

Learning From Pandemic Covid-19 Toward Ageing Societies In Indonesia: Building Of A Resilience With An Adaptive Social Protection¹

Belajar Dari Pandemi Covid-19 Menuju Masyarakat Menua Di Indonesia: Membangun Resiliensi Dengan Perlindungan Sosial Yang Adaptif

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ABSTRACT

COVID-19 pandemic reveals how demographic characteristics play significant roles to respond the situation that can be useful as a basis of policy making. Demographic aspects have been closely associated to the human's risks when they are exposed the Corona virus. This paper seeks to understand the COVID-19 pandemic through demographic aspects and the lessons learned in facing any potential pandemic in the future, particularly to prepare better approaches towards ageing societies in that circumstances in Indonesia. Having descriptive analyses, the data were collected from Statistics Indonesia, Indonesia COVID-19 Taskforce, and the Agency of Social Security Administration for Health (BPJS Kesehatan). Findings show that by age, the older a person is, the more vulnerable he/she is for a worse condition when is exposed the COVID virus. The increasing of age is equal to a decreasing in physical conditions that affects the person to have chronic diseases and results in a worse health condition. It is evident by the domination of older people (50 percent) in the mortal rate resulted by positive cases of COVID-19. Within that number, men have a higher risk than women. In another aspect, in the pandemic time, Indonesia faced a crucial challenge regarding the numbers of health workers and the availabilities of beds for inpatient in hospitals. Such obstacles and ageing people accompanied by an intensity and frequency in terms of disaster can lead to a more vulnerable population and this requires a comprehensive approach to mitigate or adapt for any future disasters. Pandemic COVID-19 has become a momentum to remind us the necessity of a better health system and an adaptive social protection.

Keywords: Pandemic COVID-19, Ageing Societies, Demographic Aspects, Adaptive Social Protection, Indonesia.

ABSTRAK

Pandemi COVID-19 menunjukkan bagaimana karakteristik demografis memainkan peranan penting dalam merespons situasi yang berguna untuk dasar pengambilan kebijakan. Aspek demografi berkaitan dengan risiko terpapar virus Corona pada masyarakat. Makalah ini berfokus pada pemahaman pandemi COVID-19 melalui aspek demografi dan bagaimana hal tersebut dapat menjadi pembelajaran dalam menghadapi pandemi berikutnya di masa depan, terutama dalam hal mempersiapkan diri termasuk mempertimbangkan akan pendekatan baru untuk menghadapi masyarakat yang menua di Indonesia. Dengan menggunakan analisis deskriptif, data dalam makalah ini diambil dari Badan Pusat Statistik, Gugus Tugas COVID-19 Indonesia, dan Badan Penyelenggara Jaminan Sosial (BPJS) Kesehatan. Data menunjukkan bahwa semakin tua usia seseorang, maka semakin rentan mengalami kondisi yang lebih buruk ketika terpapar COVID-19. Hal ini dikarenakan semakin bertambahnya usia berarti semakin menurunnya kondisi fisik yang berdampak pada penyakit kronis yang memicu semakin parahnya kondisi seseorang yang terpapar COVID-19. Kasus kematian didominasi oleh penduduk lanjut usia (lansia). Hampir 50 persen kematian terjadi pada lansia yang terkonfirmasi positif COVID-19. Risiko kematian pada laki-laki saat terpapar virus Corona lebih tinggi dibandingkan perempuan. Pada sisi lain, Indonesia menghadapi tantangan terkait jumlah tenaga kesehatan dan tempat tidur di rumah sakit, terutama dalam situasi pandemi. Intensitas dan frekuensi bencana yang semakin meningkat dan pada saat yang sama masyarakat yang semakin menua menyebabkan penduduk semakin rentan membutuhkan pendekatan yang komprehensif untuk melakukan mitigasi dan adaptasi terhadap bencana-bencana berikutnya. Pandemi COVID-19 menjadi momentum untuk mengingatkan bahwa perlu adanya sistem kesehatan yang lebih baik dan perlindungan sosial yang adaptif di saat dunia semakin menua.

Kata Kunci: Pandemi COVID-19, Masyarakat Menua, Aspek Demografi, Perlindungan Sosial Adaptif, Indonesia..

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INTRODUCTION

Since 2020, the world struggles to control and cope with the spread of Coronavirus-19 (COVID-19). The cases of COVID-19 relatively high in many countries, including Indonesia. Globally, there have been 123,902,242 confirmed of COVID-19, and there were 2,727,837 deaths cases on March 24 2021 [1]. For the cases in Indonesia, there have been 1,476,452 of people who are exposed to COVID-19, and amount to 39,983 was death (WHO, 2021).

Understanding COVID-19 pandemic can be seen through demographic aspects. It is useful for policy maker to respond the situation with comprehensive policy. For instance, age becomes prominent aspect to gain better understanding about pandemic especially about the morbidity and mortality on COVID-19 cases. Older populations are more vulnerable than young people due to several reasons. Age can be a variable to predict the severity of a country that might be faced. A country with ageing societies has more challenges and consequences during pandemic. Dowd et al. (2020) revealed that countries with an ageing population tend to more severe than others when exposed to the COVID-19.

Futhermore, there are a lack of knowledge and experiences about COVID-19 because it is the first occurrence in our lifetimes. However, the experiences of facing disaster including public health emergencies are relevant for the current situation. Several rules to protect people from COVID-19 pose difficulties when implemented particularly for those vulnerable groups. For instance, people who are socially isolated and lack of literacy skills may not receive and understand detailed information about COVID-19 pandemic. Meanwhile, health behaviour of societies determines the spread of COVID-19. Physical distancing, using mask especially when going outside, and washing hands become activities that should be done regularly. In fact, many people have ignorance to follow the rules, especially for those who are living outside Jakarta.

In addition, the importance of strengthening resilience at any level and across different groups highlight on Sendai framework for action 2015-2030 (UNISDR, 2015). This framework also

includes the agreement to enhance the efforts to disaster risk reduction actions. Epidemic and pandemic also part of disaster risks. Understanding better risks and increasing preparedness are strongly supported to Strengthening resilience.

Demographic structures become predominant aspects to increase preparedness, of disaster including in pandemic situation. In terms of COVID-19 pandemic, this situation should be seen beyond health problems. It is because the impacts of COVID-19 pandemic occurred in many aspects of life such as economy, social and psychology. For instance, Indonesia is facing ageing population. It means that the number of vulnerable people in Indonesia will be increased significantly that leads to become more vulnerable country.

Through analyzing the age structure, the region with high risks during pandemic can be identified. As WHO mentioned, the risks of older people are high if they are exposed to coronavirus. Globally, most of death cases due to COVID-19 are older people, approximately at 95%, meanwhile, around 48.5% of death cases in Indonesia are older people from the total positive cases at 10.7% (Indonesia COVID-19 task force, 2021).

Like disaster, COVID-19 pandemic also reveals the nature of social construction and digs the weaknesses. Pandemic shows the socio-economic gap in a great scale. In fact, the capacity of people to face the impacts of COVID-19 pandemic is different. For example, migrant workers are more vulnerable during pandemic. It is because, to control the virus spreading, the government release the policy about physical distancing and lockdown that affected directly to migrant workers especially for those who are working in urban areas due to the business closure (Khanna, 2020).

Furthermore, many migrant workers do not have adequate and flexible social safety nets. Previous research in India revealed that unemployment is significantly increase due to COVID-19 pandemic (Khanna, 2020). Liem et al. (2020) said that migrants are one of the most vulnerable groups during COVID-19 pandemic

due to several factors such as health, economic, social, and psychology.

Hence, it is needed for a country to have better approaches in facing COVID-19 pandemic as a disaster that caused by disease to reduce the negative impacts especially for vulnerable groups including older populations. COVID-19 pandemic shows the uncertainty condition can occur at any time. The intensity and frequency of disaster or natural hazard events also rising that lead to increasing the risks.

This paper offers the ideas of understanding COVID-19 pandemic through demographic aspects and what the lesson learned regarding the new approaches to reduce the negative impacts for those vulnerable such as older people. It can be preparedness towards ageing societies in Indonesia.

METHODS

Data of this paper come from publication of Statistics Indonesia, Indonesia COVID-19 task force, Indonesia Health Ministry, and Social Security Administrator for Health (BPJS Kesehatan). To describe the COVID-19 cases in Indonesia, including profiling the patients and health insurance ownership, this paper used descriptive analysis to gain better understanding about the COVID-19 pandemic in Indonesia through demographic aspects.

For the number of COVID-19 cases, this paper took the data from Indonesia COVID-19 task force which is official unit that handle the pandemic situation. The number of COVID-19 cases described by provinces, demographic characteristics, and chronic diseases. Meanwhile, data of health coverage provided by BPJS Kesehatan. In addition, statistics Indonesia's publication data also used, particularly to see the population projection in the future related to the ageing population.

The descriptive analysis is used to discover the spread of COVID-19 cases and the characteristics of population who are exposed by the coronavirus in Indonesia. Furthermore, data about health insurance ownership taken from BPJS Kesehatan. Therefore, this data only for

those citizens who have health security based on government scheme.

To understand how old the population of this country in the few years later, data from Statistic Indonesia, Bappenas, and UNFPA will describes the proportion of older people (60 years and above based on Law (UU) No. 13 of 1998) and its projection in the next 2050.

COVID-19 CASES IN INDONESIA

Back to the history, COVID-19 pandemic is not the first that occurred in human life. Thus, this pandemic probably will not be the last. From the previous events, there were great knowledge and experiences that can be learned to face the current pandemic. Several pandemics had occurred in the world, such as the bubonic plague (14th century), Spanish flu (1918), HIV/AIDS (20th century) and SARS and MERS in 2002-2003 (UNAIDS, 2020; Mordechai et al., 2019; WHO, 2019; Hilgenfield and Peiris, 2015; ORISE, 2006).

COVID-19 pandemic often related to the Spanish flu that happened in 1918. Both pandemics are caused by the virus that infected the respiratory tract. The virus's character relatively similar because it could spread rapidly through close interaction (Beach et al., 2020).

Figure 1 describes the distribution of COVID-19 cases in Indonesia. Coronavirus cases spread rapidly in all provinces in Indonesia, although the percentage not as much as the provinces in Java. DKI Jakarta, West Java, Central Java and East Java are the first four of provinces with the highest cases in Java (Indonesia COVID-19 task force, 2021). The percentage of COVID-19 cases for DKI Jakarta, West Java, Central Java are more than 10%. The cases in East Java around 9.4%. Moreover, East Kalimantan, South Sulawesi and Bali are the provinces which have less than five percent of the total COVID-19 cases in Indonesia (Indonesia COVID-19 task force, 2021).

High population density is one of the reasons that causes the spreading of coronavirus very quick in four provinces in Java. Approximately, 56.10% of Indonesia's people live in Java Island (Statistics Indonesia, 2020). Coronavirus spread

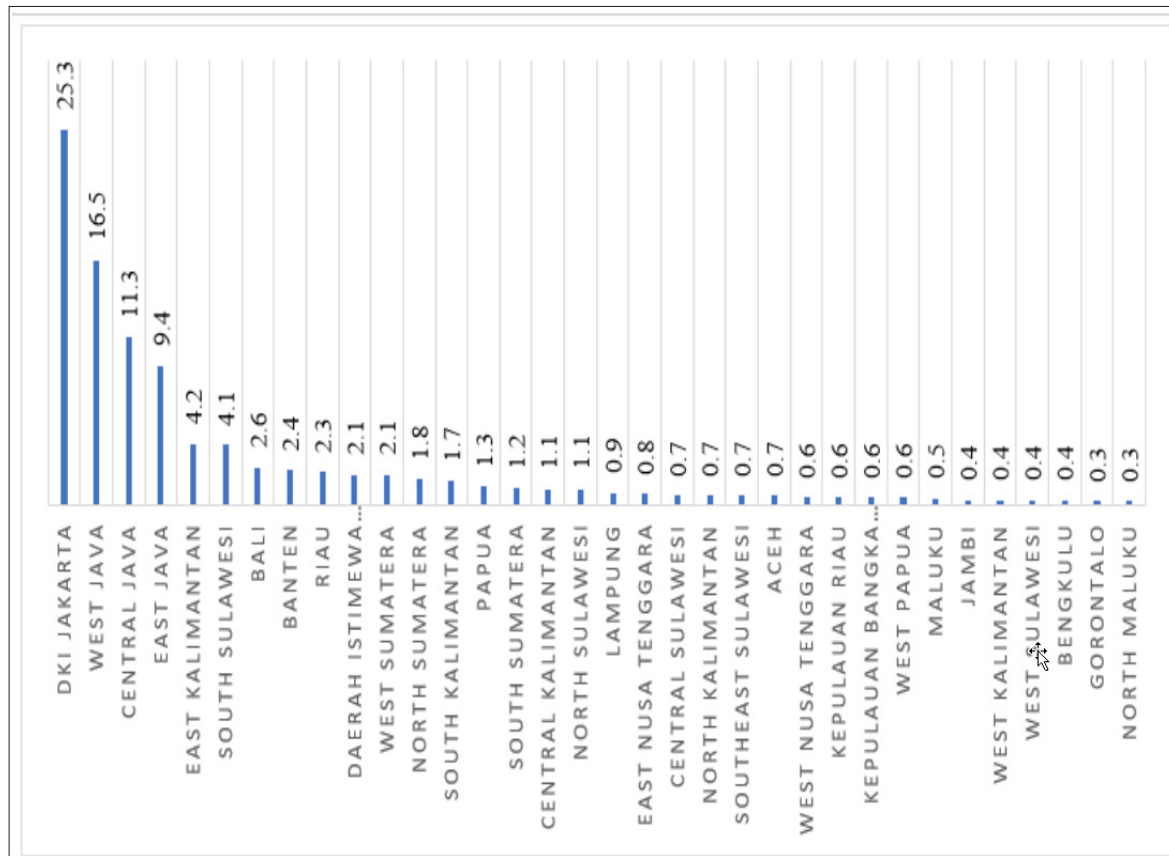


Fig.1. COVID-19 Cases by Province in Indonesia

Source: Indonesia COVID-19 taskforce. 2021. <https://covid19.go.id/>

through people as well as their interaction with others, therefore, region which the high number of populations more vulnerable than sparsely populated area.

In addition, the first case of COVID-19 is found in DKI Jakarta, and some cases identified in West Java which are closed to DKI Jakarta. As capital city and the centre of economic activities, DKI Jakarta has the high mobility that causes the spread of the coronavirus extremely. However, the policy of mobility restriction plays an important role to control the spread of coronavirus in other provinces, including Jakarta.

DEMOGRAPHY CHARACTERISTICS OF THE COVID-19 IN INDONESIA

The profile of COVID-19 patients will be described by sex, age groups, and having the comorbidities. The proportion of COVID-19 cases shows in Figure 2. The cases based on

sex and categorized into four categories, that is, positive cases, treatment or isolated, recovered, and deaths. Data reveals that there is no significant difference between male and female in COVID-19 cases. The proportion of male is 49.1% and 50.9% of female for those who confirmed as COVID-19 patients (Indonesia COVID-19 task force, 2021). However, the propensity of male to death is higher than female when they are exposed to Coronavirus. Around 57.1% of males is death and 42.9% for females due to the COVID-19 [2]. The differences in proportion between male and female are 14.2%.

Furthermore, age structure become prominent aspect in regard to understanding the COVID-19 pandemic. Age structure also has correlation with other vulnerabilities such as education level, socioeconomic status, living arrangement and housing (Balbo, 2020). Figure 3 reveals the proportion of COVID-19 cases by age groups. In

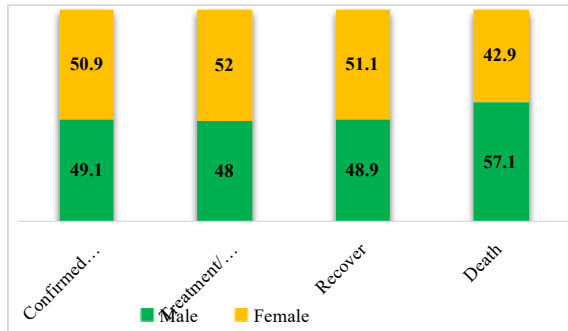


Fig.2. COVID-19 Cases by Sex in Indonesia (%), 2021.

Source: Indonesia COVID-19 taskforce. 2021. <https://covid19.go.id/>

line with WHO, older people tend to more severe when the coronavirus exposes them. The risks to get worse is increasing by ages. Based on data, people who aged more than 60 years old are the highest proportion of the death cases (47.9%) of the positive total cases in this category around 10.8%. This is followed by people aged 46-59 years old amount to 36.6% (Indonesia COVID-19 task force, 2021).

By looking at the age structures, it can also predict earlier the pandemic curve phase, critical cases and the needs for bed and medical staff in the hospital (Verhagen et al., 2020). It is urgent for a country with a high proportion of older people or those which are predicted becoming ageing societies to prepare better in the future,

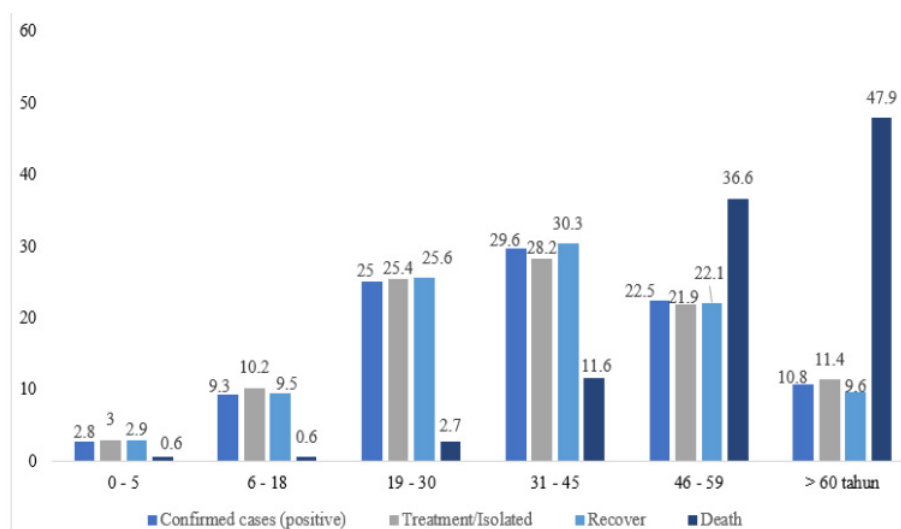


Fig.3. The proportion of COVID-19 cases by age groups (%) Source: Indonesia COVID-19 taskforce. 2021. <https://covid19.go.id/>

especially in facing pandemic, disaster, and other extreme events.

Learning from the past pandemic and COVID-19, demography characteristics can be used to gain better understanding about the pandemic situation and it is useful as basis for policy making. Thus, the government can cope and reduce more negative impacts due to the pandemic.

Moreover, Indonesia COVID-19 Taskforce also shows the comorbidities of COVID-19 patients as a supporting data. It is because, this data can explain the chronic diseases that plays an important role to increase the risks of severity due to coronavirus. In fact, some comorbidities make the condition of COVID-19 patients getting worst. Hypertension, diabetes mellitus and heart disease become the three illness that have a high impact on COVID-19 patients (Figure 4). Almost 10% of COVID-19 who have hypertension and diabetes mellitus were death when they are exposed to the coronavirus.

TOWARD AGEING SOCIETIES IN INDONESIA

Indonesia is facing ageing population. This situation needs a comprehensive approach especially in the uncertainty condition such as COVID-19 pandemic. As we seen from COVID-19 cases data in figure 3, age become

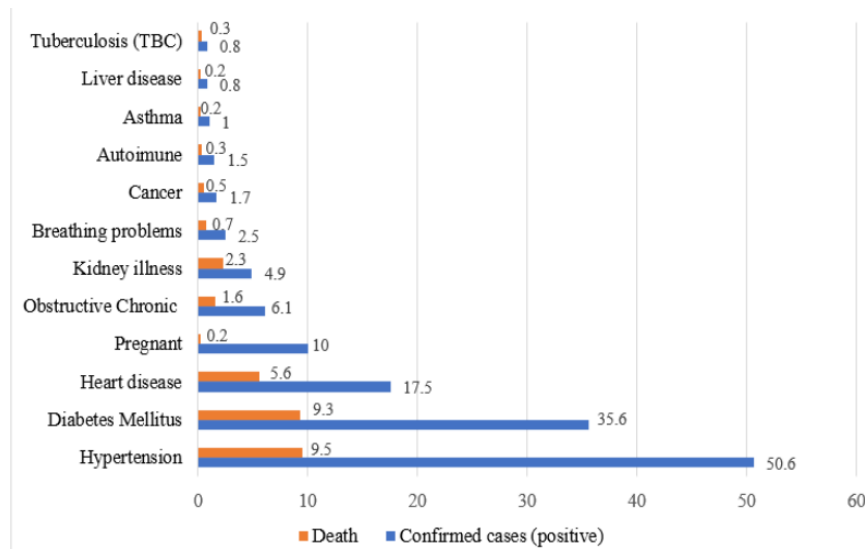


Fig. 4. Comorbidities of COVID-19 patients (%)

Source: Indonesia COVID-19 task force. 2021. <https://covid19.go.id/>

a prominent factor that affect the severe of COVID-19 patients. World Health Organization (WHO) stated that around 95% of death cases due to COVID-19 in Europe dominated by older people. In Indonesia, almost 50% of COVID-19 on older people culminate in death although the positive cases not as much as on productive ages (WHO, 2022). Moreover, Dowd et al., (2020) said that age structure affects the fatality rate (CFR) due to COVID-19. Previous studies also found that for some cases, the physical contact between people of different ages has propensity to escalate transmission of COVID-19 where population in certain age groups are vulnerable to exposed. Therefore, age structure can be useful to gain better understanding about COVID-19 pandemic, particularly for those population who are vulnerable to infection.

COVID-19 pandemic shows the lesson that population with high proportion of older people offers a challenge in the future. Learning from the history, we have to prepare the next pandemic which may come in different ways. In fact, the world is getting older including Indonesia. The proportion of older people in Indonesia is increasing rapidly. It is projected to increase slightly in 2055 approximately 21.9% from 19.8% in 2045. In 2010, the proportion of older people around 7.6% of the total population (18,1 million) and based on the 2015 Intercensal Population

Survey, it is predicted to increase to 19.8% in 2045 (Bappenas, Statistics Indonesia, United Nations Population Fund, 2018). Thus, one out of five people in Indonesia is an older person in 2045. Meanwhile, as results as increasing of older people, the life expectancy increased from 55.1 years in 1971 to 70.8 years in 2015 (Statistics Indonesia, 2015), and it is predicted to continue increase slightly until 72 years in 2035 (Adioetomo & Mujahid, 2014).

A BRIEF OF HEALTH SYSTEM IN INDONESIA

Demographic aspects become essential in understanding the current pandemic in terms of addressing and identifying the public health crisis.

The Indonesian government has a policy regarding universal health coverages which targeted to cover all Indonesia people since 2014. The total of Indonesian citizens who have covered by health social security (Jaminan Sosial Kesehatan-JKN) at 171,939,254 in 2016 (BPJS Kesehatan, 2016). In 2018, the number of participants registered in the JKN-KIS program (subsidy category) increased significantly to 78.16% of the total Indonesian population

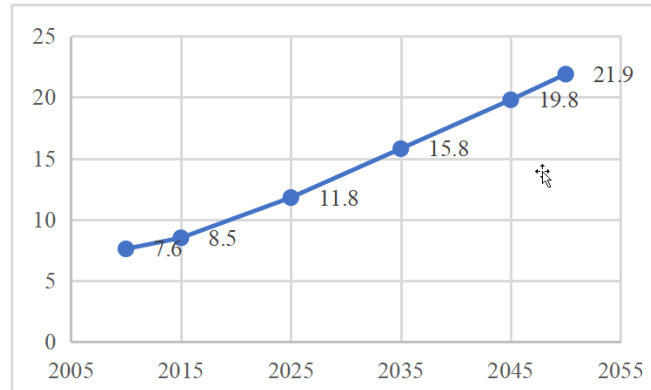


Fig.5. Proportion of Older Indonesian in 2010 – 2050 (%).

Source: Statistic Indonesia, 2010; Bappenas, BPS, and UNFPA (2018, 2023)

(205,071,003 people) (Indonesia Ministry of Health, 2018). Moreover, the health facilities that receive the JKN patients around 27,105 (Indonesia Ministry of Health, (2018). there is 79.44% of the total population have covered by JKN both subsidy and non-subsidy.

In general, the ratio of total beds to 1,000 in Indonesia has reached the minimum standard of WHO. Nevertheless, West Nusa Tenggara (0.74), East Nusa Tenggara (0.83), Banten (0.87), West Java (0.87), Lampung (0.90), West Sulawesi (0.92), Central Kalimantan (0.94) and Riau (0.98) remain below the standard of WHO regarding the bed ratio (Indonesia Ministry of Health, 2020).

Moreover, the proportion of health workers was dominated by nurses [20]. DKI Jakarta (6,174) and East Java (5,156) are the provinces with the highest number of specialist doctors. Meanwhile, West Sulawesi (93) and Maluku

(96) are the provinces with the least number of specialist doctors. Based on this data, there is a disparity between regions. It is crucial issue regarding the health care facilities, especially for those provinces outside Java Island.

ADAPTIVE SOCIAL PROTECTION (ASP)

COVID-19 pandemic shows that the world is experiencing significant environmental changes. Various disaster that occurred in the last few decades, including COVID-19 pandemic are one of the consequences of declining natural wealth due to excessive land use. Both intensity and frequency of many natural hazard events that related to global changes are increasing. As a results of this condition, many populations are facing growing risks, especially vulnerable groups such as older people.

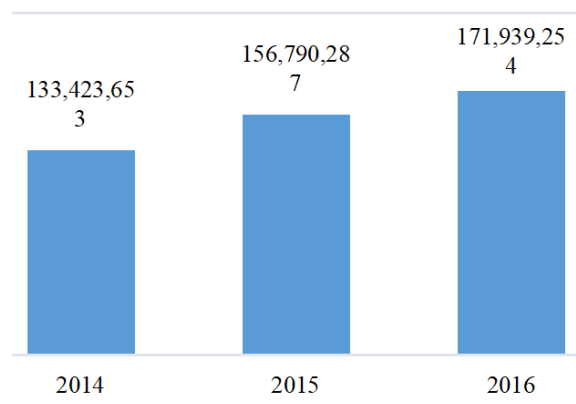


Fig.6. Health Insurance Coverage in Indonesia (BPJS)

Source: BPJS Kesehatan, 2016.

Older people tend to be vulnerable in emergency conditions, especially disaster, before the disaster, in a disaster situation, and in the recovery phase. Age is the prominent factor that causes older people to become vulnerable in disaster (Buckle, 1999; Fernandez, 2022; Smith, 2009). Ageing societies is increasing people who are vulnerable to disaster including pandemic which further add the risks. These significant changes require governments to respond and adapt beyond their traditional mechanism. Hence, new approaches are developed to cope with those risks and increase resilience. Adaptive Social Protection (ASP) is considering as one of promising approach to enhance the resilience of societies (UNU, 2020).

Adaptive Social Protection is a quite different with the common social protection. ASP is a social protection scheme which is more dynamic and flexible approach (UNU, 2020). It is addressed to face the challenges which related to climate change, environmental changes, uncertainty condition and risks. These scheme aims to increase the resilience of vulnerable populations including older people. Meanwhile, the common social protection that we know is designed to reduce poverty and inequality through assistance and support for individuals or households.

ASP has population target, that is, the most vulnerable because this group is the most urgent to have protection. In regard to learn COVID-19 pandemic, age become prominent factor that affect the fatality rate of COVID-19 patients. Age has a positive correlation with death case due to COVID-19. In fact, Indonesia is facing ageing population that increases the number of people vulnerable in facing the next pandemic, disaster, climate change and uncertainty situation.

These approach not only protect during the and after extreme events, but also mitigation activities to reduce the impacts. Therefore, ASP has benefit to increase the resilience of societies, including when they face multiple and interlinked risks. Considering the demography characteristics in the future where the number of vulnerable groups is increasing due to the high proportion of older people, ASP can be a promising approach

to prepare the uncertainty condition in the future like a COVID-19 pandemic.

Many of countries have made essential initial steps and are now working towards develop the ASP approach, including Indonesia. It is shown in medium-term development plan (RPJMN 2020-2024). It started with analyzing the protection gap in the country that will recommend to establish the ASP approach.

LESSON LEARNED FROM COVID-19 PANDEMIC: TOWARD THE AGEING SOCIETIES IN INDONESIA

COVID-19 pandemic becomes a "*wake up call*" the efforts to build and strengthen resilience as the the agreement in Sendai framework for action 2015-2030. Building resilience is not short-term process and it needs strong commitment and sustainable effort from many parties. Through COVID-19 pandemic and other previous pandemic in history, there are many lessons to be learned in facing the next pandemic or uncertainty condition which can occur anytime.

This paper addresses the four important notes that can be learned from COVID-19 pandemic. First, the world is getting older, including Indonesia. In 2020, Indonesia is facing ageing population due to the proportion of older people reach 10.7% and it is predicted to continue increase as well as the life expectancy. Ageing societies result the challenges due to the number of vulnerable people is rising. In the current pandemic situation, older people tend to increase the risk of fatality rates. It is because several problem such as physical condition and chronic diseases. Moreover, older patients have propensity to recover longer than younger patients, thus for some countries, they are preferring to focus on health of productive ages.

Meanwhile, the gap disparity of health workers remain problem, especially specialist doctors in some regions (remote area). It is important to ensure the number of doctors that needed and the bed and medical equipment in the hospital should be fulfilled. World Health Organization (WHO) revealed that region is associated with access to health facilities (WHO,

2008). Similar with WHO, Ladusingh and Ngangbam (2016) explained that region could help understand the differences in access to health care (Ladusingh & Ngangbam, 2016). Older people with disability tend to have difficulties to access the health facilities especially for those who are living in rural areas (Seftiani, 2017). Health care facilities in some rural areas are not quite enough due to the geography location. In fact, amidst these limitations, there are older people who live without social protection including health insurance. This condition adds the challenge regarding providing the better and accessible health for older people.

The second one is, age structures become a prominent factor to understand the death cases due to COVID-19. The comorbidities on older people become one of the reasons that make the condition getting worse. Some countries with high proportion of older people like in Indonesia faced the situation where the deaths caused by chronic diseases are increasing, which can interact with the Coronavirus.

To prevent the increasing of people who have chronic diseases, a massive health promotion is needed to encourage young people to have a healthy lifestyle and habits. Hopefully, it can reduce the number of people with chronic diseases. Also, clean behaviour such as washing hands regularly and using mask not only in pandemic situation should be practices in daily life. Ministry of Health should be promoted massively in the communities about clean and healthy lifestyle program.

Third, it is highly important to address the role of demographic data, especially for understanding the pandemic. COVID-19 can be understood through population trends and patterns. However, it can be occurred when the data and analysis are available. Regarding the problem of mortality data due to the COVID-19, it is necessary for the country to have better and integrated data registration. The accurate data can support the government to make a comprehensive policy in regard to respond and deal with the pandemic situation.

The last note is about how the country prepare better approach of social protection to

face uncertainty situation such as pandemic, climate change and other disasters. In this stage, the government has been starting to develop the adaptive social protection. However, this idea needs a strong commitment from various parties. It is because Indonesia has a broad geographical and diverse characteristic of people.

CONCLUSION

Gaining better understanding about COVID-19 pandemic, it is important to see this situation beyond health problems. COVID-19 shows knowledge and experiences that will be lessons learned for the country to face other uncertainty condition in the future. Demographic aspects play an important role to understand the current pandemic that can support as a basis policy making. Several demographic aspects, such as age structures and sex, show the prominent role during this current pandemic. Older people tend to have higher risks than other age groups, especially when they exposed to coronavirus. Males have higher propensity to death when they are exposed to the coronavirus. Health condition of older people, having chronic diseases, lack of social protection and where they are living can be some explanations. Considering the increasing of older population in the future, strengthening resilience should be done by seeing vulnerable groups such as older people. A new promising approach of social protection can be one of the ways to have a better adaptation.

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