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The Impact of Social Media on the Improvement of Mothers' Awareness for Stunting Prevention

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Abstract
Purpose: This study aims to provide an empirical description of a) the relationship between mothers' maternal behaviour and awareness to improve the nutritional status of their children and families and b) their behaviour of using social media (Instagram, YouTube, Twitter and Facebook) as the primary source of information to enhance their awareness of providing balanced and nutritious foods for their children, are the subjects of this study. The purpose of this study is to provide an empirical description of both of these topics.
Methods: An online questionnaire was distributed to targeted respondents, namely 133 mothers with infants and toddlers from 16 provinces in Indonesia. Regression analysis was performed using SPSS software to assess mothers' propensity in seeking information, mainly from social media, about nutritious foods when making dietary choices.
Findings: This indicates a significant correlation between mothers' awareness of seeking information about nutritious food using social media and their decisions to provide daily meals and first-line complementary foods for their newborns and toddlers. However, this awareness was not related to the variety of side dishes available on the menu.
Originality: This study offers original empirical evidence on the role of social media as a primary source of information for mothers in 16 Indonesian provinces, improving their awareness and decisions about nutritious feeding to prevent stunting. The study uniquely links digital engagement (social media) with improved child nutrition, addressing a gap in maternal health research in Southeast Asia.
Keywords: Mothers' Awareness, Nutritious Feeding, Access to Information, Social Media, Stunting.

Introduction
Since 2018, the Indonesian government has actively pursued a stunting prevention strategy and has empowered mothers to determine their children's health and nutritional status during the first 1.000 days of infants' life. The Indonesian government's immediate resolution of stunting is a national priority, since it necessitates thorough efforts to

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improve the future quality of human resources. According to 2018 data by the Ministry of Health of the Republic of Indonesia, the prevalence of stunting in Indonesia is still relatively high, namely at 27.4%, suggesting that around a quarter of Indonesia's children are diagnosed with this disease (National Team for the Acceleration of Poverty Reduction, 2018). This is an important note regarding the urgency of addressing childhood stunting to preserve Indonesia's human resources. Childhood stunting poses a serious threat, since it would diminish the quality of life in the long term and become a state burden. Indonesia is one of the countries dealing with triple-double nutrition issues, particularly regarding the nutritional status of toddlers, which leads to stunting (Rokx et al., 2018).

Human resources are the most crucial aspect of any nation that must be nurtured carefully to bring significant benefits, both in the short term and long term (Eidelman, 2017; Karlsson et al., 2024; Victora et al., 2008). Several countries, particularly developing ones, have been struggling to improve the quality of their human resources, with stunting being one of the most significant obstacles that must be surmounted (Prendergast & Humphrey, 2014). Stunting is a condition characterised by below-average cognitive abilities in children, resulting in suboptimal growth. Stunted children exhibit shorter bodies and weaker physical and psychological skills than those of their peers of the same age (Nores et al., 2024; Oumer et al., 2022). Thus, stunting becomes a significant potential national issue. The high prevalence of stunting has led to an increase in state expenditures for medical care as well as an increase in poverty rate (Oumer et al., 2022).

Stunting is closely associated with the issue of inadequate nutritional status from pregnancy to 1.000-day-old infants (Atmarita, 2018). According to the Data and Information Centre of the Ministry of Health of the Republic of Indonesia (2018), stunting is a condition where a child's body length or body height is below the standard established by WHO. Before the age of 23 months, chronic protein malnutrition causes stunting. In this regard, Indonesia ranked fifth globally, with a 2013 prevalence of 37.2% and a 2018 prevalence of 27.4%, both of which exceeding 20%, that is the WHO's maximum threshold of stunting prevalence. According to the Ministry of National Planning, stunting is a malnutrition problem that spans various regions, income levels, and educational backgrounds, suggesting that the main barrier in stunting prevention is actually a lack of information and comprehension regarding this disease among parents and the community.

This study aims to increase mothers' awareness in providing balanced and nutritious foods for their children because they are the primary determinants of their children's health. This relates to their nature, since they are the one who conceive the fetus, give birth to their infants, and undergo the first golden period of exclusive breastfeeding from 0 to 6 months, the second golden period from 6 to 23 months, and continue to 24 to 59 months (toddler's age). As Goleman's (1997) theory describes, individual consciousness comprises three dimensions, namely self-information, environmental information, and information on outside environmental activities. According to Goleman (1997), self-awareness is an individual capacity to recognise his/her feelings and use them to guide self-decisions and produce realistic benchmarks of self-efficacy based on solid self-

confidence. According to this definition, self-awareness is an individual trait that reflects his/her capacity to make decisions based on experience and beliefs supported by factual data. Self-awareness correlates with the ability and willingness to seek the necessary information to solve a problem.

The technological advancement influences the rapid development and distribution of information among individuals. Information as a source of personal knowledge will always be sought and accessed for enabling better decision-making. Davenport's (2007) study on information ecology explained that electronic and digital communication technologies make it easier to access various sources of information. The rapidly expanding and pervasive nature of communication technology has allowed it to reach every corner of nearly all countries, facilitating better interaction and information exchange among individuals. Existing communication media technologies facilitate seamless communication, information dissemination, and information searching. In addition, the rapid development of social media platforms, such as WhatsApp, has led nearly everyone to use it for daily communication.

Widayani et al. (2016) revealed that many mothers are generally knowledgeable. However, their comprehension regarding the feeding portion of children consistently lacks. Consequently, children would suffer from deficiency of energy, protein, and fat. Romadona (2017) explained that people's comprehension of the significance of consuming fisheries products is still deficient due to issues with the perception of consuming marine products. In addition, Pratiwi et al. (2016) explained that maternal behaviour is one of the causes of malnutrition in children, necessitating interventions in the form of education to change this behaviour. Lestari et al. (2018) determined that it is necessary to encourage behavioural change programs for realizing consistent and sustainable consumption patterns of healthy foods, that is through a family-based approach targeting mothers, children, and communities. In addition, Astuti & Widayatun (2018) concluded that social media serves an educational purpose owing to its capacity to effectively counteracts false information regarding childcare.

Atmarita (2018), in her study on the optimal nutritional intake to prevent stunting, explained that stunting begins before conception when adolescents with poor nutritional status and anaemia become mothers. Peru's success in reducing the prevalence of stunting was partly due to a massive multisectoral nutrition initiative (Kampman et al., 2017). This country successfully prevented malnutrition in infants and toddlers owing to its policy to prevent stunting through an intensive program of animal protein consumption at the household level and a minimum amount of eggs in complementary foods, as carried out in Iannotti et al.' (2017) study, where 80 children aged 6 to 9 months were given one egg per day for six months as part of a randomised, controlled clinical trial. The experimental results succeeded in reducing the prevalence of stunting by 47% and underweight by 74%. Peru's success was attributable to the participation of political parties and supreme leaders, the social participation of the council, coordinated multisectoral programs, performance-based budgeting, and the alignment of incentives for households, health facilities, and local governments. Moreover, persuading policymakers, public officials,

and parents about the significance of early interventions to combat chronic childhood malnutrition problem was another crucial driver of Peru's success. Its national communication campaign and nutrition program regarding stunting was a success, owing to credible data information system, clear and attainable goals, and thorough monitoring and evaluation system. In addition, Community-Based Growth Promotion Programs also played an essential role in Peru, as they did in other countries, such as Senegal and Thailand. The programs promoted children's growth through regular growth monitoring and counselling for parents concerning proper nutrition practices and general growth characteristics (body weight and length) (Kampman et al., 2017). This study adopts UNICEF's communication theory of behavioural change and the individual theory of awareness proposed by Goleman (1997) as its theoretical framework, as seen in Figure 1.

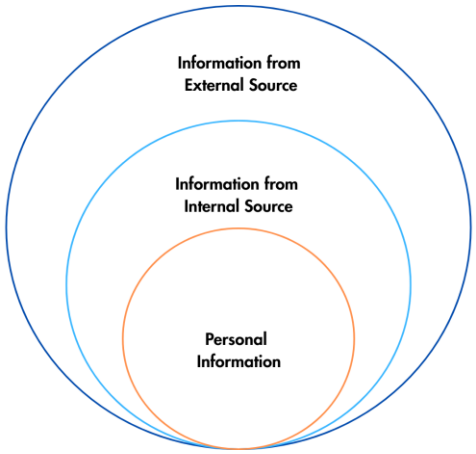


Figure 1. Theoretical framework concerning the role of access to information in the development of individual awareness (source: Goleman, 1997)

The theoretical framework regarding access to information to increase individual awareness is the foundation for the government's strategy to enhance people's conscious behaviour for stunting prevention initiatives. Information provided by the government and various collaborating actors must be widely disseminated so that the public, particularly mothers, can easily access information regarding maternal and child health, particularly stunting prevention. Every member of society, especially mothers and parents, must have the broadest possible access to easily accessible and readily available information in the form of multiple communication channels. For this reason, credible and scientifically-proven sources of information must be provided by the government and corresponding parties, thereby minimising the spread of misinformation regarding maternal and child health and stunting prevention. In Indonesia, the term stunting remains unfamiliar to the majority of the population. Therefore, the government must provide adequate space and facilities for all community members so that they capable to disseminate correct and reliable information about stunting prevention to change people's behaviour. Referring to the theoretical framework regarding sources of access to information, the Indonesian government has established a stunting prevention strategy consisting of five pillars based on individual-oriented aspects of collective behaviour change.

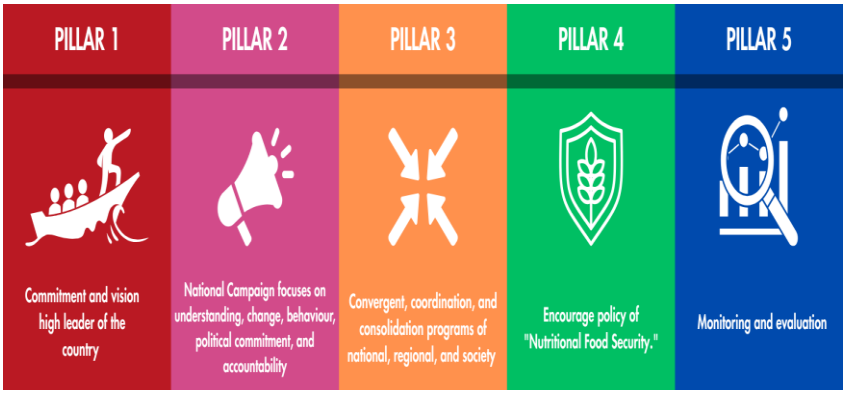


Figure 2. Five pillars strategy of stunting prevention (source: National Team for the Acceleration of Poverty Reduction, 2018)

As shown in Figure 2, these five pillars require the commitment of state, regional, and community leaders, since multi-level collaboration is necessary to educate people to change their behaviours as well as to produce a collective impact, namely fostering people's conscious behaviour to seek information and effectively communicate to prevent stunting within their nuclear family. The targeted people in this strategy are mothers or parents with full awareness and a desire to learn and seek relevant information about providing nutritious foods for their children and families. The Five Pillars Strategy of Stunting Prevention (National Team for the Acceleration of Poverty Reduction, 2018) aims to prevent and reduce stunting case by focusing on directing people's conscious behaviours to the awareness of healthy life style and consumption of nutritious foods, especially among adolescent girls, pregnant women, breastfeeding mothers, and children aged 0–23 months.

Based on this study's theoretical framework, it is proposed that mothers require sources of information to affirm their decisions, particularly regarding the provision of balanced and nutritious foods for their children. For this reason, it is essential to provide external and internal sources of information that are easily accessible and understood by mothers. Therefore, a strong commitment is needed from all corresponding ministries, academics, health professionals, national and local governments, field practitioners, and industries to provide mothers with accurate and reliable information. The easily accessible sources of information for mothers is necessary so that they can change their attitudes and behaviours in light of the significance of maternal and child health and stunting prevention initiatives.

Methods

This quantitative study employs regression analysis to examine the relationship between numerous variables and information availability. The targeted population of this study were all mothers with children, while the sample consisted of young mothers with infants and toddlers, related their behaviour of using social media (Instagram, YouTube, Twitter and Facebook) as the primary source of information to enhance their awareness of providing balanced and nutritious foods for their children. Based on the framework developed from the communication theory of behavioural change, this study employs an

online survey to assess the behaviour of mothers in seeking information about balanced and nutritious foods. UNICEF's three elements of individual behaviour, awareness, and communication were measured via an online questionnaire as the data collection instrument. From the beginning of September to October 2019, the online questionnaire made in Google Docs was distributed to the targeted respondents, namely 133 mothers with infants and toddlers from 16 provinces in Indonesia, through multiple online communication channels, both individually and in groups. This study employs SPSS software to analyse mothers' tendency to seek nutritional information about healthy and nutritious foods. Multiple regression analysis was used to examine the relationship between independent behavioural components and information-seeking behaviour concerning healthy and nutritious foods. Respondents' demographic information was also used to understand the phenomenon of nutritious feeding.

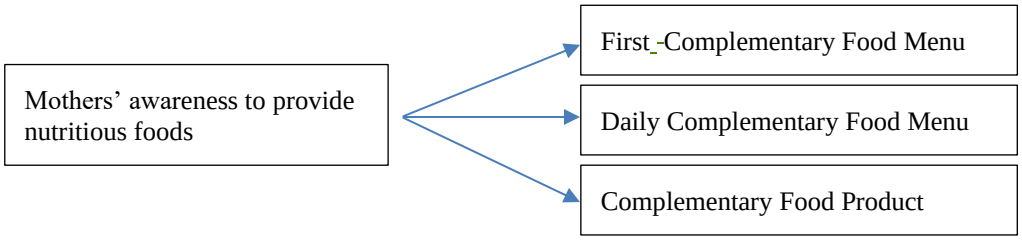


Figure 3. Interconnection between 'mothers' awareness' and 'behaviour to provide nutritious foods' (source: Data Processing, 2019)

This study developes three hypotheses based on the aforementioned background and several prior findings. As Figure 3 shows, these hypotheses were formulated based on the notion that mothers' awareness in providing balanced and nutritious foods for their infants and toddlers is shown by seeking reliable information about healthy and nutritious foods for stunting prevention. The three hypotheses are presented as follows:

H1: Mothers' decision to provide the first complementary food menu for their children is related to their awareness of seeking information about nutritious foods.

H2: Mothers' decision to provide the daily complementary food menu for their children is related to their awareness of seeking information about nutritious foods.

H3: Mothers' decision to provide the complementary food product for their children is related to their awareness of seeking information about nutritious foods.

Results

One hundred and thirty three mothers--with children younger than five years old from 16 provinces in Indonesia--completed the online questionnaire. The majority of all respondents resided in West Java and Jakarta, as depicted in Figure 4. Taking into account the cost and accessibility factors, the survey was conducted in DKI Jakarta and West Java. The participating respondents originated from different provinces. Respondents' amount from West Java have the highest proportion, namely 39.8%, followed by DKI Jakarta (25.6%), Central Java and Banten (8.3%), DIY (5.3%), and East Java (4.5%). Respondents' amount from other provinces, such as Riau, West Sumatra, West Kalimantan, South Sulawesi, and Bali, have the proportion of 8% each.

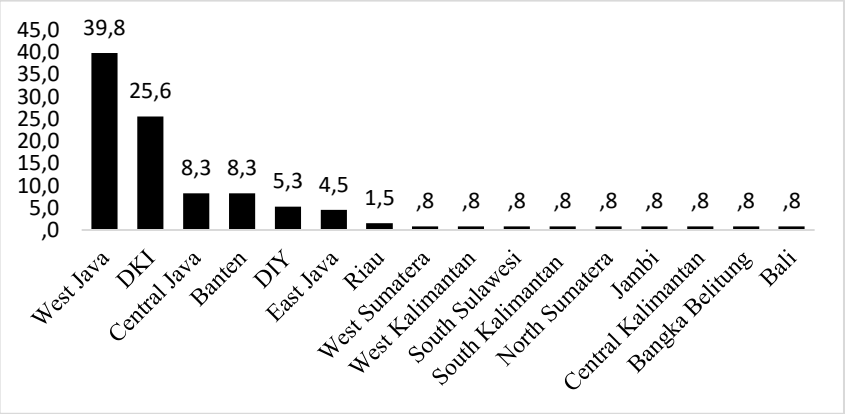


Figure 4. Distribution of respondents based on region (source: Data processing, 2019)

Figure 5 shows that 72.9% of all respondents held diploma and bachelor's degrees, followed by 15% with master's degree. The respondents' educational backgrounds range from junior high school to master's degree. Following, as Figure 6 shows, a significant proportion of all respondents (40.6%) were housewives, while the rest were private workers, government officials, entrepreneurs, teachers/lecturers, etc. Despite the wide range of respondents' occupations, it was demonstrated from their responses during the online survey that the scope of mothers' behaviour in seeking reliable information about maternal and child health and nutritious foods is not particularly affected by their occupations, whether they were housewives, educators, or civil servants.

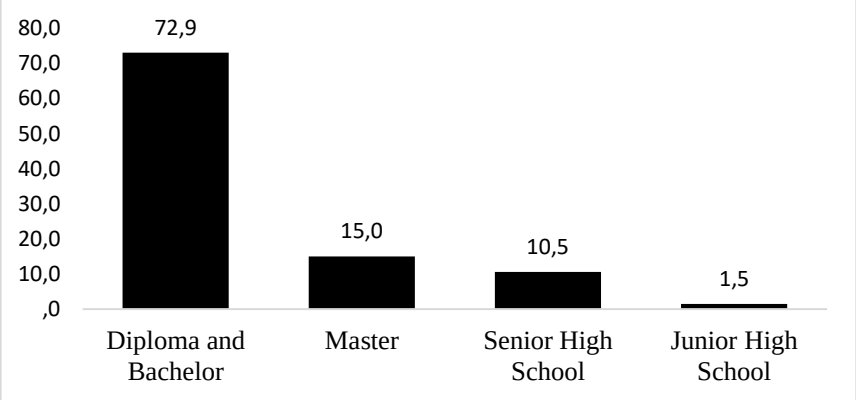


Figure 5. Distribution of respondents based on educational background (source: Data processing, 2019)

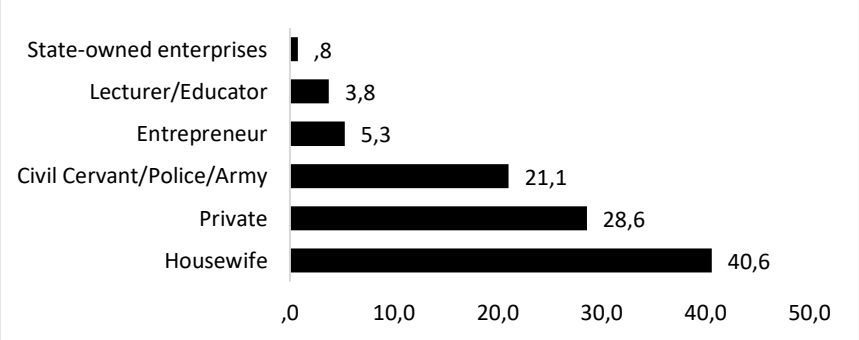


Figure 6. Distribution of respondents based on type of occupation (source: Data processing, 2019)

As shown in Figure 7, the majority of respondents were young mothers with one and two children, with 55.6% of them having one child, 29.3% having two children, and 11.3% having three children. All respondents in this study had children of varying ages, with the majority of them being young mothers with one or two infants or toddlers.

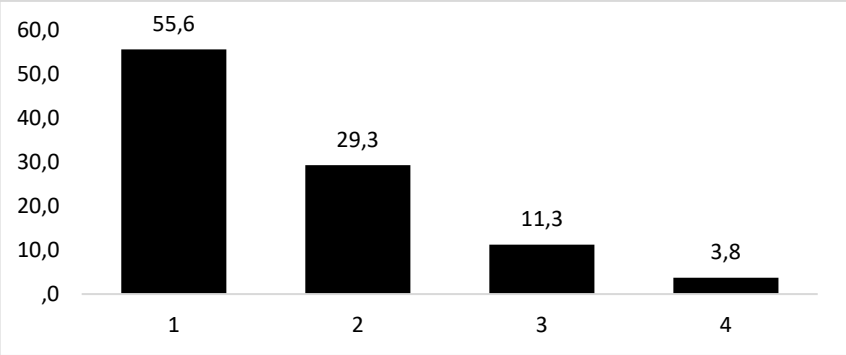


Figure 7. Respondents' number of children (source: Data processing, 2019)

Next, as shown in Figure 8, 98% of all respondents reported accessing social media as their primary source of information, followed by website (49%), television (35%), books and newspapers (20%), articles and journals (11%), and radio (4%). Social media in digital-based devices are the most accessible information media, since they are associated with personal ownership and fast internet connection, which each individual possesses. In addition to connecting people, the today's purpose of social media is to facilitate information interchange. Moreover, as Figure 9 shows, the online survey results also reveal that respondents utilise several social media platforms, namely Instagram (89%), Facebook (79%), YouTube (36%), and Twitter (35%), and other platforms (5%).

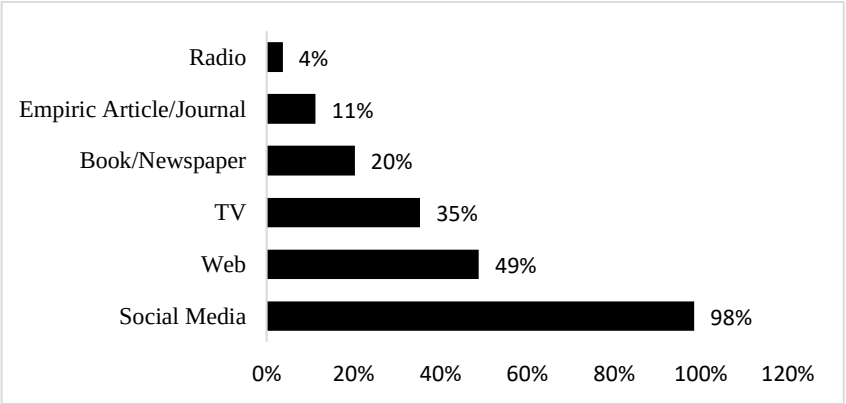


Figure 8. Easily accessible sources of information for mothers (source: Data processing, 2019)

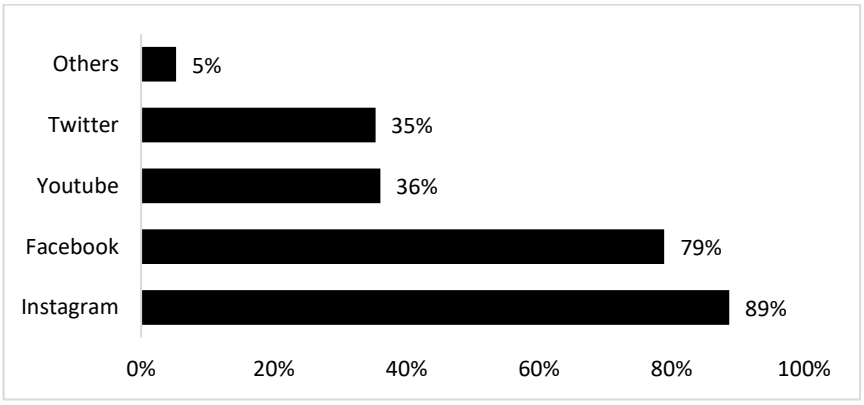


Figure 9. Sources of information in the form of social media
(source: Data processing, 2019)

As seen in Figure 10, 92% of all respondents reported seeking information about balanced and nutritious foods for children and families from social media, followed by 74% from physicians/midwives, 32% from integrated service center (*Posyandu*), 32% from books/newspapers/tabloids, 28% from public health center (*Puskesmas*)/hospital, 4% from the internet, and 7% from other sources. Social media is the most accessible source of information for mothers about nutritious foods, even though doctors and midwives are also deemed reliable as the insight providers about this matter. Similarly, as Figure 11 shows, 88% of all respondents reported seeking information about complementary foods from health websites and social media, followed by 44% from parents and periodicals, 39% from doctors/hospitals, 20% from *Puskesmas* and *Posyandu*, and 16% from couples (husband/wife).

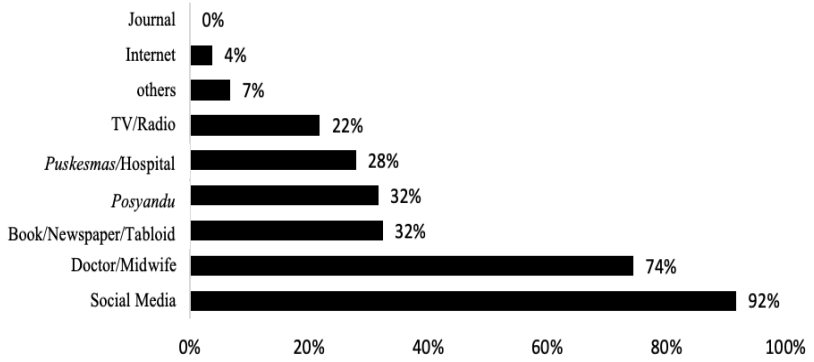


Figure 10. Sources of information regarding nutritious foods
(source: Data processing, 2019)

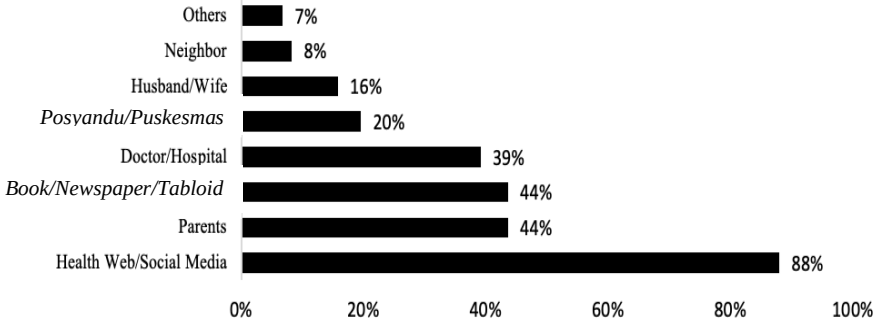


Figure 11. Sources of information regarding complementary foods
(source: Data processing, 2019)

As seen in Figure 12, 91.7% of all respondents stated that their infants were given first complementary food menu at the age of six months. Only small proportion of them reported providing first complementary food menu at the infants' age below six months: 2.3% at the age of five months, 0.8% at the age of four months, and 3.0% at the age below three months. Meanwhile, 2.3% of all respondents reported providing first complementary food menu at the infants' age of seven months.

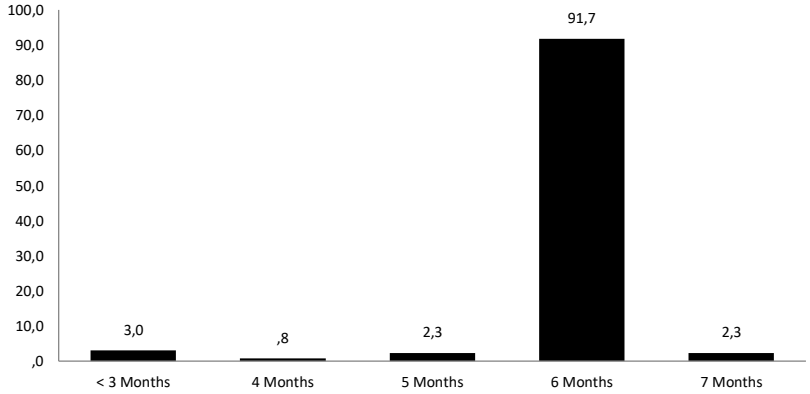


Figure 12. Infants' ages when given first complementary food menu
(source: Data processing, 2019)

As shown in Figure 13, the first complementary foods provided by mothers were rated as 4-star menu (balanced nutrition) at 45.1% of the time, followed by 1-star menu at 32.1% of the time (e.g., single menu, banana porridge, rice porridge). Likewise, 45.1% of the daily complementary foods provided by mothers were also rated as 4-star menu. Four-star menu is a publicly known name representing a balanced and nutritious menu aligning with the criteria of *Isi Piringku* established by the Ministry of Health, that is consisting of carbohydrates, animal and vegetable protein, vegetables, and fruits.

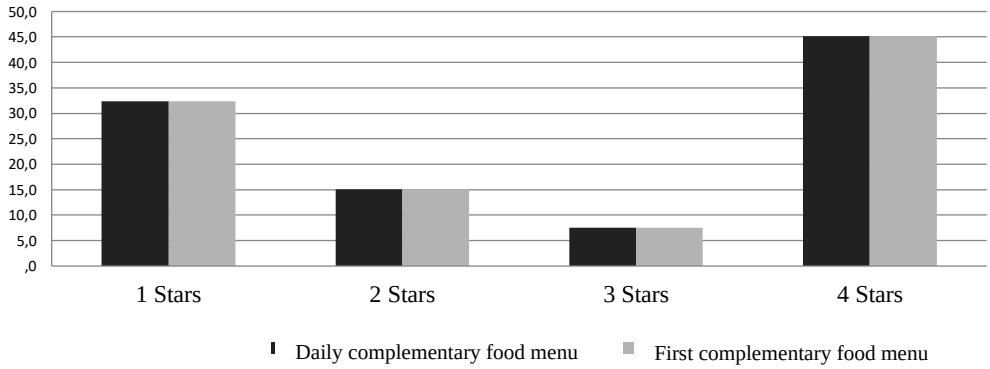
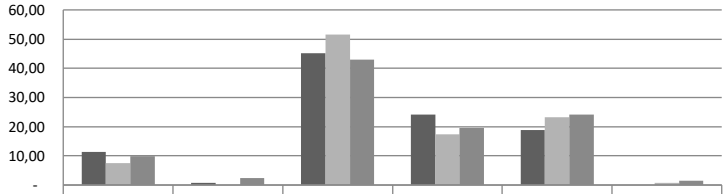


Figure 13. Daily complementary food menu and first complementary food menu
(source: Data processing, 2019)

As seen in Figure 14, 42.9% of all respondents reported providing animal protein from meat in first complementary food menu at the infants' age of six months, while 24.1% reported providing it for the first time the at the infants' age of eight months. The initial provision of beef and poultry at the infants' age of six months was reported by 51.1% of all respondents, while 45.1% reported that their six-month-old infants already

receive animal protein from fish and seafood as part of the complementary food menu. According to these data, the majority of mothers complemented their first breast milk feeding at the infants' age of six months with a substantial amount of animal protein, as recommended by the government. Interestingly, after 7, 8, and 12 months, several mothers exclusively complement their infants' breast milk with animal protein from fish, poultry, and livestock meat.



	12 Months	18 Months	6 Months	7 Months	8 Months	> 23 month
fish	11,28	0,75	45,11	24,06	18,80	
poultry	7,50	-	51,50	17,30	23,30	0,80
meat	9,80	2,30	42,90	19,50	24,10	1,50

Figure 14. Children's ages when given animal protein-based first complementary food menu (source: Data processing, 2019)

Next, as presented in Figure 15, 83.46% of all respondents reported cooking complementary foods themselves, while 6.02% reported buying instant complementary food products. In addition, 7.52% of all respondents actively provide healthy complementary food menu bought from complementary food vending depots in their neighbourhood, and 3.01% reported providing a combination of home-cooked and fast complementary food menu. The decision to provide complementary food menu for infants and toddlers is influenced by their understanding about the recommendations for complementary feeding. To maintain the proper level of food nutrition and suitable texture for their infants' ages, the majority of respondents decided to conduct homemade-cooking to provide complementary food menu, while a few respondents provided complementary food menu by combining home-cooked and fast, instant complementary foods.

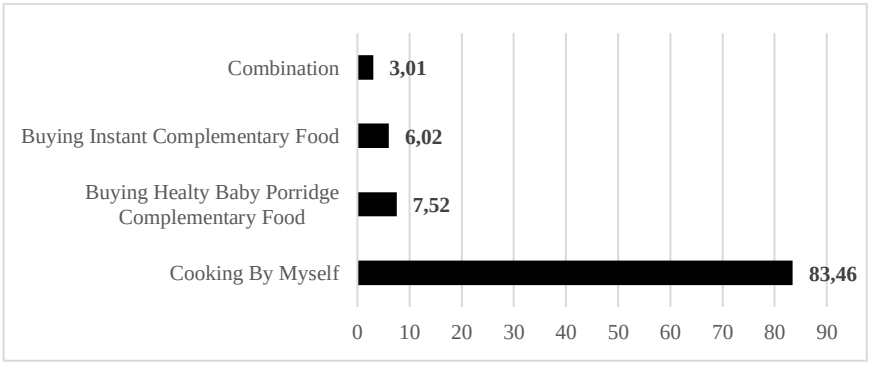


Figure 15. Types of complementary food products provided by respondents for their children (source: Data processing, 2019)

The data analysis results (Table 1) from 133 mothers with infants and toddlers as respondents were processed and the data were normally distributed. Then, regression

analysis was performed using SPSS software to examine the relationship between mothers' decision to seek information about nutritious foods and the frequency of accessing information about this matter from popular sources, such as social media. Based on the hypotheses that mothers have provided their infants ad toddlers the first complementary food menu, the daily complementary food menu, and the complementary food product, following are the results of relationship analysis to test the hypotheses.

Table 1. Pearson correlation among mothers' awareness, first complementary food menu, daily complementary food menu, and complementary food product

		MA	FCFM	DCFM	CFP
MA	Pearson Correlation	1	.257**	.199*	-.075
	Sig. (2-tailed)		.003	.022	.388
	N	133	133	133	133
FCFM	Pearson Correlation	.257**	1	.255**	-.009
	Sig. (2-tailed)	.003		.003	.919
	N	133	133	133	133
DCFM	Pearson Correlation	.199*	.255**	1	-.045
	Sig. (2-tailed)	.022	.003		.607
	N	133	133	133	133
CFP	Pearson Correlation	-.075	-.009	-.045	1
	Sig. (2-tailed)	.388	.919	.607	
	N	133	133	133	133

Note: MA=Mothers' Awareness; FCFM=First Complementary Food Menu; DCFM=Daily Complementary Food Menu; CFP=Complementary Food Product;
**. Correlation is significant at the 0.01 level (2-tailed);
*. Correlation is significant at the 0.05 level (2-tailed)

The analysis results indicate a significant relationship between mothers' awareness in seeking information about balanced and nutritious food intake and their decisions regarding complementary feeding for their infants and toddlers. Specifically, with a significance value of 0.003 ($p<0.05$), mothers' awareness is positively associated with their decision to provide the first complementary food menu. Similarly, a significance value of 0.022 ($p<0.05$) demonstrates that their awareness is also linked to their decision to provide daily complementary food menu. However, no significant relationship was found between their awareness and their decision to provide complementary food menu, as indicated by a significance value of 0.388 ($p>0.05$). These results suggest that while maternal awareness of nutritional information influences key decisions about the introduction and frequency of complementary feeding, it does not extend to the selection of specific complementary food products.

Based on the demographic data and the regression analysis results of the three hypotheses, it can be stated that mothers' decision to provide complementary food menu for their infants and toddlers is related to their willingness and ability to seek information about balanced and nutritious complementary foods. This phenomenon demonstrates that mothers possessing sufficient knowledge also exhibit greater curiousity to check their infants and toddlers' health and nutritional intake to promote their children's optimal growth and development. They utilise social media and other existing sources to obtain accurate information about how to provide nutritious foods for their children.

Mothers' knowledge regarding healthy foods is typically tied to their interest in child and family health information, making them actively access their social media platforms, such as Instagram, Facebook, YouTube, etc. The topics pertaining children health and nutritious foods naturally attract them, since today's social media is a readily available source of information loaded with massive entertaining contents due to the rapid expansion of information activists concerned with health and children development, particularly those involved with dietary intake. Diverse backgrounds characterise the activists who provide information regarding maternal and child health, particularly those who are capable to offer intensive education regarding the provision of balanced and nutritious foods for complementary feeding.

Following the recommendations of WHO, UNICEF, and the Ministry of Health of the Republic of Indonesia, also based on the analysis results, the majority of respondents understand that they should begin providing complementary food menu in addition to breast milk at the infants' age of six months. Even though a few respondents conduct initial complementary feeding at the infants' age below six months and beyond seven months for various reasons not mentioned in this study, the majority of them provide initial complementary food menu at the infants' age of six months. Moreover, the daily and first complementary food menu provided by almost half of all respondents for their infants and toddlers were rated as 4-star menu, indicating a fairly good understanding among mothers regarding well-balanced diet aligning with the criteria of *Isi Piringku* established by the Ministry of Health.

Discussion

As the primary agents in stunting prevention, mothers closely relate to their children's nutritional status (Abuya et al., 2012; Bhutta et al., 2013). Several demographic statistics indicate that maternal education can influence mothers' utilisation of the existing facilities to obtain health-related information for themselves and their families (Tadesse et al., 2020, 2023). Moreover, maternal education can enhance mothers' interest in providing nutritious foods for their children, particularly concerning complementary foods (Nyamasege et al., 2021; Vazir et al., 2013). This supports the prior findings by Astuti & Widayatun (2018), Imdad et al. (2011), Nikièma et al. (2017), and Victora et al. (2008) that maternal education is a significant factor in the utilisation of prenatal health services.

However, providing complementary food menu can be quite complicated since it reflects mothers' behaviour, which is influenced by numerous aspects, such as their knowledge regarding a well-balanced diet (Black et al., 2013). This study's findings confirm that mothers' educational backgrounds and types of occupation do not particularly affect their behaviour in seeking information about nutritious foods and providing complementary food menu for their infants. Instead, their knowledge and capability to prepare nutritionally balanced complementary food menu are sometimes influenced by their proficiency in preparing animal protein-based food menu with the suitable texture for certain infants' ages (Aguayo et al., 2016; Fewtrell et al., 2017; Pérez-

Escamilla et al., 2021; Sausenthaler et al., 2011). Moreover, Romadona (2017) and Locks et al. (2015) highlighted that mothers' capability to prepare seafood-based menu, mainly fish, can lead to the habit of providing fish-based animal protein foods for their children and families. Their capability to prepare seafood-based menu, especially fish, will enhance their confidence to feed their family these dishes (Bégin & Aguayo, 2017; Harding et al., 2019). In addition, internal considerations and pressures also influence mothers' decision to provide animal protein in complementary food menu for their 6-month-old infants (Daelmans et al., 2013; White et al., 2017). Several mothers still feed their infants complementary foods at six months of age, prepare a single menu, and only introduce animal protein to infants aged 7, 8, and 12 months (Aguayo et al., 2016). This practice contradicts the government's suggestion, whereas the Ministry of Health articulated that the complementary food menu is supposed to be directly meet the nutritional standard of a well-balanced diet, that is consisting of carbohydrates, animal and vegetable proteins, vegetables, and fruits.

This study's findings reveal that mothers' awareness in seeking information about balanced and nutritious foods significantly correlates with their decision to provide both daily and first complementary food menu for their infants and toddlers. However, this awareness is unrelated to the types of side dish menu (Bournez et al., 2018; Daniels et al., 2014). It is thereby concluded that mothers' understanding about this matter can be seen through their behaviour in seeking information from popular sources about nutritious and healthy foods. All of these disclosures thereby affirm the novelty posed by this study, since it focuses on young mothers' behaviour and awareness in seeking information, mainly from social media, about the provision of balanced and nutritious foods for their infants and toddlers as stunting prevention efforts.

Following the Indonesian government's plan to accelerate the stunting prevention, public are equipped with greater access to the vital role of digital technology-based sources of information (Torlesse & Aguayo, 2018; Utami et al., 2019). In addition, there is also an expanding number of health information advocates and children's development programs working to prevent stunting. Based on their professionalism, experience, and standpoint concerning their communities, these activists are deemed reliable as the information providers, particularly concerning nutritious foods (Frongillo et al., 1997; Swinburn et al., 2019).

Nonetheless, several limitations of this study need to be acknowledged. *Firstly*, this study experienced a time constraint of only two months to distribute the online questionnaire, thus posing a barrier for researchers. Due to the short duration available for data collection, the focus was directed to a quantitative analysis of the respondents' responses, that is concerning their behaviour in seeking information about healthy, well-balanced, and nutritious foods for their children and families. *Secondly*, the distribution of online questionnaire was limited by the existing research network, and the time constraint made it impossible to gather the larger number of respondents. *Thirdly*, this study's contribution based on its findings' scope is solely determined by the regression analysis results, since qualitative analysis was not performed, whereas the latter allows

researchers for gaining deeper insights of other factors influencing mothers' behaviour in this matter. For this reason, future studies are expected to improve these drawbacks and examine other factors affecting maternal behaviour in seeking appropriate information about healthy, balanced, and nutritious foods as well as about stunting prevention efforts. This study is still infrequently conducted by other researchers so that it may facilitate further investigation regarding maternal behaviour and information variables for preventing childhood stunting.

Conclusion

This study concludes that mothers' knowledge and awareness about healthy and nutritious foods for stunting prevention can be seen from their behaviour in seeking information about this matter. Today's digital technology-based facilities, such as social media, are the most convenient and accessible sources of information. Respondents increasingly utilise Instagram, Facebook, YouTube, Twitter, and other social media platforms to access various information. In addition, social networking communities, such as WhatsApp groups and mailing lists, also serve as valuable sources of information. This behaviour is strongly associated with initiating breastfeeding at the infants' age of six months. The first complimentary food menu provided is the balanced and nutritious food menu. The most common type of complementary food menu is home-cooked dishes prepared by mothers themselves. The six-month-old infants, in addition to being the group receiving the most first complementary food menu, are also the one receiving the most animal protein-based first complementary food menu, such as livestock meat and chicken as well as fish and other seafood products. Regarding the impact of social media on stunting prevention initiatives, the government must pay close attention to the role of digital information technology as an efficient information dissemination tool, provide health advocacies, and develop stunting prevention strategies through well-aimed assistance programs and regulation establishment. The Ministry of Health is particularly expected to be more proactive in implementing these activities to realise successful and efficient acceleration of stunting prevention efforts.

Conflict of Interest

All authors declare no conflicts of interest regarding the implementation of this study and the writing of this article. All authors contributed equally as main authors.

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