status. Meanwhile, the two variables that have an insignificant effect are the number of household members and domicile.

From the results of the discussion and conclusions above, some recommendations are demonstrated. Looking at the condition of the elderly in Central Sulawesi: 14.41 percent who live alone, more than half have poor health conditions, most have low education levels and do not have income, need attention from their families, neighborhoods, non-governmental organizations and the government to empowering them to be productive and tough elderly people. For example, being involved in family development activities for the elderly (BKL), supporting productive economic enterprises for the elderly. Furthermore, this study did not involve the social security variable because of the limited data used for the 2017 August 2017 Sakernas. This variable is thought to have a major influence on the elderly's decision to enter the labor market, and is a weakness of this study. So that further research should involve the variable social security and family economic support.

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