Factors Related to Women Health Literacy in The Coastal Area at Semarang City

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ARTICLE INFO

A B S T R A C T

Improving women health literacy is crucial. In addition to improving individual health conditions, a mother is also closer to her child in terms of parenting. Nevertheless, there are still various factors that influence the improvement of health literacy, especially in coastal areas. This study aims to determine the health literacy of women in coastal areas and the factors that influence it. This research is quantitative research with a cross-sectional approach. The research was conducted from March to July 2021 with locations in 4 sub-districts in the coastal area at Semarang City, namely Genuk, Tugu, North Semarang, and West Semarang. Respondents in this study were 220 people who were selected using the cluster random sampling technique. Data were obtained through interviews with questionnaires and analyzed by univariate and bivariate tests. Based on the results of the study, most of the respondents (65.5%) had health literacy at a medium level. Several factors that influence health literacy include education (p-value=0.006), motivation (p-value=0.0001), resources (p-value=0.0001), and social culture (p-value=0.011). Increasing knowledge and motivation related to health can be done through informal health training and group sharing. In addition, the support of resources from the government and the support of community leaders is also needed to improve health literacy in coastal areas.

A B S T R A K

Peningkatan literasi kesehatan pada wanita merupakan hal yang krusial. Selain untuk meningkatkan kondisi kesehatan individual, seorang ibu juga lebih dekat dengan anak dalam hal pengasuhan. Meskipun demikian, masih terdapat berbagai faktor yang berpengaruh dalam peningkatan literasi kesehatan terutama di daerah pesisir. Penelitian ini bertujuan untuk mengetahui literasi kesehatan pada wanita di daerah pesisir dan faktor yang mempengaruhinya. Penelitian ini merupakan penelitian kuantitatif dengan pendekatan cross sectional. Penelitian dilakukan selama bulan Maret hingga Juli 2021 dengan lokasi di 4 Kecamatan daerah pesisir Kota Semarang yaitu Genuk, Tugu, Semarang Utara dan Semarang Barat. Responden dalam penelitian ini sebanyak 220 orang yang dipilih dengan menggunakan teknik cluster random sampling. Data diperoleh melalui wawancara dengan kuesioner dan dianalisis dengan uji univariat serta bivariat. Berdasarkan hasil penelitian sebagian besar responden (65,5%) memiliki literasi kesehatan dengan dengan level menengah. Beberapa faktor yang berpengaruh terhadap literasi kesehatan diantaranya adalah pendidikan (p=0.006), motivasi (p=0.0001), sumber daya (p=0.0001), dan kultur sosial (p=0.011). Peningkatan pengetahuan dan motivasi terkait kesehatan dapat dilakukan melalui pelatihan informal kesehatan dan grup sharing. Selain itu dukungan sumber daya dari pemerintah dan dukungan

tokoh masyarakat juga diperlukan untuk meningkatkan literasi kesehatan di daerah pesisir.

INTRODUCTION

Literacy according to the Big Indonesian Dictionary is defined as someone who processes information and knowledge for life(Language Development Agency, 2016). Literacy is the initial capital to improve a person's standard of living in a better direction. This is because literacy encourages a person to carry out lifelong learning, so it is not surprising that many countries and agencies pay more attention to efforts to increase literacy.

Unfortunately, literacy in Indonesia is still relatively low, this can be seen from the results of a study conducted by Central Connecticut State University in 2016 which noted that Indonesia's literacy rate was ranked 60th out of 61 countries examined (Miller & McKenna, 2016). This is certainly very located where Indonesia is ranked second from the bottom in terms of literacy. Research at the national level conducted by the Ministry of Education and Culture shows that Central Java has a literacy index of 33.3. The literacy index value of Central Java is low because it is below the national average index which is 37.32 (Wiratno et al., 2017). This makes Central Java focus on improving the literacy possessed by the community even during a pandemic like today (Akmalah & Khatullaila, 2020).

Another effort to increase literacy in the Central Java area is by declaring Semarang City as a Literacy City (Central Java Public Relations, 2018). This is interesting to study more deeply because the city of Semarang has been proclaimed as a literacy city and as the heart of the capital of the province of Central Java, the city of Semarang is expected to be a role model in efforts to increase literacy.

The coastal area of Semarang City administratively consists of 4 sub-districts, namely Tugu, West Semarang, North Semarang, Genuk, and 14 villages or sub-districts that are used as ports, industrial areas, and residential residents. Residential areas are often characterized by inadequate environmental conditions, impression, use of technology, and vulnerability to natural disasters such as tidal flooding (Ambariyanto & Denny, 2012). This is a challenge in the activation of health literacy in the era of industrial technology 4.0 in this area.

Many efforts to increase public literacy have been carried out by the government and literacy observer communities, however, based on the research of Konishi, et al. (2018) it is known that literacy improvement is more effective if it is carried out by mothers. This is because the mother is the first person a child encounters, so the child's literacy level is highly dependent on the mother's literacy level. Other research conducted by Jarrett and Coba-Rodriguez (2017) also shows that mothers have a significant role in fostering literacy in a family, especially in children. Unfortunately, the role of mothers in increasing literacy is still very minimal.

Literacy does not only include the personal development of an individual in terms of education but is also very influential on the level of development of a nation's human index (Rintaningrum, 2009). The same thing was explained by UNESCO that literacy has a multiplier effect where literacy empowers someone so that they can fully participate in society. One aspect that is influenced by literacy is health. There is a relationship between a person's literacy level and a person's level of health, so the concept of health literacy was born (Dastani & Sattari, 2016).Based on the background that has been mentioned above, this research aims to know the health literacy among the women in the coastal area at Semarang City and the factors that affect literacy.

METHOD

Participant characteristics and research design

The research was quantitive research with the cross-sectional approach. The participant characteristics include the woman that lived in the coastal area in Semarang City include of Tugu, West Semarang, North Semarang, Genuk sub-districts. The inclusion criteria were that the informant has 17-65 years old and agrees to be the respondent. The exclusion criteria were the respondent withdraw from the research. The research was done from March until July 2021 and has been approved by Health Research Ethics Committee with number 103/EA/KEPK-FKM/2021

Sampling procedures and sample size

The sampling technique used in this research is cluster random sampling. With these steps: (1) Determining the locus of coastal areas, namely the sub-districts of Genuk, Tugu, West Semarang, and North Semarang (2) Determining the total number of samples needed (3) Determining the number of samples in each area. (4) Determination of respondent representatives from each sub-district randomly. The number of samples was 220 respondents that contain 55 respondents from Genuk, 55 respondents from Tugu, 55 respondents from West Semarang, and 55 respondents from North Semarang sub-district. Dependent variable was health literacy and independent variable were resources, motivation, social culture, and education.

Data collection and analysis

The research was done from March until July 2021 and has been approved by Health Research Ethics Committee with number 103/EA/KEPK-FKM/2021. Data were collected from respondents using a questionnaire that contains health literacy measurement that adopts from European Health Literacy Survey Questionnaire and questions related to factors that affect health literacy. Data were analyzed using SPSS and bivariate analysis using Rank Spearman.

RESULTS AND DISCUSSION

A. Respondent's Characteristics

The respondent's characteristics were shown in table (1). All respondents are women or mothers with 62.3% of respondents having an adult age of 26-45 years old. Of the

220 respondents, 155 respondents (70.5%) had minimum education Senior High School/ Vocational High School(SMA/SMK), with the majority working as housewives. For respondents' income, 81.4% have income below the minimum wage. And 200 respondents stated that they have a communication media in the form of a cellphone with a maximum usage time of 2-4 hours per day.

Table 1
Respondent's characteristics (N=220)

Variable	f	%
Age		
17-20	6	2.7
20-50	137	62.3
50-60	74	33.6
60-65	3	1.4
Education		
Elementary and Junior High Scholl	65	29.5
Senior High School and Garduate	155	70.5
Employee		
Civil servant	7	3.2
Entrepenurship	39	17.7
Farmer	2	0.9
Fisherman	3	1.4
Housewive	150	68.2
Others	19	8.6
Income		
< Rp 2.700.000,-	179	81.4
> Rp 2.700.000,-	41	18.6
Having smartphone		
Yes	200	90.9
No	20	9.1
Intensity of using handphone		
Not using handphone	19	8.6
1-2 hours/day	59	26.8
2-4 hours/day	72	32.7
4-6 hours/day	41	18.6
> 6 hours/ day	29	13.2
Health Literacy		
Low	35	15.9
Middle	144	65.5
High	41	18.6

Based on the results of the study (table 1), it showed that only 18.6% of respondents had a high level of health literacy, 65.5% had a moderate level of health literacy and 15.9% of respondents had a low level of health literacy.

They have difficulty choosing valid health information, using various media to obtain health information, obtaining information on healthy behavior, physical activity, disease prevention, stress management, mental health, and making health-related decisions herself. But, most of them have quite easy access to healthcare services and understanding advice from health professionals.

B. Factors Related to Woman Health Literacy

There are many factors that related to health literacy i.e resources, motivation, and social cultures. Based on the research for the resource variables in coastal communities, 29 respondents (13,2%) stated that they had a lack of facilities, 157 respondents (71.4%) had adequate resources including ownership of funds and equipment for access to health information, and 34 respondents (15,5%) had very adequate resources.

In the motivation variable, only 24.1% of respondents have high motivation to support or improve health literacy, 54.1% of respondents have enough motivation and there are still 21.8% of respondents who lack the motivation to improve their health literacy.

And based on research, coastal communities have a social culture that is enough supportive (68.2%) in efforts to increase health literacy, where coastal communities have an environment and community leaders who are very active in efforts to increase health literacy.

Table 3.
Correlation Between Health Literacy and Resources, Motivation, Social Cutlure, and Education

Variable	P value	Correlation Strength
Resources	0.0001	0.288
Motivation	0.0001	0.449
Social culture	0.011	0.171
Education	0.006	0.183

Based on table 3, it can be seen that the level of education has a significant correlation with the level of health literacy, p-value = 0.006, where the level of strength of the correlation is very weak (0.183). Education can create a person's ability to always add or update the health knowledge through a continuous learning process (Canadian Council on Learning, 2008). Education plays a role in the formation of knowledge and skills related to health. Education can affect a person's preferences, behavior, and lifestyle which in turn can affect his health. Education also increases a person's ability to collect and interpret health information. This is in line with research (Tutik, 2019), which states that there is an influence of education on the level of health literacy (p-value = 0.000), where the higher the level of education, the higher the literacy. Education is believed to affect the level of health literacy, either directly or indirectly. Directly, education affects the ability to read, listen, and understand health information, indirectly, education is related to work which then has an impact on the economic level and financial ability to deal with health problems (Ng Edward & Omariba, 2010).Other research says that a person can acquire sufficient knowledge even though they have a low level of formal education. This knowledge capacity can be increased through informal training such as training on proper diet, nutrition, vaccination, parenting, and physical activity.

Based on the research, it can be seen that resources have a significant correlation with the level of health literacy (p-value = 0.0001) where the level of relationship strength has a sufficient correlation (0.288). The resources in this study referred to the ownership of equipment for accessing health information, sources of funds owned, knowledge of steps to obtain information, locations of health services, and sources of health information. This result is in line with Karina (2012) which states that access to health information is the most influential variable on health literacy. Nutbeam (2000) suggests that increasing people's access to health information and their capacity to use it effectively is crucial in terms of health literacy. Good health decisions require health information that is comprehensive, accessible, and in accordance with the needs and socio-cultural background of the individual. In research (Cholik, 2017), it is also stated that ownership and use of digital devices (laptops/computers, etc.) are very important to use in searching for information sources both offline and online.In the context of fulfilling resources, the government also needs to improve existing infrastructure, use media that are appropriate to local conditions, and provide funding support for equitable distribution of health information.

Community social culture has a significant correlation with the level of health literacy (p-value = 0.011) where the level of relationship strength has a very weak correlation (0.171). Social culture can be in the form of the role of community leaders where community leaders can provide informative support including advice, instructions, suggestions, and feedback (Smet in Akbar et al., 2015). The role of community leaders in providing informative support can be seen in their efforts to disseminate health-related information to the community so that they can improve public health literacy.Based on the results of the study, it can be seen that the level of motivation has a significant correlation with the level of health literacy (p-value = 0.0001) where the level of relationship strength has a moderate correlation (0.449).The European Health Literacy Survey also states that the motivation of individuals is very influential in health literacy. This is because motivation is needed to obtain, access, interpret and understand, assess, and apply existing health information so that health literacy increases. The results of this study are in line with Martinah's research (2011), which states that high motivation will increase the activity of mothers to seek information about health that may increase maternal health literacy.To increase motivation to get health information, sharing groups can be formed on certain platforms such as through WhatsApp so that they can motivate each other.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, most of the respondents (65.5%) had health literacy at a medium level. Several factors that influence health literacy include education, motivation, resources, and social culture. Increasing knowledge and motivation related to health can be done through informal health training and group sharing. In addition, the support of resources from the government and the support of community leaders is also needed to improve health literacy in coastal areas.

ACKNOWLEDGMENT

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