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FINAL REPORT

Rapid Survey on COVID-19 behaviors, social, and economic impact on communities in Bone District, South Sulawesi, Indonesia

23 April - 15 May 2020

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Snapshot of findings

- **Cases** (15 May 2020)**:** Confirmed cases in Bone increased to 6 people. 21,249 people tested, 14 under treatment (PDP), 310 under surveillance (ODP); and 9,796 at risk (ODR). *Source: Gugus Tugas.*
- **360 total survey participants**, data collected from 23 April - 15 May 2020.
- **Health behaviors.** 85.3% used fabric face masks, 11.4% used medical masks, with 3.3% not using any mask. Reported hand washing with soap was 96.4%. There were significant differences in using face masks by age. Adults aged 18-60 years (97.1%) were more likely to use face masks than children aged under 18 years (83.3%) and elderly aged over 60 years (85.7%).
- **Social distancing**. 28.1% went out every day, 44.4% went out at least 1-2 times a week, and 5.3% did not go out at all. 57.5% kept a distance of 1 meter from other people, while 39.2% asked other people to stay at least 1 meter away. Adults aged 18-60 years (97.1%) were more likely doing outside activities than children aged under 18 years (60.2%) and elderly aged over 60 years (57.1%).
- **Social support received.** More has been distributed, although 65.6% still have received nothing. Over 22.2% received government help; 13.9% from community organizations (e.g., RT, RW, PKK), and 2.8% from NGOs. Those with income below UMP (38.9%) were more likely to receive social support compared to those with above UMP (18.2%).
- **Social support given**. 14.2% undertook fundraising; 16.4% distributed donations; 11.4% donated to community organizations; and 13.6% became volunteers. Those with income above UMP (64.9%) were more likely to do social support compared to those with below UMP (38.5%).
- **Social support needed.** 60.0% need groceries (food), 48.9% need masks, 40.0% need vitamins and supplements, 38.1% need other support (internet, electricity, gas or free water), 37.2% need hand sanitizer, 18.1% need gloves, 6.3% need cash, and 2.1% need disinfectant, 1.8% need soap and washing area.
- **Economic, social and personal impacts.** 52.2% reported less income, 50% had difficulty meeting daily needs and 16.1% lost their jobs. 68.3% fear infection, 35% feel stressed or angry.
- **Communication channels.** Most people received COVID-19 information from television (87.5%) and social media (68.9%). Television was also considered the most reliable channel (72.5%); the most reliable source was national government (66.4%).
- **COVID-19 hoaxes and misinformation**, some quotes about that: *"If it's news from Facebook, I'm a little doubtful. I only believe news from the government. I prefer news from television. I believe, because on television, the government talks directly" (R3); "We know from the news that is broadcast on TV. Because if on social media, a lot of news is not true" (R8)*
- **Information needed.** 41.9% wanted to know case numbers, 39.7% wanted to know virus transmission routes; and 46.4% wanted information on available health services.

1. Background

Coronavirus disease 2019 (COVID-19) is a virus first identified in China and reported to the WHO in December 2019. In January 2020, the WHO declared COVID-19 a global health emergency. Most people only experience mild respiratory illness symptoms. However, some people can experience severe symptoms, including pneumonia, resulting in lung damage and death (Sani, Mariska, Prasetya, 2020). COVID-19 is more dangerous for older people and those with pre-existing medical conditions, such as diabetes, high blood pressure and heart disease (Liu et al, 2020). The first case was reported in Indonesia on 2 March 2020 and on 13 April the government declared a national disaster. On 10 April, the government initiated Large Scale Social Restrictions (PSBB), including closing schools, workplaces, restricting movement and closing public places. The local, Indonesian and global effects of COVID-19 have an impact on people's lives, families, communities and economies.

Bone consists of 27 *kecamatan* (sub-district), 335 *desa* (villages), with Watampone as the capital. Bone has 751,026 people, the most populous in South Sulawesi Province. By 15 May 2020, a total of 21,249 people have been tested for COVID-19 with six (6) confirmed cases; 14 patients under treatment (*Pasien Dalam Pengawasan*/PDP); 310 under surveillance (*Orang Dalam Pantauan*/ODP); and 9,796 people at risk (*Orang Dalam Risiko*/ODR) (COVID-19 Task Force, 2020). Movement restrictions and other COVID-19 responses came into effect in Bone on 27 May 2020. Health promotion efforts include cleaning with disinfectant, distribution of face masks, and hand sanitizer. In 2019, as part of its BERANI program, UNICEF commissioned Tulodo to manage a project in Bone to prevent child marriage and improve menstrual health. The project staff and networks are being used to implement this study.

2. Objectives

This study aims to answer the question: what is the impact of the COVID-19 pandemic in Bone, South Sulawesi, Indonesia over time? It explores how communities have responded, including any changes in health behaviors (e.g. use of face masks, practicing handwashing with soap, and social distancing) and how this outbreak has affected their economic status. We also explore their exposure to communication channels and campaign messages. This study also provides recommendations for partners and stakeholders in Bone to consider.

3. Methodology

This cross-sectional study used a mix of quantitative and qualitative methods, conducted weekly from 23 April to 15 May 2020. This enabled us to track changes from week to week and also over the life of the study. The quantitative survey was conducted via phone and online. We used snowball sampling methods to recruit via phone, while for online we distributed it through partners. The total target sample was 450 respondents, 360 completed the survey by telephone or online (80% of target). For the qualitative study, we conducted 15 interviews via phone.

4. Results

Below are the results from four weeks of data collection (23 April - 15 May 2020). 360 respondents total joined the study (202 via phone and 158 via online).

4.1 Sample characteristics

- ***a. Location.*** 15.0% (n=54) from Salomekko sub-district, 11.7% (n=42) from Tanete Riattang Barat, and 10.0% (n=36) from Libureng sub-district.
- ***b. Gender.*** 58.1% female (n=209), 41.9% male (n=151).
- ***c. Age.*** 30.6% aged 31-40 years; 27.2% aged 21-30; 22.2% aged 41-50; 12.5% aged 51-60; 5.6% aged 11-20; 1.7% aged 61-70; and 0.3% over 70. 96.4% adults (19-60 years); 1.9% elderly (over 60 years); and 1.7% children (under 18 years).
- ***d. Breadwinner.*** Father (73.9%), mother (13.6%), other males (8.6%), and females (3.9%).

e. ***Education.*** 46.7% (n=168) university/college, 26.4% (n=95) completed senior high school, 11.7% (n=42) completed elementary school, 10.6% (n=38) completed junior high school, 1.7% (n=6) not completed elementary school, 1.4% (n=5) did not complete senior high school, 1.1% (n=4) not school, and 0.6% (n=2) not completed junior high school.

f. ***Income.*** 26.1% (n=94) crop sales, 25.3% (n=91) had permanent jobs, 13.1% (n=47) non-agricultural casual labor, 5.3% (n=19) sale of food aid, 4.4% (n=16) sale of livestock and animal products, 4.4% (n=16) agricultural waged labor, and 3.1% (n=11) retirement pension. 78.6% (n=283) received less than Provincial Minimum Wage (UMP) and 21.4% (n=77) received the same and more than Provincial Minimum Wage (UMP). *Upah Minimum Provinsi* (UMP) in South Sulawesi is IDR 2,860,382 (USD200) per month.

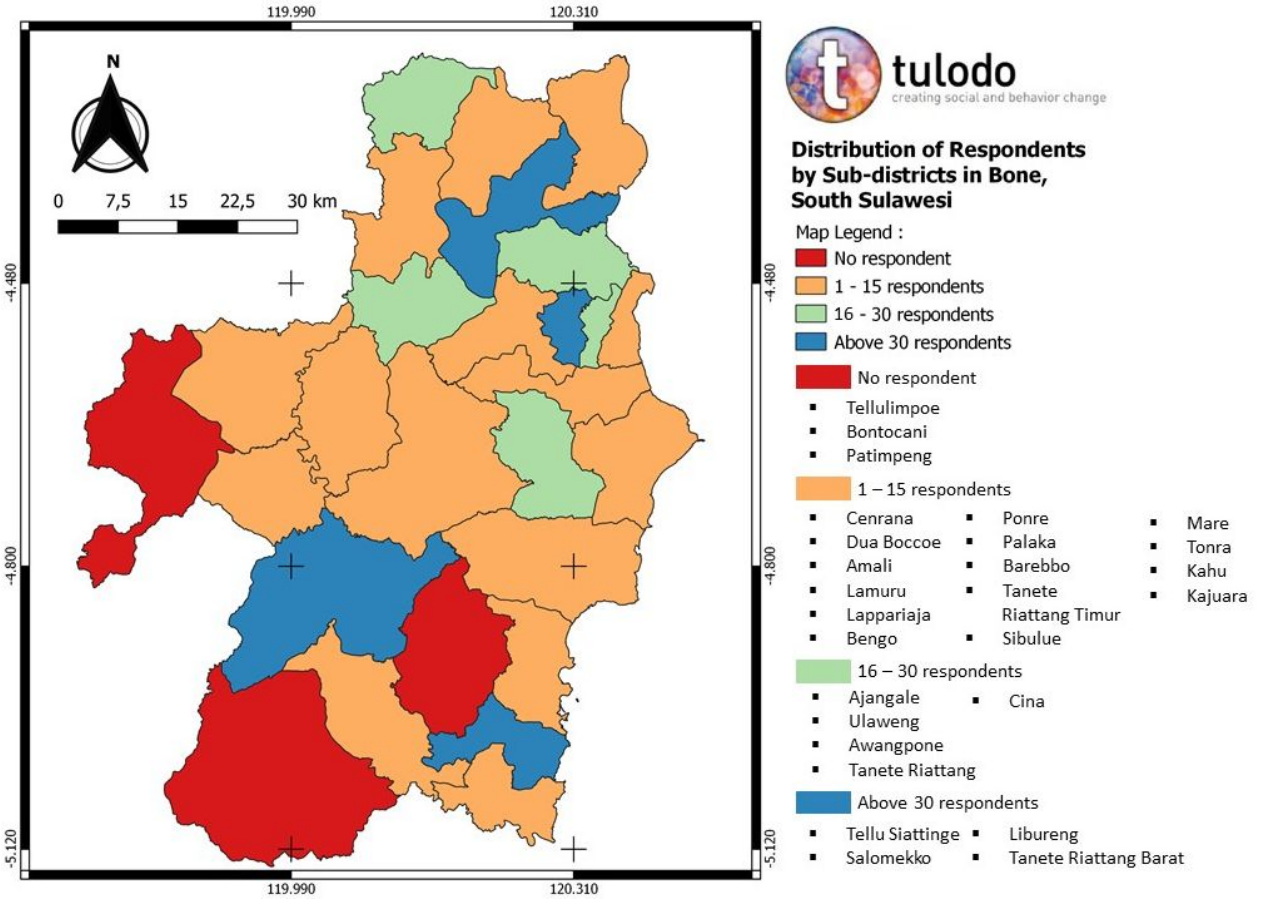

Figure 1. Distribution of respondents in Bone

g. ***Government support.*** 9.2% (n=33) received goods from government agencies, 4.4% (n=16) received cash, 7.8% (n=28) received services, and 78.6% (n=283) received nothing. Of those who received support, 42.9% (n=33) received *Program Keluarga Harapan* (PKH) cash payments; 37.7% (n=29) were registered on the Healthy Indonesia Card (KIS) program; 24.7% (n=19) received *Beras Sejahtera (Rastra)* rice allowance; 19.5% (n=15) were registered on the Kartu Indonesia Pintar (KIP) program; 5.2% (n=4) received *Kelompok Usaha Bersama* (KUBE) program cash payments; and 2.6% (n=2) received services from Asistensi Sosial Penduduk Lanjut Usia Terlantar (ASLUT).

h. ***Elderly.*** 30.3% said there was one person aged above 60 years in the household; 14.4% had two elderly people; 2.3% had three or more elderly, and 53.1% reported no elderly.

4.2 Results from Quantitative Study

Analysis of the quantitative data included proportions and correlation tests for behaviors, impact of the COVID-19, communication, and social support during the pandemic.

4.2.1 Behaviors

a. ***Handwashing practice.*** 90.6% (n=326) washed their hands after doing activities outside the house, 67.8% (n=244) before/after eating and drinking, 58.1% (n=209) after handling goods from outside, 34.2% (n=123) before/after preparing food, 31.1% (n=112) after using the toilet, 21.9% (n=79) after shaking hands, and 19.7% (n=71) after sneezing and coughing.
b. ***Handwashing tools.*** 96.4% (n=347) washed their hands with soap, 33.9% (n=122) used hand sanitizer, 13.6% (n=49) wiped hands using cloth/tissue, and 9.7% (n=35) used running water.
c. ***Face masks.*** 85.3% (n=307) used fabric face masks, 11.4% (n=41) used medical masks, while 3.3% (n=12) didn't use masks. Of those who used face masks, 85.9% (n=299) used masks when going to the market/stalls/shops, 17.0% (n=59) when there were household members with cough/flu, 31.3% (n=109) when going to work, 20.4% (n=71) when going to health services, 6.6% (n=23) when treating sick people, 43.3% (n=151) when visiting relatives/friends/neighbors' house. There were significant differences in using face masks by age ($p=0.047$, $p<0.05$). Adults aged 18-60 years (97.1%) were more likely to use face masks than children aged under 18 years (83.3%) and elderly aged over 60 years (85.7%). 42.9% elderly aged over 60 years old didn't go out at all from home.
d. ***Social distancing.*** 57.5% (n=207) kept a distance of 1 meter from other people, 39.2% (n=141) asked other people to stay at least 1 meter away, 24.7% (n=89) asked others to wear a face mask, 15.8% (n=57) did not change any behavior, and 10.3% (n=37) provided someone with a face mask.
e. ***Outside activities.*** 44.4% (n=160) went out at least 1-2 times a week, 28.1% (n=101) went out every day, 22.2% (n=80) went out at least 3-5 times a week, and 5.3% (n=19) did not go out at all. There were significant differences in terms of outside activities by week ($p= 0.008$, $p<0.05$) and age ($p=0.000$, $p<0.05$). Those who did outside activities in week 2 (98.4%) were higher than the other weeks (week 1: 97.8%; week 3: 90.9%; and week 4: 89.4%). Adults aged 18-60 years (97.1%) were more likely doing outside activities than children aged under 18 years (60.2%) and elderly aged over 60 years (57.1%).

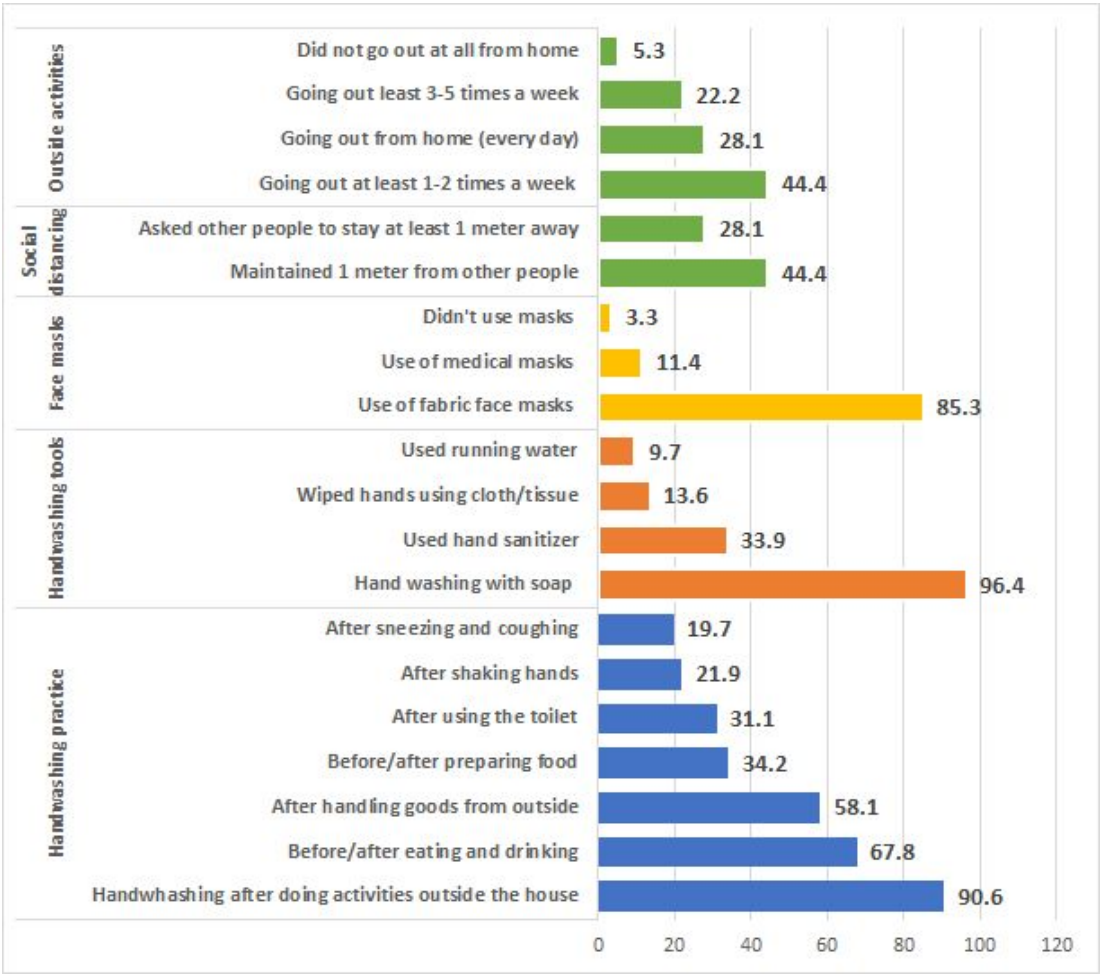

Figure 2. Community behaviors during COVID-19 in Bone

4.2.2 Impact of COVID-19

a. ***Employment.*** 36.7% (n=132) worked as usual, 23.3% (n=84) worked from home, 22.2% (n=80) did not work, and 17.8% (n=64) worked as usual but with restrictions, e.g.: changes in work schedules or shifts.
b. ***Income.*** 52.2% (n=188) reported less income, 26.4% (n=95) said the same income, and 20.8% (n=75) reported no income (IDR 0), and 0.6% (n=2) reported income increased.
c. ***Feeling isolated.*** Most people did not feel isolated (72.5%, n=261), 17.8% (n=64) reported sometimes feeling isolated, 6.4% (n=23) almost never feeling isolated, and 3.3% (n=12) often feeling isolated.
d. ***Other impacts.*** 68.3% (n=246) feared infection by/of other people, 52.2% (n=188) said their revenue has decreased, 50.0% (n=180) had difficulty meeting daily needs, 35.0% (n=126) felt stressed or angry, 23.3% (n=84) reported being away from family, 18.1% (n=65) were afraid of being isolated (due to infection), and 16.1% (n=58) lost their jobs.

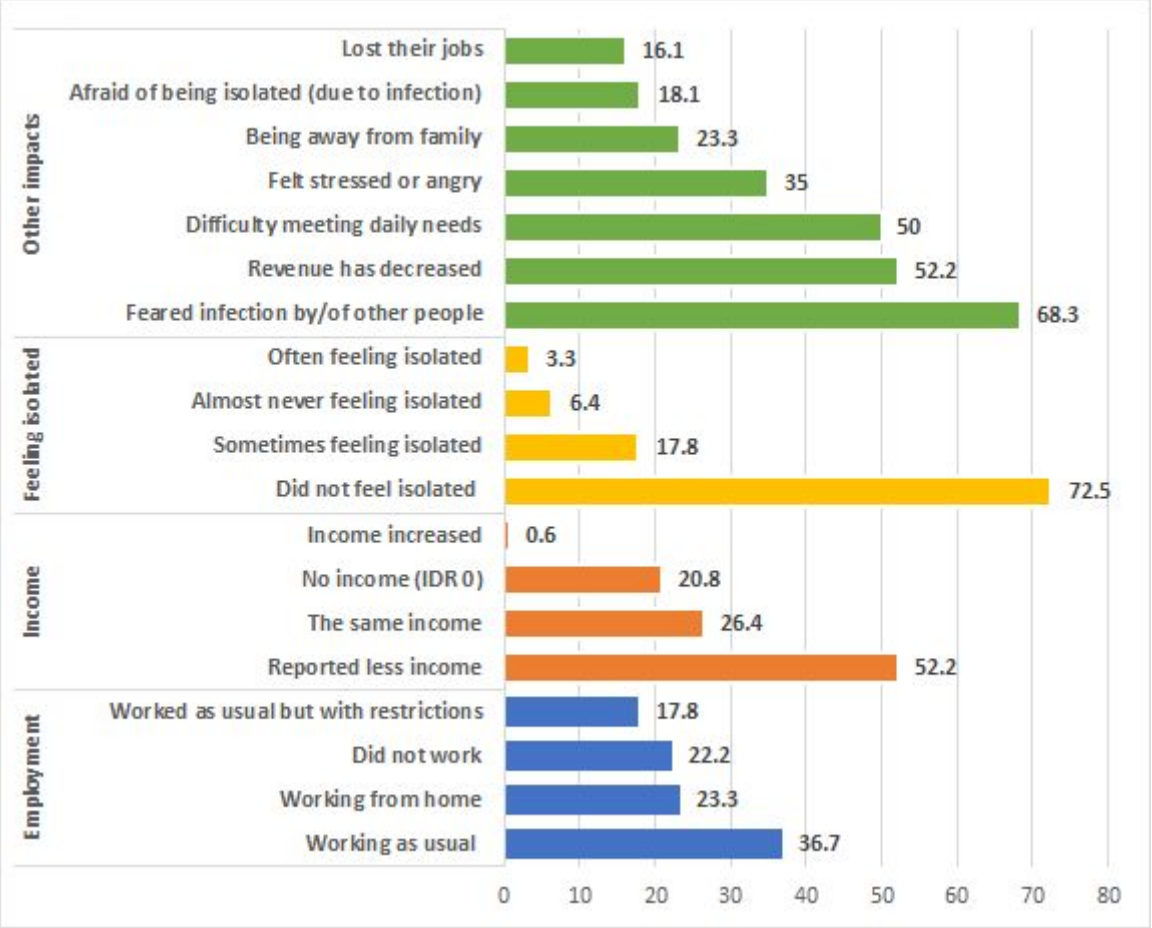

Figure 3. Impact of COVID-19 in Bone

4.2.3 Communications

a. ***Exposure to COVID-19 information.*** 87.5% (n=315) received information from television, 68.9% (n=248) exposure from social media, 39.4% (n=142) from online articles, 32.8% (n=118) from mosques, 28.1% (n=101) from banners/posters, 22.5% (n=81) from "*mobil keliling*", 16.9% (n=61) from SMS, 11.4% (n=41) from pamphlets, 10.0% (n=18) from newspapers, and 5.0% (n=18) from radio. Of those who mentioned social media, 82.7% (n=205) from Facebook, 77.8% (n=193) received information from WhatsApp, 29.4% (n=73) from Instagram, 32.7% (n=81) from YouTube, 5.2% (n=13) from Twitter, 3.6% (n=9) from TikTok, and 0.8% (n=2) from Line.

b. ***Source of information.*** 81.1% (n=292) said their information was from national government, 60.0% (n=216) from provincial/sub-district government, 43.3% (n=156) from the village government, 41.9% (n=151) from friends, 41.1% (n=148) from family members, 23.3% (n=84) from religious leaders, and 23.1% (n=83) from neighbors.

c. ***Most reliable channels and sources.*** 72.5% (n=261) said television was the most reliable, 11.1% (n=40) online articles, and 8.9% (n=32) said social media. The most reliable source was national government (66.4%, n=239) and village government (13.1%, n=47).

d. ***Information needed.*** 46.4% (n=167) wanted available health services, 41.9% (n=151) about the number of cases, 39.7% (n=143) said they needed to know about virus transmission routes, 38.9% (n=140) need fact checking of hoaxes and misinformation, 36.4% (n=131) on the large-scale social restrictions (PSBB), 28.3% (n=102) on lockdown areas, 22.1% (n=83) need information about types of face masks, 19.2% (n=69) said hand washing practice, 18.3% (n=66) on making hand sanitizer, 17.8% (n=64) about mental health, 16.4% (n=59) need information about making face masks, and 5.4% (n=18) when the outbreak/COVID-19 ended.

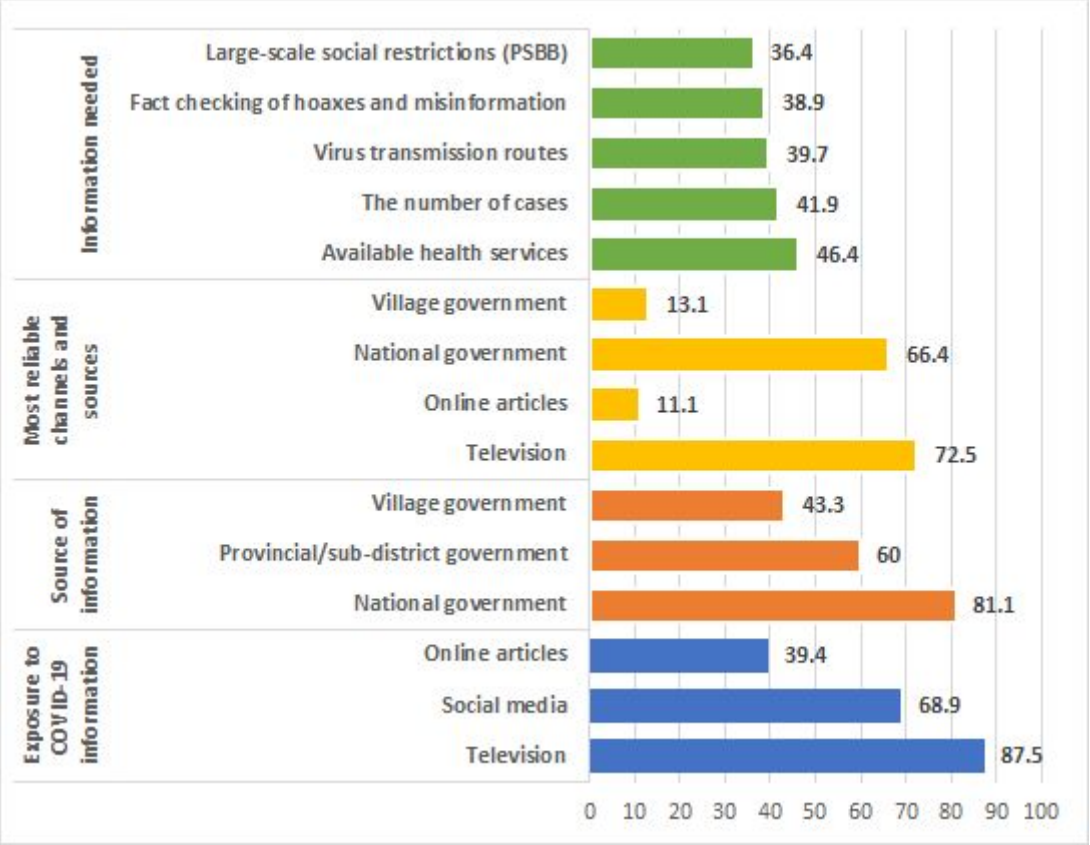

Figure 4. Communication during COVID-19 in Bone

4.2.4 Social support

a. ***Social support received.*** 65.6% (n=236) never received any support, 22.2% (n=80) received government support; 13.9% (n=50) received community organization support (e.g., RT, RW, PKK), and 2.8% (n=10) received NGO support. Of those who received support, 65.3% (n=81) received face masks, 23.4% (n=29) received other support (internet, electricity, gas or free water), 21.8% (n=27) said groceries (food), 17.7% (n=22) received hand sanitizers, 5.6% (n=7) received cash, 3.2% (n=4) received vitamins and supplements, and 1.6% (n=2) received gloves. There was a significant difference in terms of social support received by level of income (p=0.000, p<0.05). Those with income below UMP (38.9%) were more likely to receive social support compared to those with above UMP (18.2%). There was a significant difference in terms of not received social support by level of income (p=0.001, p<0.05). Those with income above UMP (81.8%) were more likely to didn't receive social support compared to those with below UMP (61.1%).

b. ***Social support given.*** 55.8% (n=201) did not contribute to social support, 47.2% (n=68) distributed masks, 30.6% (n=44) distributed groceries (food), 20.1% (n=29) distributed cash, 16.4% (n=59) distributed donations to beneficiaries, 14.2% (n=51) fundraised, 14.6% (n=21) distributed hand sanitizer, 13.6% (n=6) became volunteers, 11.4% (n=41) donated to community organizations, 4.9% (n=7) distributed vitamins and supplements, and 1.4% (n=2) distributed personal protective equipment for medical personnel (APD). There were significant differences in terms of social support given by week (p= 0.000, p<0.05), gender (p=0.000, p<0.005), and level of income (p=0.000, p<0.05). Those giving support in week 1 (57.3%) are higher than other weeks (week 2: 54.9%; week 3: 40.0%; and week 4: 20.2%). Male respondents (55.6%) were more likely to give support compared to female respondents (35.9%). Those with income above UMP (64.9%) were more likely to do social support compared to those with below UMP (38.5%).

c. ***Social support needed.*** 60.0% (n=216) need groceries (food), 48.9% (n=176) need masks, 40.0% (n=144) need vitamins and supplements, 38.1% (n=137) need other support (internet, electricity, gas or free water), 37.2% (n=134) need hand sanitizer, 18.1% (n=65) need gloves, 6.3% (n=21) need cash, and 2.1% (n=7) need disinfectant, 1.8% (n=8) need soap and washing area.

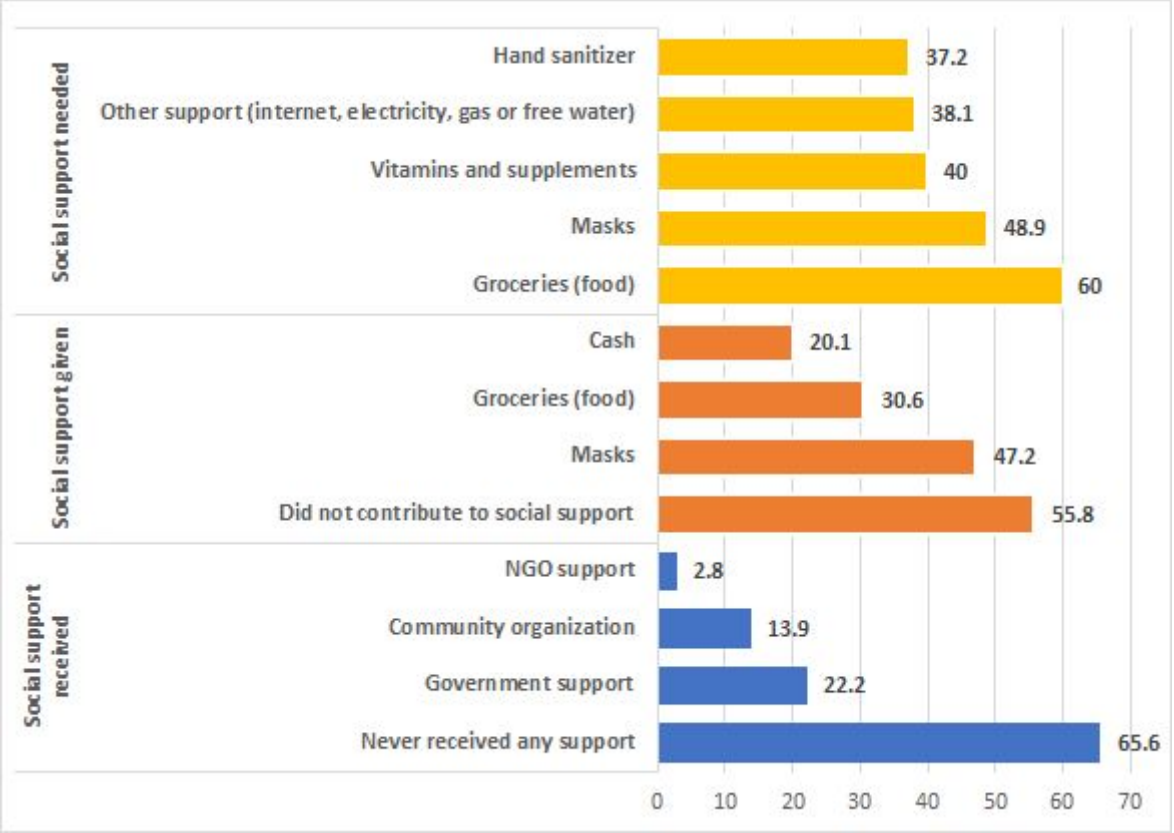

Figure 5. Social support given, received and still needed during COVID-19 in Bone

4.3 Results from the qualitative study

Qualitative research was carried out to obtain in-depth information about the community's perceptions, beliefs and understanding about COVID-19, including: behaviors, impact of COVID-19 situation, communications, social support, and issues for the elderly.

4.3.1 Information related to COVID-19

4.3.1.1 Community knowledge regarding COVID-19

A total of 15 respondents were interviewed to find out how much they understood about the COVID-19 pandemic. When asked about the cause of COVID-19, answers included that it was the result of unhealthy life behaviors, the emergence of new viruses, and some respondents linked the disease with the origin area of the pandemic, China. Here are some quotes:

> *"It is caused by of lack of hygiene, poor health" (R11);*
> *"The cause is a virus that has a round shape. I know this info from the picture" (R1);*
> *"In my opinion, corona comes from Wuhan City in China" (R13).*

Respondents were also asked about COVID-19 transmission. All respondents stated that transmission of the virus can occur when there is a direct contact with an infected person, for example because of not maintaining distance from that person. Some respondents also explained the details of the transmission type, which is not only through physical contact, but also through the air or touching goods contaminated with viruses. Here are some quotes:

> *"(It) can be transmitted through sneezing, also by touching. Therefore we must wash our hands often" (R5);*
> *"By touching, or transmitted through the air. Or being exposed to fluids from being infected, like saliva can be contagious" (R11);*
> *"Through sneezing. Transmission can also be through objects such as money or items that are normally handled" (R3).*

Respondents were also asked if they knew the general symptoms of people who were indicated to have COVID-19. Most of them (14 out of 15 respondents) mentioned high body temperature, cough, runny nose, shortness of breath, and also sore throat. Some respondents also mentioned that some people affected by COVID-19 may not show symptoms.

> *“Symptoms such as shortness of breath, coughing, high body temperature, attacking the lungs" (R8);*
> *"As for what I have read, now we have many cases without symptoms. There are some people who have no symptoms, but when tested, it turns out that the person is positive for COVID-19" (R5).*

4.3.1.2 COVID-19 hoaxes and misinformation

As there were some hoaxes and misinformation spread in the community, we also asked respondents about how they filtered the information. Many respondents (10 out of 15 respondents) stated that they trust television as a media because it is direct and comes from the national government. Some respondents also compared television with social media as they stated there was a lot of information that was not trusted circulated in social media, so they preferred television.

> *"If it's news from Facebook, I'm a little doubtful. I only believe news from the government. I prefer news from television. I believe, because if on television, the government talks directly" (R3);*
> *"We know from the news that is broadcast on TV. Because if on social media, a lot of news is not true" (R8).*

Respondents were also asked whether they were accustomed to finding out the validity of the information they received. Less than half (6 out of 15 respondents) have ever tried to find out more details about the information they got. There are various ways that they did that, such as finding information from other media or comparing it. There were also those who asked directly to trusted colleagues/family members.

> *"For example, at that time I got information from social media about the symptoms that we have COVID-19. I don't just believe it, but compare it with the news on TV" (R6);*
> *"There was news that a family had been affected by COVID-19, but they did not want to be taken to the hospital. I then checked it with one of the midwives in the village, apparently the correct information was that there were two people who were sick, but it had not been confirmed positively, they were only from the red zone in Java" (R13);*
> *"Sometimes the news is very convincing, there are pictures, logos and so on. Usually I check on the Bone Terkini (local Facebook account of the people of Bone)" (R10).*

For some respondents, they stated that if they felt uncomfortable about the news, they would not spread the news to the people closest to them. Here are some quotes:

> *"I see it, or I hear the news, but I don't practice it" (R13);*

> *"If I do not know the source of the news, then I will not forward to another, I am afraid it is a hoax. If the source is trusted, like the Bone Terkini, then I will share it with my family" (R11).*

4.3.1.3 Information for the elderly

Out of 15 respondents, 13 had elderly family members (over 60 years) living with them. When asked how they convey information about COVID-19 to the elderly (mostly their parents), most of them (11 of 13 respondents) stated that their parents already knew information about COVID-19 through television or other media. Here are some quotes:

> *"Parents often watch corona on TV, so it's easier to tell them" (R8);*
> *"He often watches the news on TV so he knows. My father, after seeing the news on TV, immediately commented 'wow danger if Corona gets to this village, because there is no cure yet'. He is more at home than traveling outside" (R13).*

Younger family members were more likely to inform the elderly in the family by sharing the latest information, helping to provide facilities to maintain hygiene, or reminding them to look after themselves by wearing masks, washing hands, and so forth. Here are some quotes:

> *"He understands, he already knows that this virus exists. He also knows the rules of washing hands, how to prevent it. If I get a brochure or news, I usually translate it into bugis language so that he can understand more" (R3);*
> *"First, I try to remind my parents to stay healthy, wash their hands, wear masks when leaving the house. But she rarely goes out of the house. We provide a small basin near her room which is always replaced with clean water, so she often washes her hands" (R12).*

4.3.2 Changes in behavior during the COVID-19 Pandemic

4.3.2.1 Handwashing behaviors

Out of 15 respondents, 14 respondents stated that during the COVID-19 pandemic, they washed their hands more often. The remaining respondent stated the habit of washing his hands was the same, because before COVID-19 his family was accustomed to diligently washing their hands.

> *"In a situation like this, after doing activities outside the home, you will immediately wash your hands. Happens the frequency of washing hands more often. Because we know how to prevent Corona by washing hands frequently" (R3);*
> *"Same as usual. I usually wash my hands if I want to cook, want to pray, or shop from the market. So this new situation has no effect, because it has become a family habit" (R4).*

When respondents were asked what their reasons for more frequently washing their hands, all respondents stated it is a way to prevent COVID-19. Here is a quote:

> *"Fear of contracting the virus. Yes, I feel scared. Yes, it's better if you wash your hands often. For cleanliness" (R7).*

We also asked if there are barriers both in terms of handwashing facilities and access to soap and water. Almost all (14 respondents) stated that they did not have any barriers in carrying out new habits. Some even stated that they took the initiative to build a handwashing station that could be used by the family or neighbors. While one respondent stated there were obstacles, because in his area it was difficult to get hand washing soap and hand sanitizer and the price was expensive. Here are some quotes:

> *"There is no difficulty. In fact, I provide a small gallon outside the house, so that my family members can change their habits. I made it myself from used gallons" (R12).*
> *"The goods (soap, hand sanitizer) are difficult to obtain in the village, the price will also be more expensive" (R8).*

Changes in handwashing habits were not only experienced by respondents, but also by family members. Some of them also make new rules in the family, such as the obligation to wash their hands before entering the house, otherwise they are not allowed to enter the house.

> *"I provide places to wash hands on the porch and behind the house. We use the porch one for guests who come to the house. While behind the house is for family members. They may not enter the house, if they haven't changed clothes and washed their hands" (R13).*

4.3.2.2 Wearing face masks

Almost all (14 of 15 respondents) stated that they used masks during COVID-19, especially for activities outside, such as going to the office or to the market. They use masks to prevent virus infection. While one respondent stated that she did not use a mask, this was because she stayed at home all the time. Here are some quotes from respondents:

> *"Before the corona frankly we did not wear masks. After corona, I use it every day. Masks must be on standby, especially when working in an office wearing masks, it is mandatory at all times" (R5);*
> *"Most importantly, if you want to do activities outside the home, wearing a mask is a must. So you don't get infected, for example when you go to the market" (R6);*
> *"I don't wear masks. Because since the COVID-19 outbreak, I have always stayed at home" (R4).*

When asked about the motivation to use a mask, some respondents stated that it was because of self motivation as they did not want to be infected or infect other people. The motivation to use a face mask was also influenced by others such as the village government. Here are some quotes:

> *"I use a mask because of my own desire. As a precaution, because we don't know who we are interacting with" (R5);*
> *"The village head once came here, in the village to announce that the community must wear a mask" (R2).*

Respondents mentioned several sources where they obtain the masks. Some bought from the nearest shop or pharmacy, some made their own cloth masks, and some also received masks donated by the local government. Here are some quotes:

> *"There are masks given by the local government, there are also those that I bought myself" (R7);*
> *"Initially it was fun to learn from Youtube. Now I can produce my own mask and sell it to the public" (R11).*

Most (13 out of 15 respondents) stated that there was a change in the frequency of activities outside the home. They stated that they rarely traveled and only left the house for urgent matters such as to the office or to the nearest market to buy their daily needs. While the other two respondents stated that they continued doing their activities as usual as it was related to the work such as farmers who still had to go to the fields and did not interact with many people. Here are some quotes:

> *"I went out of the house, just to go to the market. Before, I had been to the puskesmas to have my sick child examined and checked for pregnancy. By the midwife, it was suggested to temporarily stop coming to the puskesmas, because it said the conditions were not safe for children and pregnant women" (R1);*
> *“Nothing has changed, still as usual, I still went to the fields. It's prohibited to go outside the house to avoid the crowd. Because in the rice fields I work alone, not meeting many people” (R8).*

4.3.3 Impact of COVID-19

COVID-19 has a number of impacts on people’s lives. Some impacts were decrease in revenue, difficulty in meeting daily needs, feeling stressed, and changes in communication methods.

4.3.3.1 Revenue decreased/no income

Some respondents who work as small traders admit that sales of their goods have declined. There are also those who think this is the result of activity restrictions, so that they cannot sell to the full.

> *"The impact I feel is a declining income. I usually sell clothes, but since Corona, buyers have decreased" (R2).*

4.3.3.2 Difficulties in obtain daily needs

Some respondents stated that since there were activity restrictions, some staples were difficult to obtain in the market. Because of the prohibition for sellers who come from outside the area.

> *"What can be bought if there are no sellers. Even now bananas are hard to come by, the price is expensive. Actually many want to buy, but there are no sellers, because they come from outside the area so they cannot enter the village" (R1).*

4.3.3.3 Changes in communication

Some respondents stated that the office where they worked adapted to the situation by doing all activities online. The obstacle in this case is the limited facilities and ability to use technology.

> *"For the time being all field activities have been postponed. Communication with colleagues is only done via telephone and Zoom. Because working from home is often constrained by poor internet signals, it is easier in the office because wifi is available" (R5).*
> *"It's also hard to handle all work from school because it's all online. This is new to me, I'm already old" (R12).*

4.3.3.4 Feeling stressed

Some also stated that they felt stressed by the current situation due to the uncertainty.

> *“Then I also felt stressed. Why are conditions like this huh? Everything is uncertain” (R11).*

We also asked them about how they cope with the impacts during this situation. Answers from respondents can be categorized into two - active and passive - as seen below:

4.3.3.5 Passive group

They do not know how to overcome the obstacles they are experiencing, and wait for other parties to provide assistance.

> *"I have done nothing" (R1);*

> *"Until now there has been no information regarding assistance that has been received. But there is information that there will be social assistance that will be distributed through village officials" (R3).*

4.3.3.6 Active group

They try to minimize the impact they experience. For example, by trying to increase other streams of income, using new strategies in selling, and home gardening so that there is no need to buy food and so forth.

> *"I grow vegetables around the house and in the family garden. So later when the results can be harvested, I can consume them and not have to buy from a vegetable trader" (R13);*
> *"To increase revenue, I now sell masks and sell items online" (R11).*

4.3.4 Social support

During the COVID-19 pandemic, several respondents stated that they had received assistance in various forms such as masks, handwashing areas, or basic food necessities.

> *"Once there was help in the form of masks, each house got two masks. Village officials went to the homes of each resident to distribute them" (R8);*
> *"There is help in the form of a place to wash hands that is distributed to each house" (R2);*
> *"I got groceries: 5 kg of rice, 1 L of oil, 1 kg of sugar and Indomie from P2TP" (R7).*

Interestingly, many respondents stated that they did not know the mechanism or conditions to obtain social assistance through existing channels.

> *"I do not know, some say that the recipient's data is sourced from Jakarta. I want to protest but I also do not know where to protest. Yesterday, I was asked to collect KK (family card) by village officials, but until now there has been no social assistance that I received. Village officials said they would filter the data of the recipients of social assistance" (R3);*
> *"If someone says there is no data collection of recipients of social assistance, it seems like it's a strategy from the village officials. So that it does not cause social jealousy" (R14).*

5. Discussion

5.1 Behaviors

5.1.1 Wearing protective face masks

The proportion of people wearing face masks was high and there was no significant difference by week. People wore masks when they went out from home. People were more likely to wear fabric masks (85.3%) than medical masks (11.4%). Adults aged 18-60 years (97.1%) were more likely to wear masks than children aged under 18 years (83.3%) and elderly aged over 60 years (85.7%). In addition, from the qualitative research, we found 14 references on wearing masks during COVID-19, especially if they have to do activities outside home. Here are some quotes: *"Before the corona frankly we did not wear masks. After corona, I use it every day. Masks must be on standby, especially when working in an office wearing masks, it is mandatory at all times" (R5); "Most importantly, if you want to do activities outside the home, wearing a mask is a must. So you don't get infected, for example when you go to the market" (R6)*. The use of fabric masks or medical masks was not a problem because people know they need to wear masks in public places or when doing activities outside.

Esposito et al (2020) stated that controlling a respiratory infection at source by a face mask is a well-established strategy. Strongly advocate universal use of face masks as a means of source control in public places during the COVID-19 pandemic. Strongly support the use of cloth masks as a simple, economic and sustainable. Aydin et al (2020) stated that during pandemics and mask

shortages, home-made masks can be effective against transmission of infection through droplets. Mask wearing by all individuals, supported by proper education and training of mask making and appropriate usage, can be an effective strategy.

5.1.2 Outside activities

Doing activities outside is one of the risk factors for being exposed by COVID-19. Adults have a high possibility of being exposed by the virus as they went out more often than children or elderly. 44.4% went out at least 1-2 times a week, 28.1% went out every day, 22.2% went out at least 3-5 times a week, and 5.3% did not go out at all. There are differences based on age groups with outside activities from home. Adults aged 18-60 years (97.1%) were more likely to do activities outside than children aged under 18 years (60.2%) and elderly aged over 60 years (57.1%). In addition, from qualitative research, we found 13 references reported that people went outside to go to the market, health facility and work: *"I went out of the house, just to go to the market. Before, I had been to the puskesmas to have my sick child examined and checked for pregnancy. By the midwife, it was suggested to temporarily stop coming to the puskesmas, because it said the conditions were not safe for children and pregnant women" (R1)*; *"Nothing has changed, still as usual, I still went to the fields. It's prohibited to go outside the house to avoid the crowd. Because in the rice fields I work alone, not meeting many people" (R8).*

Lau, H. et al (2020) stated that outside activities were extremely limited since every citizen was given a permission card and only allowed to leave their home every second day for a maximum of 30 minutes. Qiu, Y. et al (2020) stated an estimated increase in the number of cases due to activities outside the home using mathematical modeling. The frequency of transmission will increase if more activities outside the home without protection such as the use of masks or hand sanitizer. Liu, K. et al (2020) stated that the proportion of multiple lobe involvement in the elderly group was higher than that in the young and middle-aged group. The proportion of lymphocytes in the elderly group was significantly lower than that in the young and middle-aged group, and the C-reactive protein was significantly higher in the young group.

5.2 Impact of COVID-19

5.2.1 Social and economy

COVID-19 has an impact on social issues and the economy among communities in Bone. Regarding income, this study found 36.7% of respondents still worked as usual, whilst 23.3% worked from home. Overall, 52.2% reported that their revenue has decreased, whilst 50.0% had difficulty meeting daily needs, and 16.1% lost their jobs. There was no significant difference in the employment status, ability to fulfil daily needs and revenue received from week 1 to week 4 by gender, age and income level. As there has been a reduction in income and even job loss, it will affect the most disadvantaged populations. Thus, there is a need to develop policies to lessen such risks. Special attention should be given to protections for vulnerable populations, such as elderly, unemployed young people, or disabled individuals (Lewnard & Lo, 2020).

5.2.2 Mental health

The other impacts of COVID-19 include fear infection by/of other people and being stressed/angry. Even though most respondents (73%) did not feel isolated by social distancing practice and lockdown policies, 68.3% feared infection by/of other people, whilst 35.0% felt stressed or angry. There has been an increase from week 1 to week 4 however there was no significant difference by gender, age and income. One of contributing factors to stress identified in the qualitative study is feeling uncertainty, as quoted by respondent; "*Then I also felt stressed. Why are conditions like this huh? Everything is uncertain" (R11).* There is a need to pay more attention to mental health problems, especially depression and anxiety among the general population via hotline, online consultation, online course and outpatient consultation (Gao et al., 2020).

5.3 Social support

The results of the quantitative survey showed that masks were the most common goods (65.3%) received by the community and also provided/donated to the community (47.2%). As many as 48.9% of respondents also stated that masks were one of the goods needed the most. The findings from the qualitative results also support this, where respondents stated that in their village and neighboring villages received face masks as support, *"Once there was help in the form of masks, each house got two masks. Village officials went to the homes of each resident to distribute them. In other villages, residents must go to the village office and sign in to get a mask" (R8).* Face masks are one of the most immediate forms of assistance in accordance with interim guidelines from WHO recommending the use of non-medical masks (WHO, 2020).

The qualitative results showed many respondents had lack information about social support provided by the government. Most of them said that there was no data collection done by the village government. Here are some quotes: *"I don't know, some say that the recipient's data is sourced from Jakarta (meaning the national government). I want to complain but I also don't know where to do it. Yesterday, I was asked to collect Kartu Keluarga (family card) by village officials, but until now there has been no social assistance that I received. They said the village officials would filter the data of the recipients of social assistance" (R3); "In my opinion it (the distribution of social assistance) depends on people's fortune. Because no one is doing data collection" (R13).*

Information not conveyed well, and not in a transparent manner, can cause confusion and social jealousy from residents who feel in need but do not get the social assistance. Several respondents stated similar to this person, "*In my opinion, assistance in the form of groceries should be given to families who still have income. While assistance in the form of money, given to families who have no income at all. But apparently the decision was different. I'm just an ordinary citizen, just giving a proposal. At that time it was conveyed to the village head, but he said there were already rules governing the distribution of social assistance*"(R7). "*There are families who get social assistance in the form of money. There are also those who get groceries. I saw it by myself, that my neighbor had received the assistance. But our family did not get any help. We don't have income, We don't have income and many family members need to be fed*" (R15).

Moreover, President Jokowi has mentioned the distribution of social support during the COVID-19 pandemic. Thus the public will know the details about those who are eligible to receive aid and what type of aid is being distributed (Jakarta Post, 2020). However, it is important to educate and inform the community about this social support system, so people will know the status and eligibility requirements. Van Lancker, W. et al (2020) stated that from a policy perspective, legislators should consider providing regular income support for households during the impending economic crisis to prevent a deepening and broadening of poverty. Without such action, the current health crisis could become a social crisis that will have long-lasting consequences for children in low-income families.

5.4 Reliable media and information sources during COVID-19

The quantitative results showed television was the most reliable media (72.5%) compared to other media. The most reliable sources are those from the national government (66.4%), because television is a media that is often broadcast news from the national government. Qualitative results also showed that respondents chose and believed news from television as shown by this quote: *"I believe because it can be seen directly. From TV, I can see the President say the information directly."(R2). "If it's news from Facebook, I'm a little doubtful. I only believe news from the government. I prefer news from television." (R3).*

This study supports Kriyantono (2007) explaining that in Indonesia, television became the media with the largest consumer compared to other types of media (print, radio, and internet). This is

because television allows the public to access information as much and as far as they could have. There are still many Indonesian people who do not have the habit of reading. This is what makes television one of the ways to fill spare time. They tend to think television is able to meet all needs, including the need for information.

5.5 Information for elderly

This study found that almost half (46.9%) said there was at least one person aged above 60 years in the household. Based on the qualitative study, most stated that their parents already knew information about COVID-19, particularly through television as they spend more time at home. One of quotes from the respondent: "*"He often watches the news on TV so he knows. My father, after seeing the news on TV, immediately commented 'wow danger if Corona gets to this village, because there is no cure yet'. He is more at home than traveling outside" (R13).* According to Nielsen Television Audience Measurement (TAM) in 11 cities in Indonesia, there was an increase in TV viewership particularly during the News program as the COVID-19 related news on TV stations increased (Lubis, 2020).

Younger family members have roles to update and share information they obtained from other media to the elderly in the family. Family members also help to remind them to maintain hygiene such as wearing masks and washing hands with soap. COVID-19 is more dangerous for older people and those with pre-existing medical conditions, such as diabetes, high blood pressure and heart disease (Liu, Chen, Lin, & Han, 2020). The presence of these diseases can slow healing or increase the risk of complications. Most deaths occur in patients aged 80 years and over, reaching 14.8% of cases. This virus can also cause more severe symptoms for the elderly. This is because the body's defenses and organ system deteriorate as we age. The mortality and morbidity of elderly patients with COVID-19 is higher than that of younger patients. Elderly patients with COVID-19 are also more likely to progress to severe disease.

6. Limitations

The first limitation is the low response rate. Because this rapid survey uses telephone and online platforms for data collection, calculations for the response rate every week were explained. For telephone survey, response rate in week 1 (52.6%), week 2 (69.1%), week 3 (72.3%), and week 4 (81.7%). For online survey, week 1 (43.7%), week 2 (48.7%), week 3 (3.1%), and week 4 (2.5%). A second limitation is that the sampling method. As this rapid survey uses snowball sampling, this study cannot be generalized to all populations in Bone, South Sulawesi. However, it captures the situation of the community during this COVID-19 and can be used to provide recommendations for government and stakeholders in Bone, South Sulawesi.

7. Conclusion and recommendations

This study has added to the evidence for COVID-19 behaviors, social and economic impact on communities in Bone, South Sulawesi. The data and analysis on COVID-19 behaviors, as well as social and economic impact, can be integrated into village information systems, particularly for supporting decision making on programs in the community level.

Overall, there has been a change in health related behaviors during the COVID-19 pandemic. People wearing face masks and handwashing practices remained high (more than 90%). People also practiced social distancing and more people stayed at home in the last week of data collection. On the other hand, there were several social, personal and economic impacts of COVID-19, such as half having less income and having difficulty meeting daily needs and 16% lost their jobs. Most people also feared infection (68.3%) and feeling stressed or angry (35.0%). As now countries including Indonesia are preparing to transition towards a "new normal" in which social and economic life can function, continued whole-of-government and whole-of-society approach would be critical. Communities need to be educated, engaged, and empowered to adjust

to the “new normal”. Below are some recommendations to prepare for the “new normal” situation, particularly in Bone, South Sulawesi:

7.1 Focus on physical distancing behavior change activities

Social distancing policy has a significant effect in reducing community mobilization in Indonesia. As the social distancing policy may be lifted, there is a need to educate the communities regarding how to keep practicing social distancing. Emphasis should be placed on staying at home as often as possible, including providing economic incentives, such as wage subsidies and food, as well as disincentives, such as fines and warnings as more people who do not obey the “new normal” policy such as wearing face masks and practicing social distancing.

7.2 Support for those with decreases in income and lost employment

As COVID-19 has an impact on the community level of income and job status, it is important to develop a strategy on how to address these issues in the new normal situation. Existing programs need to be strengthened such as KUBE, PKH, Rastras, KIS etc. Support, including labor intensive projects and microcredit, should be delivered through local channels, e.g. PKK, BKMT, farmer and fisher groups. There is a need to identify the most needy beneficiaries in the community. It is also important to communicate the support system or mechanism of distribution in the community.

7.3 Targeting elderly

As almost half reported at least there was one person aged above 60 years, responses must consider the right communication channels and materials targeting elderly people. Traditional media such as newspaper television and radio are still the best channels to reach elderly in Indonesia. In this COVID-19 situation, these media become important channels as the news is mainly delivered via these channels. Caregivers and family members can also act as an important channel to reach elderly that can have an impact on how the communication message can be delivered to the elderly accurately and effectively.

7.4 Reducing social stigma and improving mental health

It is important to reduce the social stigma particularly in the new normal situation. As there are some confirmed cases in Bone, we need to understand that those who don’t have the disease but share other characteristics with those confirmed with COVID-19 (e.g., living in the same location) may also suffer from stigma. There is a need to enable communities to reduce the social stigma. This includes educating the community on COVID-19 and its transmission. Mechanisms to improve mental health need to be improved, including the referral system.

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