An Analysis on the Factors which Influence Offering the Elderly as Workers in Medan

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Abstract: The objective of this research was to analyze and find out some factors which influenced offering the elderly as workers in Medan. Independent variables were education, health, earnings, dependents, and occupational status. The samples were 100 respondents. Primary data were gathered by conducting interviews, observation, and questionnaires and analyzed by using multiple linear regression models with E-views 7 program. The result of the research showed that the variables of education, earnings, and dependents had positive and significant influence on offering the elderly as workers in Medan. There was the difference in offering the elderly as workers in Medan, based on health, but there was no difference in offering the elderly as workers in Medan, based on occupational status.
Keywords: dependent, earnings, education, health, offering the elderly as workers

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I.   INTRODUCTION

Government policy to design a people centered development program which is planned with regard conditions and dynamics population. All development planning must pay attention and consider population data and information starting from; number, growth, structure of age, distribution, and population quality (Badan Kependudukan dan Keluarga Berencana Nasional, 2017). Therefore, the development of a country must be developed and implemented by taking into account the ability of its population so that all residents can actively participate in the dynamics of development. So, the development of a country can be said to be successful if it is able to improve the quality of human resources and the welfare of its population.

The quantity of human resources without being accompanied by good quality will be a burden development for a nation. The quality of human resources concerns the quality of humans on non-physical abilities (intelligence and mental). To improve physical quality is pursued through nutritional health programs. As for the quality or non-physical ability that is most needed through education and training efforts.

Improving the quality of human resources can create more advanced development. One indicator of increasing human resources is the increasing life expectancy of the population (Mason, et al, 2006). The life expectancy of Medan increased to 72.34 years in 2016 from the Medan life expectancy in 2015, which was 71.28 years (Badan Pusat Statistik, 2016), this number is the highest in Sumatera Utara. Increasing life expectancy will cause the proportion of elderly people to be even greater. The elderly population is a population that has reached the age of 60 years and over. (Indicators of development success that increase the life expectancy of the population have problems and affect the community, especially the workers market. This is a problem and challenge in the workers market where elderly workers seek income without burdening the capacity of productive workers. With the continued increase of the elderly population and to meet the retirement needs of elderly workers, the elderly workforce decides to extend their working life and improve their ability to work.

Increasing elderly population in an area indicates the occurrence of aging population in the region. Changes in demographic characteristics towards the aging population are characterized by a slower growth rate of young population than the growth of the elderly population. The slow growth of the young age population is caused by a decrease in the birth rate, while the acceleration of the population growth of old age is due to the life expectancy (Burtless and Moffitt, 1985).

Not only seen from the population, the structure of the old population can also be seen from the proportion of the population in a certain age group. A country is said to have an old structure if it has an elderly population above seven percent (Soeweno, 2009). The proportion of elderly people in Sumatera Utara has reached 6.96 percent of the total population in 2016. This condition shows that during the last year in Sumatera Utara the proportion of elderly people has increased significantly, increasing from 6.71 percent in 2015 to 6.96 percent in 2016 or increased by 0.25 percent. This shows that Sumatera Utara is an area with a population structure towards an aging population.The results of Badan Perencanaan Pembangunan Nasional prediction (2013) show that the percentage of the elderly population in Sumatera Utara will reach 8.29 percent of the total population in 2020 and be 13.22 percent in 2035.

Medan which is a city/regency in Sumatera Utara with the highest life expectancy at 72.34 in 2016 and is predicted to increase or stay afloat. When viewed from the total population of Medan in 2015 was 2,210,624 and increase in 2016 was 2,229,408, while the composition of the elderly population 60 years and over in 2015 amounted to 141,113 and in 2016 was 151,248 inhabitants and this will increases with life expectancy (Badan Pusat Statistik, 2017).

In Table 1 there was an increase in the number of elderly who worked in 2015 as many as 52,137 with a total of 141,113 elderly. In 2016, the number of working elderly rose dramatically by 57,149, as well as in 2017 experienced an increase of 67,829. In general, from year to year the percentage of elderly participation who work towards the total elderly tends to increase.

Table 1. Percentage Elderly as Workers to Total Elderly in Medan 2015-2017

Year	2015	2016	2017
Elderly as Workers	52.137	57.149	67.829
Total Elderly	141.113	151.248	159.039
% Elderly as Workers To Total Elderly	36,94	37,78	42,64

Sumber: Badan Pusat Statistik Kota Medan

This shows that in general the elderly in Medan can still carry out various activities and still have a lot of role in family and community life. It is not surprising that in reality many elderly workers in Medan still want and have to work.

The large number of elderly as workers who still are working can show that elderly as workers are still active in the workers market and try not to depend on other residents, but on the other hand it can be a problem if they are not properly considered.

Based on this background, although the elderly as workers is a human resource group that is actually unproductive, but in reality there are still many elderly as workers who are productive and actively working, there arises interest researched the factors that influence offering the elderly as workers in Medan.

II. METHOD

The sampling technique was carried out in this way purposive sampling and accidental sampling. According Sugiyono (2011) purposive sampling is the selection of samples based on certain characteristics that are considered to have relevance to the characteristics of the population that have been known previously. The sampling method uses the Slovin formula as many as 100 respondents of elderly as workers (60 years and over) who are still working in Medan.

This study was conducted to examine the effect of independent variables on the dependent variable using multiple linear regression methods with ordinary least square. This method have ideal characteristics and can be seeded, which is technically very strong, easy to calculate and withdraw its interpretation (Gujarati, 2003).In this study the regression model:

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$

where:

Y is offering the elderly as workers.

X_1 is education.

X_2 is health.

X_3 is earnings.

X_4 is dependent.

X_5 is occupational status.

III. RESULT AND DISCUSSION

Based on primary data, to see the effect of variable of education, health, earnings, dependent, occupational status on offering the elderly as workers can be analyzed the statistical coefficients of each variable. The statistical coefficient of each independent variable can be calculated with the help of a computer through the Eviews 7 program with the following results:

Table 2. Output Regression

Variable	Coefficient	p-value
Constant	11.313	0.000
Education	1.422	0.000
Health	2.016	0.021
Earnings	2.311	0.000
Dependent	4.546	0.000
Occupational Status	0.681	0.263
N	100	
R^2	0.988	
Prob (F-stat)	0.000	

The results of the study indicate that education had positive and significant influence on offering the elderly as workers in Medan. The results of this study are supported by the research of Wang and Shultz (2010), that the level of education had positive influence where the higher level education of the elderly as workers, so offering the elderly as workers reflected in working hours tends to be higher. Having a high level of education will increase market wages from individuals even when he is in his 60s (Seike and Shimada, 1994). The results of this study are also in accordance with those proposed by Burtless and Moffitt (1985), which explains that there is a desire of employers to pay more for those who have the ability or expertise.

The results of the study which showed that health had positive and influence significant on offering the elderly as workers in Medan, meaning there was the difference in offering the elderly as workers between who are ever hospitalized and never been hospitalized. Elderly people who are in good physical condition have a greater likelihood of working than those in the elderly whose physical condition is not good (sick). The elderly as workers both men and women who have poor health and long illness will make decisions to reduce their participation in work. The results of this study are supported by the research of Wang and Shultz (2010), Zweifel, et al (1999) regarding the effect of health on offering the elderly as workers, which is increasingly absent the elderly because of illness within a year of work, it will affect the decline of elderly working hours. In this study there were several days the elderly were absent from work because the elderly who worked generally had several complaints of illness. Diseases complained of by elderly who work can disrupt their activities so that this will have implications for decreased working hours.

The results of the study indicate that earningshad positive and influence significant on offering the elderly as workers in Medan. The results of this study are supported by Weil's research (2008), that one of the factors that influence the amount of workers participation is the level of wages. The higher the level of wages offered in the workers market, the more people are attracted to workers market. This is in line with what Bellante, et al. in Oshio, et al. (2010), that theoretically there is a relationship between the number of hours worked and wages, because the increase in wage rates will produce a price of time so that some people tend to increase working hours to get greater wages. The results of other studies that support previous research by Burtless and Moffitt (1985), Ackerman (2004) that earningshad positive and influence significant on offering the elderly as workers.

The results of the study indicate that dependent had positive and influence significant on offering the elderly as workers in Medan. The more family members means that the relative number of family needs must be fulfilled so that they tend to encourage someone to work to meet the economic needs of their families. The results of this study are supported by the research of Bakir and Manning (1984), the number of family members determines the level of working hours from the results done because more and more family members eat and live, forcing workers to seek additional income. Weil (2008) stated that the economic reasons that are the cause of the elderly work, indicating that with many elderly people still working, the elderly can still support themselves, support the families of their children who live with them, because they live in poor families.

The results of the study indicate that the employment status had positive and influence significant on offering the elderly as workers in Medan, meaning that there was no difference in offering the elderly as workers between workers elderly who are self-employed and work with others. If the job status is self-employment, then the working hours of the elderly will be spent more outside the home to do the work. Whereas

if the job status is to work with other people, then spend more work hours for outside work and less time will be devoted to leisure.The results of this study are supported by the study of Zweifel, et al (1999) which states that there is a positive and influence significant on offering the elderly as workers.

A value of indicates that all independent variables (education, health, earnings, dependent, and occupational status) can explain the dependent variable (offering the elderly as workers) by 98.9%. While the remaining 1.1% is explained by other variables outside the research model. The results showed that education, health, earnings, dependent, and occupational status together had influence significant on offering the elderly as workers.

IV. CONCLUSION

The results of this study indicate that education had positive and influence significant on offering the elderly as workers in Medan. Variable income and dependent had positive and influence significant on offering the elderly as workers in Medan. There was the difference in offering the elderly as workers in Medan, based on health, but there was no difference in offering the elderly as workers in Medan, based on occupational status.

There are several recommendations that can be taken into consideration by the Government and subsequent Researchers. First, the Government should provide assistance to create workers market conditions that are suitable for the elderly as workers, for example there is no strict time setting (flexible working hours) such as being able to work part time. Second, the Government should hold job training opportunities that are suitable for the elderly such as skills training or provide opportunities for entrepreneurs for the elderly. Third, future research can add other research variables that influence offering the elderly as workers in order to obtain more diverse results.

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