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Understanding Parental Health Literacy for Clean and Healthy Behavior in Early Childhood During the Covid-19 Pandemic

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ABSTRACT: In the COVID-19 pandemic scenario, parents need to be familiar with health literacy by applying clean and healthy living habits to their family members, especially those with early childhood. This study aims to explain parents' perceptions of health literacy for a clean and healthy behavior in their children during the COVID-19 pandemic. The method used in this study is a cross-sectional study involving 22 men and 62 female respondents. Respondent requirements were used in data analysis to determine parents' perceptions of health literacy and the efforts they have made to practice clean and healthy lifestyle in their children. The research findings show that knowing the health awareness of parents has an impact on a child's balanced lifestyle. Based on six measures of clean and healthy behavior for children, three indicators were determined in the category of discipline and high discipline: using clean water, using the toilet, and doing physical activity. The act of washing children's hands with soap indicators has a high discipline score and the use of masks in children has low discipline. If the use of masks is not disciplined by parents, exposure to COVID-19 in early childhood can be disrupted.

Keywords: *Early Childhood, Parental health literacy, Clean and healthy behaviors.*

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1 INTRODUCTION

Important and timely health information about COVID-19 now comes every minute from various media and backgrounds, from personal messages from health workers wearing sanitizers and masks that have gone viral on social media to mainstream media, states, and groups seeking to contextual reactions in ways that are urgent to their population. It is extremely difficult to sift through data and finds accurate and reliable facts to guide the actions of people, households and communities, as well as, most importantly, health care agencies and the legislature (Sentell et al., 2020). Likewise, health literacy for adults who have early childhood during a pandemic is very important so that children can escape the outbreak and have a more prosperous future.

The number of pediatric patients could increase in the future, because the smaller number of pediatric patients at the start of the pandemic does not mean that children are less susceptible to the disease (Wang et al., 2020). It is imperative to describe the most effective strategies for dealing with COVID-19 in children (Lee et al., 2020). Parents are now role models and advocates for their children's health. When children are detained in their households, strong leadership skills are essential. Parents must value children's interests and shield them from damage in addition to monitoring their success and behavior. To reduce COVID-19 in the general population and particularly in children, the WHO has set a target of changing people's perceptions, as a result, it's critical to survey parents' awareness, behaviors, and beliefs about COVID-19 (Abuhammad, 2021).

Water, sanitation, and hygiene (WASH) activities have emerged as a key factor in managing and stopping the COVID-19 pandemic's spread. Bauza et al., (2021) report findings emphasize the importance of providing appropriate WASH facilities to communities in order to encourage the practice of healthy behaviors and improve resistance during a large-scale health crisis. The relationship between health literacy and distress or anxiety in the general population has been studied less frequently than during the COVID-19 pandemic. Health literacy refers to a term that is highly relevant for the understanding and application of health knowledge (Duplaga & Grysztar, 2021). Parents who have early childhood need more knowledge on health literacy, specifically for children, so that they have the ability to build clean and healthy living behaviors in children in a pandemic situation.

To prevent the spread of Covid-19, which ultimately affect the healthy behavior of family members, understanding health literacy in the parent, especially concerning the COVID-19 pandemic mitigation, has a profound influence on children healthy living behaviors. Based for the context to the issue, the purpose of this study is to explain the perception of parent health literacy in the clean and healthy behavior of early childhood during the pandemic.

2 THEORITICAL STUDY

2.1 *Parental Health Literacy during Covid-19 Pandemic*

The WHO described health literacy in 1998 as the cognitive and social skills that decide an individual's desire and capacity to gain access to, learn, and use knowledge in ways that encourage and sustain healthy health (Nutbeam, 1998). Health literacy can be viewed as a matrix of 12 dimensions arising from the convergence of four categories of practices relating to health knowledge and three domains: healthcare, disease prevention, and health promotion, according to the model established during the European Health Literacy Survey Project (Sørensen et al., 2013). The available evidence indicates that adequate health literacy is a precondition for patient empowerment and the efficient use of health care resources, effective communication with health care providers and the daily implementation of the rules for a healthy lifestyle (Berkman et al., 2011; Duplaga, 2020; Humphrys et al., 2019; Sørensen et al., 2015; Zaben & Khalil, 2019).

Health awareness is a personal advantage that develops over time (Clouston et al., 2016), since a child grows up with varying traits and health needs at each point of development (Cooper, 2019; Okan, 2019). Children's and teenagers' health awareness, for example, is highly influenced by their developmental abilities, as well as their parents and peers (Bröder et al., 2020). When they

reach maturity, they become more self-reliant in making healthcare, illness prevention, and health promotion choices (Sørensen et al., 2015). Older adults are more vulnerable when cognitive capacity decreases with age, leaving them with fewer self-management capacities for daily health-related choices (O'Connor et al., 2019).

If the latter research model is extended to modern health literacy research and practice, the primary advantage would be. The method of translation and awareness participation, for example, brings the resulting health awareness data into the modern world. Interactions with researchers may help end consumers of information, such as parents with young children, by reflection about their own everyday habits, improved health knowledge, and expertise to safeguard health. Researchers will learn as well when they obtain a new perspective on the procedure and policy setting, as well as improve health literacy research questions with practical implications and benefits (Gagliardi et al., 2015).

2.2 *Children Clean and Healthy Behavior During Covid-19*

The COVID-19 pandemic is a measure of health literacy, suggesting that this definition is one of the most important personal and environmental pathways to population health and well-being in the twenty-first century. The idea of health literacy must be adapted to the demands of changing times to encourage the improvement of voluntary behavior in the current public health system while still paying attention to meaning, especially changes in clean and healthy behavior from an early age (Sentell et al., 2020).

The promotion of clean and healthy living behaviors is one of the most important resources available to health care professionals in fighting disease (Weston et al., 2018). Individuals participate in health promotion activities such as behavioral prevention and monitoring to maintain or improve their health. Health patterns influence the long-term development of chronic diseases, such as the relationship between diet and exercise habits and cardiovascular disease or diabetes, but these patterns are often important in the field of infectious diseases (Toussaint et al., 2020).

The Centers for Disease Control and Prevention (CDC) published guidelines on the health practices people should strive to help prevent the spread of disease, with the primary goal of preventing exposure to the new coronavirus. The CDC proposes the following health practices regarding COVID-19 by March 2020: (a) hand washing; (b) stop rubbing the face with unwashed hands; (c) avoid direct contact with sick people; (d) maintain a safe distance from others if COVID-19 is circulating in the community; (e) stay home when sick; (f) covering the mouth and nose with a tissue when coughing or sneezing; (g) throwing used tissue into the trash; (h) wash hands or scrub with hand sanitizer. These guidelines are not fresh in the area of infectious disease prevention. Cleaning the feet, avoiding rubbing the face with unclean hands, maintaining social distance, etc. have been recommended for a long time; The CDC created some of the same guidelines for preventing the common cold as recently as 2019 (Center for Disease Control and Prevention (CDC), 2019).

The Household Clean and healthy living behavior (CHLB/PHBS in bahasa) Order aims to empower household members to know, want, and be able to carry out clean and healthy living behaviors and have an active role in movement at the community level. The main goal of the CHLB/PHBS order of the household level is the achievement of a healthy household. There are several CHLB/PHBS indicators of the household level that can be used as a reference to recognize the success of CHLB/PHBS practices to the household level. Here are 10 CHLB/PHBS indicators at the household level: (1) childbirth, (2) exclusive breast milk administration, (3) weighing infants and toddlers periodically, (4) washing hands with soap and clean water, (5) using clean water, (6) using healthy restrooms, (7) eradicating mosquito flicks, (8) Eat fruit and vegetables daily, (9) Performing physical activity daily, and (10) not smoking in the house (Kementerian Kesehatan RI, 2011). In this study of ten indicators, researchers limited to four indicators then added two indicators tailored to the current situation, namely indicators of keeping a safe distance and using masks in public places to prevent the spread of Covid-19.

3 METHOD

The research was conducted as a cross-sectional observational study design to assess the psychological response of parents who have early childhood literacy to the effect on clean and healthy habituation behaviors during the Covid-19 pandemic, conducted using an anonymous online questionnaire. From June to September 2020, the survey was conducted via a connection posted on a social networking site. The sampled population consists of 84 parents with young children who live in West Bandung Regency. The respondents' criteria are parents who have early childhood studying in the Play Group, ChildCare Park, Kindergarten, and other early childhood education units. The parents can use social media and are willing to consent to the questions asked in the research instrument. Sampling is conducted using convenience techniques and snowball sampling. Respondents who will fill out the research instrument agree to the contents of the research question filling out the form objectively and are given non-monetary rewards for filling out the questionnaire.

3.1 *Instruments*

The instruments used in this study were validated first by the representatives of parents in the Play Group, Childcare Park, Kindergarten, and other PAUD units, so that various errors and deficiencies in the instruments to be used could be corrected. This instrument was developed by the author regarding the knowledge and behavior towards COVID-19 based upon the literature.

Instruments consist of: (1) Characteristics of parents who have early childhood, which include: age, gender, residence, level of education; (2) parental understanding of health literacy made on the form of attitude scale (1-5); (3) clean and healthy living behaviors of early childhood carried out on an attitude scale (1-5).

Scores on respondents' behavior consisted of normal (scale 1), mild psychological impact (scale: 2), moderate psychological impact (scale 3), severe psychological impact (scale: 4), and very severe psychological impact (scale: 5).

Indicators studied in the clean and healthy living behavior in early childhood are: (1) washing hands with soap, (2) using clean water, (3) using healthy latrines, (4) doing physical activity daily, (5) maintaining a safe distance (social distancing), and (6) using masks in public places to prevent the spread of Covid-19.

3.2 *Data Collection*

Data is collected through semi-structured questionnaires using Google's forms with the consent included in them. Questionnaire links are sent via email, WhatsApp groups, Facebook groups, and other social media. When receiving and clicking on a link, participants will be directed to information for the study and informed consent. After receiving the survey, the educator will fill in the details about the instrument contents. Then questions will appear sequentially, where participants will answer.

4 RESULT AND DISCUSSION

4.1 *Demographic variables*

All respondents were in West Bandung Regency spread across eight sub-districts studied from 16 sub-districts in West Bandung regency, namely Lembang, Cisarua, Ngamprah, Cikalong Wetan, Batujajar, Padalarang, Cipatat, and Parongpong sub-districts. Demographic Variables of Parents (see table 1).

Table 1 Demographic Variables of Parents

Variable	Amount
Gender	
Male	22
Female	62
Age	
n < 30	16
31-35	43
36-40	18
40 < n	7
Levels of Education	
Junior high school	3
Senior High School	64
Bachelor	16
Higher education	1

4.2 *Parents' understanding on Health Literacy*

Parents' understanding of people's literacy was reviewed based on six indicators: (1) washing hands with soap, (2) using clean water, (3) using healthy latrines, (4) doing daily physical activity, (5) maintaining a safe distance (social distancing), and (6) using a mask. This health literacy indicator is adjusted to the current COVID-19 pandemic conditions. Based on data from 84 respondents obtained data on the level of parental understanding of health literacy on five scales is as follows: very understanding 2 people, understanding 59 people, quite understanding 15 people, less understanding 8 people, and not a respondent who does not understand. Based on the data that more than half (70%) respondents understand about health literacy, others are very well understood (2%), quite understand (18%), and lack of understanding (10%). This is in line with the latest research from Abuhammad (2021) that the point of view of parents, the results presented in his research are very important to understand the clinical picture and the vertical transmission capacity of COVID-19 infection in children. In the majority of cases, the parents' understanding of COVID-19 in children is considered adequate. This expertise helps in the creation of training services to raise awareness in places where there is a shortage.

4.3 *The Child's Clean and Healthy Behavior*

Data on the clean and healthy living behaviors of early childhood is researched based on information provided to parents, so it does not make direct observations about the behavior of the child because it is not possible in the condition of the Covid-19 pandemic, nor does it conduct interviews or ask the child to fill out instruments because the child is not yet capable of filling out instruments. The results of data on the clean and healthy living behavior of early childhood based on the observations of their parents are as follows: (1) the child's habit of doing handwashing with soap obtained data as follows: highly disciplined 1 person (1%), discipline 37 23 people (27 44%), fairly disciplined 37 people (44%), less disciplined 14 people (17%) and undisciplined 9 people (11%).

The data showed that children's behavior in washing their hands using soap was almost half as disciplined. However, there were still 23 children (28%) whose behavior is lacking and undisciplined, so parents should provide guidance and explanation to their children about the importance of washing their hands using soap in daily life, especially during the Covid-19 pandemic. The child understands the importance of washing hands using soap becomes the child's habit and behavior daily, especially when after doing activities outside the house, after exiting the bathroom/toilet, and before holding food and drinks. Changes in clean and healthy behavior in children who look quite good when it is known that the health literacy of parents to face the Covid-19 period is adequate. Therefore, health literacy must be built deliberately as a population level resource and a community asset (Sentell et al., 2020).

Furthermore, clean and healthy living behaviors on indicators of clean water use conducted by children obtained the following data: highly disciplined 11 people (13%), discipline 63 people (75%), quite disciplined 8 people (10%), less discipline 2 people (2%) and no child are undisciplined (0%). The data showed that children's behavior in using clean water was mostly disciplined and disciplined (88%). The availability of clean water and parental guidance to early childhood in using clean water is quite good. Therefore, parental health awareness is widely recognized as a key factor in achieving equitable child health. The majority of trials and programs cover adults, but there is a growing emphasis on children's health literacy. Despite being a key stage in developing prerequisites for abilities, behaviors and activities that are understood to be key components and outcomes of health literacy, early childhood has not been considered an important goal for addressing health literacy issues during its existence (Okan, 2019).

The clean and healthy living behavior of children on indicators of latrines use obtained data as follows: highly disciplined 19 people (22%), discipline 56 people (66%), fairly disciplined 9 people (11%), less discipline 1 person (1%) and no child are undisciplined in the use of latrines (0%). The data showed that children's behavior in using restrooms was mostly disciplined and disciplined (88%). Thus, the clean and healthy living behavior of early childhood in using family latrines is classified as disciplined. The discipline that was formed during the Covid-19 period made it easier for children to get used to living clean and healthy. Although extreme COVID-19 affects children and adolescents less, this group is thought to be at high risk of physical, social and mental health consequences unrelated to treatment and general pandemic prevention measures. Assessments of clean and healthy living behaviors in children are used to look at the indirect impact of the COVID-19 pandemic on their well-being and take action to reduce additional damage (Chanchlani et al., 2020).

Indicators of performing physical activity daily obtained the following data: highly disciplined 8 people (10%), discipline 59 people (70 %), enough discipline 11 people (13%), less discipline 6 people (7%) and no child is undisciplined (0%). The data shows that in general, children's behavior in physical activity during the Covid-19 pandemic, in general, is highly disciplined and disciplined (80%), quite disciplined and lacking in the discipline (20%). Parents give their children the freedom to do a physical activity while at home during the Covid-19 pandemic, Zaben and Khalil (2019) said that physical exercise and medical diagnosis have had an impact on quality of life and increase the body's immunity during a pandemic.

Findings on the clean and healthy living behavior of children on indicators of keeping a safe distance (social distancing) obtained data as follows: highly disciplined 1 person (1%), discipline 29 people (35%), fairly disciplined 28 people (33%), less disciplined 12 people (14%) and undisciplined 14 children (17%). The data showed that in general, children's behavior in maintaining a safe distance was highly disciplined and disciplined (36%), fairly disciplined (33%), and less and undisciplined (31) %. The data shows that early childhood behavior in maintaining a safe distance needs to get the attention of parents in keeping the child from exposure to Covid-19. Because 31% of children who are poor and undisciplined are very vulnerable from the COVID-19 transmission.

Clean and healthy living behavior of children on indicators using masks in public places to prevent the spread of Covid-19 obtained the following data: no one is very disciplined (0 %), discipline 11 people (13%), enough discipline 31 people (37%), less disciplined 27 people (32%) and the undisciplined there are 15 (18%). The data showed that children's behavior in using masks when out of the house or going to public places was in the 50% less and undisciplined category. This indicates that the behavior of children in using masks is quite concerning. Consequently, parents should be more intensive in understanding and guiding children about the importance of using masks to prevent exposure to Covid-19.

5 CONCLUSION

This study has found that health literacy understanding in parent's affects early childhood's clean and healthy living behaviors. Based on six indicators of clean and healthy living behaviors, children obtained information that three indicators have category of high discipline and dis-

cipline, namely children's behavior in using clean water, using latrines, and doing physical activity. While the indicator that has a fairly disciplined score is in the child's behavior in doing hand-washing with soap, while the behavior of the child who should get the attention of the parents is in using masks because the disciplinary score is not high enough. If parents do not discipline the use of masks, it can impact COVID-19 exposure in early childhood. From the perspective of parents, the results presented here are critical for recognizing the clinical features and potential for vertical transmission of COVID-19 infection in infants. Parents have a quite enough understanding of COVID-19 in adolescents. They have a better understanding of clinical symptoms of illness, virus transmission pathways, and disease prevention methods.

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