



# The Narration of Jamu as Herbal Medicine in Ageing Population During COVID-19

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**Abstract.** Over the last two years, COVID-19 has become a pandemic all over the world, including Indonesia. The pandemic infected all groups, including ageing population. The vulnerability comes from the aging process, along with the weakened immune system. Nevertheless, in Indonesia, the interaction between community and community brings a practice to consume a local medicine, namely Jamu. Traditions emerge in Javanese society, such as Gunung Kidul, Yogyakarta special regions. Moreover, the popularity of Jamu as a herbal that can increase body immunity overspread during a COVID-19 pandemic. The aim of the study is to explore the transition of Jamu consumption during Covid-19 pandemic in older people. The qualitative method with a phenomenological approach is used to discover older people's experiences about Jamu consumption during the pandemic. Participants were nine older people, consumed Jamu in their daily lives, had not been diagnosed with COVID-19, and domiciled in Gunung Kidul. Date collection carried out on April, 2021. The results showed that the Jamu consumed by the elderly were beras kencur, turmeric, ginger, eagle flower, red betel leaf and curcuma. This Jamu's consumption practice is preserved from their parents. Before the pandemic, the elderly had consumed jamu but not regularly. Meanwhile, during the pandemic, the elderly were consuming Jamu repeatedly because they believed it could give them more benefits, such as increasing their immunity. At last, the pandemic only gave a narration to make the practice of drinking Jamu increasing in Javanese community.

**Keywords:** Covid-19 · Elderly · Jamu

## 1 Introduction

Coronavirus Disease, or COVID-19, is a disease caused by the SARS-CoV-2 virus that can attack humans, including the elderly [1]. According to the World Health Organization [2], COVID-19 can attack and infect the human respiratory tract when the body's immunity decreases. This disease can spread quickly and is deadly so that people are afraid of being exposed to COVID-19. The COVID-19 pandemic is vulnerable to the

elderly due to the weakening of the immune system and age [3]. This fear makes people look for alternative treatments. One of the alternative treatments is through local medicine, namely jamu.

Indonesian communities have a strong tradition of consuming jamu. This local medicinal drink is usually formulated from medicinal plants processed from natural ingredients of roots, stems, and leaves. Different regions have different terms for jamu in each place. However, the term 'jamu' is more identic in Javanese ethnic. The tradition that has survived until now is supported by the community's belief in the consumption of jamu from generation to generation obtained from parents by teaching their children [4].

The stickiness of consuming jamu in the community makes this drink inseparable from various groups, namely children, adolescents, adults, to the elderly. Among these groups, the elderly are much attached to jamu because of the culture of drinking jamu that they have received from childhood. This habit continues until they reach old age. The use of jamu is believed to have various benefits. Turmeric has antibacterial, antifungal, antiviral and turmeric properties that increase appetite, relieve fever, stomach pain, and swelling [5]. Meanwhile, ginger has anti-inflammatory, antioxidant properties, relieves colds, warms the body, and contains essential oils [6]. The use of spices processed into jamu becomes the community's habit before or after the COVID-19 pandemic.

People in Gunung Kidul have had the habit of consuming traditional medicines before COVID-19. The villagers use a lot of jamu and spices in food daily. Finally, this habit remains a tradition during the COVID-19 pandemic, especially for the elderly.

Much research on COVID-19 has previously been conducted on the elderly, such as what [7] did in protecting the elderly from COVID-19. In this effort, the role of Posyandu (Integrated Health Center) and families is needed to help the elderly avoid COVID-19 infection. Nevertheless, it turns out that this effort impacts the mental condition of the elderly, which makes the elderly feel lonely. Furthermore, according to [8] research on the protection of the elderly during the COVID-19 pandemic to reduce elderly victims in terms of health, economy, and security of the elderly has also been studied. However, research regarding the shift in consumption of jamu in the elderly during the pandemic to help cope with or prevent COVID-19 has not yet been studied. Therefore, this research objective was to explore the shift in consumption of jamu during the COVID-19 pandemic in the elderly.

## 2 Method

This research used a qualitative method using a phenomenological research approach. This research focused on the elderly who consumed jamu daily in Gunung Kidul Regency. Gunung Kidul Regency was chosen because most people in this area were still Javanese who still attached to the tradition of consuming jamu obtained from generation to generation. In addition, Gunung Kidul was chosen because people have been consuming jamu since before the pandemic. Moreover, people, especially the elderly, still consume jamu during this pandemic.

Data collection was conducted using qualitative methods to describe and explain the phenomena through interviews. The phenomenological approach was a philosophical

approach that aimed to investigate experienced phenomena related to human experience with meaning, namely to develop a method that tried to obtain renewable knowledge both critically, logically, and not based on a priori and normative [9]. The preference of the phenomenological approach was based on the COVID-19 pandemic. This pandemic is a phenomenon or situation that has recently occurred in various regions, not only in Indonesia but also in various countries. This approach was also used to determine the shift in consumption of jamu in the elderly based on the individual's experience. The research data was collected through in-depth interviews using semi-structured questions.

Data collection was done in one day. The research location was in Gunung Kidul Regency, Yogyakarta, in April 2021. Furthermore, the research participants consisted of nine people who met the inclusion criteria, including elderly  $\geq 60$  years old who consume traditional medicine in their daily lives, lived in Gunung Kidul, and were never diagnosed as positive COVID-19. Meanwhile, the constraints during the data collection process were related to language differences because all research participants used Javanese. Therefore, the researcher asked for the help of a translator who came from the Javanese tribe to assist the data collection process.

After the data was collected, a transcript was made based on the interviews conducted. Furthermore, the analysis was carried out by a coding process and converting it into specific categories until conclusions were drawn [10].

### 3 Results and Discussion

#### 1. *Elderly practices related to jamu in Gunung Kidul*

The elderly are groups that still often maintain the cultural traditions they believe in from their ancestors [4]. One of their traditions is consuming local medicine. Consumption of this local medicine usually comes from processed spices or herbs and can be found around the living place. Consumption of local drugs is carried out not only by an individual but also by a group of older people in the same area. Usually, the consumption of local drugs is referred to as Jamu [11].

The culture of consuming jamu was closely related to Javanese culture. It was also found in the Gunung Kidul area, Yogyakarta, where the majority of the elderly are Javanese. Nine elderly participants in Gunung Kidul often use jamu as a drink in their daily life. The participants consisted of six older men and three older women. Although there were gender differences in the research participants, nine participants had the same opinion regarding jamu. They still maintained the practices of consuming jamu because they felt many benefits of consuming jamu. Apart from being consumed personally, participants also continued and taught their families so that their family members also consumed jamu. The participants obtained information about jamu consumption from generation to generation, especially from parents who taught children. It was revealed by seven participants as follows:

“It has passed down from generation to generation because the grandparents often drink aromatic ginger (kencur) and turmeric like that.” (Tati, Female, April 2021)

“First, it has passed down from generation to generation. We did not have to think much because our ancestors have researched it. Therefore, we can directly consume it.” (Semet, Male, April 2021)

The practice of consuming participants' jamu in Gunung Kidul had persisted. Five participants said they preferred to consume jamu because jamu did not have side effects like drugs purchased at pharmacies containing chemicals. The public considered jamu safer for consumption because it was made from natural ingredients. Its consumption for a long time did not cause side effects. It was as a participant stated:

“Yeah, traditional medicine had no side effects, sis. However, if you took capsules or medicines from the pharmacy, you have used chemicals. That was all.” (Ino, Male, April 2021)

### ***2. The benefits of Jamu Consumed by the Elderly in Gunung Kidul***

The jamu consumed by the elderly in Gunung Kidul came from various materials, roots, stems, and leaves which were then processed into jamu. Several types of jamu ingredients used by participants were beras kencur (the mixture of rice and aromatic ginger), turmeric, ginger, butterfly pea flower, red betel leaf, and curcuma. In addition to these ingredients, other ingredients used by some participants were lemongrass, cloves, cardamom, grilled onions, Javanese chilies, tamarind, and cinnamon. They used these materials to make jamu that would be consumed.

Participants believed that consuming jamu could provide many benefits. One of the public benefits that the elderly believed when consuming jamu was for body health, such as making sleep soundly, not tasting bitter, facilitating defecation, sweating a lot, and making the body healthier. According to [12], jamu has benefits, such as warming the body, increasing appetite, and accelerating blood circulation. In addition, several types of jamu have their respective benefits [5]. The benefits of consuming jamu for Gunung Kidul include herbal turmeric, which is helpful for warming, reducing pain, making the body feel light. Jamu beras kencur was to increase stamina, overcome body chills, reduce dizziness and fatigue, warm, increase appetite, make sleep more soundly, and increase endurance. Ginger jamu was beneficial for increasing warm sensation for the body, good for relieving colds and coughs, fever, and increasing endurance. Red lemon grass jamu contains antibiotics, maintains blood pressure, and warms the body. Butterfly pea flower jamu could lower cholesterol. Curcuma jamu was advantageous to warm the body and throat and reduce coughing. It is as expressed by participants:

“We did not feel bitter or other flavors, you know. We do not feel it when consuming the jamu. Moreover, we could sleep well and our bodies woke up healthy. We just felt a lot of sweat come out. It was because of jamu. Thus, if you sweated a lot, your body was healthy. Besides that, the defecation was also more frequent.” (Ijo, Male, April 2021)

### ***3. Access and Method of Processing Jamu for the Elderly in Gunung Kidul***

The elderly in Gunung Kidul was easy to access ingredients for making jamu. Access to jamu for the elderly in Gunung Kidul was obtained from buying at the market, and some of the raw materials were planted in the yard of the elderly's house. Playen and Wonosari markets were traditional markets located in Gunung Kidul. Most of the elderly in Gunung Kidul chose to buy jamu ingredients at the Playen and Wonosari markets because participants could reach these markets. Therefore, the participants could quickly obtain materials for processing jamu because of the close access to the elderly's house.

However, there were still four elderly of the nine participants (two men and two women) who got the materials by planting them in their yard. The ingredients that the elderly planted in the yard were butterfly pea flower, red betel leaf, and lemongrass. The elderly's knowledge of the butterfly pea flower had only been known by the elderly in recent years. The participants knew about the butterfly pea flower jamu from the rumors circulating. Then, the elderly searched for the truth about the butterfly pea flower jamu by reading and watching on YouTube, which the participants trusted. It was similar to what [13] said, that previously the butterfly pea flower was only used as an ornamental plant. However, nowadays, it is widely consumed as a medicinal plant made into tea and food coloring.

After the participants got the information, the elderly then started planting. The reason for the elderly to plant butterfly pea flowers and red betel leaf was because they were rarely sold in the market; on the other hand, participants planted lemongrass because they did not require much land to plant them. In addition, another reason the elderly did not plant spices was that most people had land for planting or gardening. People preferred to plant rice to meet their daily staples rather than growing spices. Thus, the elderly obtained materials to make jamu by buying them at the market. This expression was supported by one of the participants:

“The people who did not have a large area of land, such as near a forest, better planted something else that can be eaten for staple foods. The examples included rice and cassava.” (Ino, Male, April 2021)

Information related to the participants' jamu processing also increased over time. Currently, participants live in a digital era that requires them to adapt. One of the used media was YouTube [14]. The participants previously believed in getting information from generation to generation, which was then strengthened by reading and watching YouTube related to the ingredients used to process jamu. However, the measurements used by the elderly were only according to their estimation and the taste they desired. Therefore, when processing jamu, the elderly often only estimate the dose used for processing.

Two older men of the nine participants processed their jamu. One elderly bought ready-made ones and three older men made their own family (wife and parents). Meanwhile, two older women made jamu by themselves, and one obtained jamu by buying ready-made ones.

There were various ways of processing jamu. After the participants got the materials to be processed, the materials were washed, then crushed or grated, and then boiled. Some of the ingredients used were boiled one by one, and some were mixed with several other spices, which are processed into one. Examples of jamu that participants commonly mixed were ginger added with lemongrass, curcuma, and turmeric, and curcuma, ginger, turmeric, lemongrass, and cloves, which were processed into one. Then, some participants processed ingredients in ginger, turmeric, aromatic ginger, ginger, lemongrass, and cardamom. Meanwhile, participants usually processed the rest without being mixed. In addition to the essential ingredients used, the elderly often added sugar or brown sugar, honey, lemongrass, and cloves to add flavor to the jamu they consumed [15]. The participants also stated that:

“It was grated, given the rice, then, the rice powder was mixed. Furthermore, it was given sugar, and spice as well, such as cloves. The spices were mixed.” (Ijo, Male, April 2021)

“Turmeric and curcuma were good for the stomach. They were often drunk, and the method was boiled. Meanwhile, the butterfly pea flower was boiled to make tea.” (Ino, Male, April 2021)

“Indeed I used spices, such as ginger, turmeric, aromatic ginger, lemongrass, ginger, and cardamom. Firstly, I mixed and boiled them. No, no, no, not one by one, not...” (Tati, Female, April 2021)

Besides being boiled, some jamu was made as tea drinks. The jamu that was made for tea was the butterfly pea flower jamu. The elderly said that the processing of the butterfly pea flower jamu included the flowers firstly being dried. However, after being picked, it could be directly made into tea without being dried. It was in line with what one participant who stated:

“Yes, it could be directly made as tea. The tree was picked and then boiled. Then, first, I mixed the boiling water with ginger, lemongrass, and then cloves.” (Tati, Female, April 2021)

#### ***4. Shifting Consumption of Jamu during COVID-19 in Gunung Kidul***

Consumption of jamu has become a habit attached to the elderly participants in Gunung Kidul. The belief in the habits of the elderly in jamu was supported by experience in the benefits of jamu, which they had known from generation to generation. However, this habit of consuming jamu was not routinely carried out before, and the nine participants only did it when they felt sick and did not feel well.

During COVID-19, participants' confidence in consuming jamu was further strengthened by the information circulating that jamu could maintain a healthy body and increase immunity. The elderly were a vulnerable group because as their ages increased, their immune system would weaken to be easily infected with diseases. One of the diseases was COVID-19 [16]. This rumor made the habit of consuming jamu among the elderly increase. Eight participants, namely five older men and three older women, said that they were becoming increasingly regular in consuming jamu because they thought jamu could maintain immunity during the pandemic. In line with what [15] said, jamu could function to maintain the body's immune resistance. Therefore, it could avoid the ongoing COVID-19 virus. Maintaining the immune system made the elderly think about consuming jamu to avoid COVID-19.

There was also one male elderly participant who said that during this pandemic, he had reduced his consumption of jamu than before. During the pandemic, especially when there was a PSBB (Large-Scale Social Restrictions), participants rarely left their houses. Participants said they felt healthier during the pandemic because they rarely interacted with many people. In addition, other influencing factors were because the food consumed by the elderly was always cooked at home, and sleep patterns became more regular during this pandemic. The participants stated it:

“During COVID-19, I rarely went out. I did not have a cold at home, did not feel unwell. Then, because I always stayed at home, I did not even get sick for a year.” (Bertus, Male, April 2021)

Participants’ knowledge of information about the efficacy of jamu also increased during the COVID-19 pandemic. It was because there were many rumors about jamu circulating. Several elderly participants in Gunung Kidul revealed that they received additional information about jamu from the media they used. They also became more confident during the pandemic to consume jamu. One participant stated this:

“Yeah. My knowledge was powered by YouTube. There was much traditional medicine in YouTube.” (Ino, Male, April 2021)

“Yes, in a pandemic, it was strong. Yes, because we wanted antibodies to increase, I also read the literature that if you consumed aromatic ginger and ginger, your antibodies would increase. Therefore, we ate or consumed it. That was it. Thus, there was a benefit. I was still confident.” (Ijo, Male, April 2021).

## 4 Conclusion

Consumption of jamu was closely related to the Javanese people, especially the elderly in Gunung Kidul. The habit of consuming jamu for the elderly in Gunung Kidul, Yogyakarta, was passed down from generation to generation from parents. Previously, the elderly did not make this habit regularly, but they only did it when they felt sick and did not feel well. However, during the COVID-19 pandemic, the elderly became more frequent in consuming jamu because they recognized that it had many benefits, significantly increasing endurance. This habit then made a shift in the consumption of jamu for the elderly in Gunung Kidul. The strong tradition of consuming jamu in Javanese society made the pandemic only a factor in increasing the habit of consuming jamu.

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