

## Stunting in the Digital Age: Health Literacy Challenges Among Parents in Palopo City

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### Abstract

The rapid use of digital information about health is used by parents to find out about stunting conditions in their children. This study aims to analyze the behavior of parents seeking information about stunting on the internet and also identify the factors that influence parents to search for information online about stunting. The method used in this study is a qualitative approach with in-depth interviews with five informants who have stunted children. The results of the study show that parents actively use digital platforms, such as YouTube and Google, to seek information related to parenting, nutrition, and child health, especially after knowing that their child is stunted. Parents feel that video content on the internet helps them better understand parenting practices and appropriate nutrition recommendations. Videos allow them to see first-hand recommended techniques or tips, which they find more effective than verbal instructions they get from healthcare professionals. In addition to the ease of access and availability of various resources, parents also feel that online search allows them to select and sort information according to their child's specific needs, such as the type of nutrition, meal schedule, or sleep patterns that support the child's growth. Unsatisfactory interactions with health workers, such as limited consultation time and incomplete information, also encourage parents to seek additional information online as a complement and further guidance. This study emphasizes the importance of improving digital literacy and health among parents so that they are better able to access accurate and relevant information in order to support child development.

**Keywords:** Digital; Internet; Parenting; Stunting

### 1. Introduction

Stunting has become a significant health problem in Indonesia. Prevalence rate stunting in Indonesia, it was recorded at 24.4% (Fitri et al., 2024). Based on the results of measurements of toddlers for the period August 2023, the number of toddlers with status stunting was 42,659 or around 7.6 percent of the number of toddlers measured as many as 558,648, it was recorded that the stunting prevalence rate in Selayar Regency was (18.7%) Enrekang Regency (18.6%), Jeneponto (15.4%), Tana Toraja (15.4%) and North Toraja (11.6%) are the five regions with the highest percentage in South Sulawesi Province. Furthermore, the area that shows the lowest percentage of stunting is Palopo City (2.2%), Makassar City (3.1%) and East Luwu (3.8%). Stunting Referring to a condition in which children experience growth disorders due to a lack of adequate nutritional intake in an important period of development, especially in the first 1000 days of life (de Onis & Branca, 2016; Liem & Noratama Putri, 2023; Scheffler et al., 2020). The long-term impact of stunting including cognitive impairment, chronic health risks, and lower economic potential in adulthood (Tongkonoo et al., 2021). Therefore, proper knowledge and precautions by parents are very important.

In today's digital era, the search for information about children's health, including stunting, further facilitated by advances in information technology (Ratri, 2024). This is as found in the research by Kinanti and Erza (Kinanti & Erza, 2020), where young adults often seek information about health and disease through Google and social media. The use of the internet to search for information, including about health and disease, is due to the quick and easy access compared to searching for information directly (Santosa & Princen, 2023). The use of the internet by the public is also increasing due to the feeling of staying connected with others, especially during the COVID-19 pandemic (Köse & Murat, 2021).

One of the effects of excessive use of the internet, especially to seek health information, is the increased risk of health-related anxiety, which is often referred to as *health anxiety* (Kristina et al., 2019).

*Health anxiety* It arises when a person misinterprets things that are considered threatening to their health, either from within such as physical symptoms, or from outside such as media reports about a health condition (Zheng & Tandoc, 2022). This then triggers the formation of irrational beliefs related to certain diseases.

The rapid use of the internet to find health information is no longer concentrated in big cities, but has also begun to occur in rural areas, one of which is Palopo City. Most parents in Palopo City are more active in seeking information about stunting through the internet, especially after finding out that their child has been diagnosed *with* stunting. In fact, many parents avoid visiting health centers or other health centers because they feel more confident in information obtained from cyberspace.

Parents' preference to rely on information from this poses various challenges in the context of health literacy. Information on the internet often varies in quality, with a large amount of content that may not be based on scientific evidence or updated regularly (Adam, 2022). A lack of understanding of how to filter and assess the accuracy of online information makes parents vulnerable to misinformation, which ultimately affects their health decision-making (Syafei, 2023).

This phenomenon needs attention, because low health literacy in seeking and understanding information related to stunting can worsen the health conditions of affected children. This study will analyze how the behavior of online information about stunting and to explore the factors that make parents in Palopo prefer the internet as a source of health information.

## 2. Methods

This research uses a qualitative method with a case study approach (Spradley, 2006), which was held in Palopo City. This research involved five informants, namely parents who have children stunting. Data were collected through observation, semi-structured interviews (Suggestion, 2010), and audio-visual documentation (Creswell, 2010). The data analysis process begins with preparing the data for analysis. The collected data is then transcribed from the results of the interviews, followed by a coding process to categorize the data. After that, the data is reduced based on the formulation of the research problem, so that it can answer the research question. The results of the study were then analyzed using Emile Durkheim's theory of structural functionalism, which was then presented in the form of a narrative text (*display data*), followed by interpretation and drawing conclusions from the data that has been obtained and analyzed.

Structural functionalism is one of the main approaches in sociology and was developed by Emile Durkheim, one of the founders of this field. This approach aims to understand society as a system of various interconnected elements or parts, each of which has certain functions that are important for the continuity and order of the entire system (Gofman, 2014). Durkheim explained that social structure influences individual lives and how social elements work together to maintain social stability and cohesion. Society is not just a collection of individuals. He likens society to an organism in which each part plays a certain role in supporting the functioning of the whole (DiCristina, 2016). For example, institutions such as family, education, and religion did not appear out of thin air; These institutions play an important role in maintaining social order. The family plays a role in early socialization, education provides knowledge and social values, and religion provides meaning and collective solidarity. All of these elements work together to ensure society remains stable and orderly.

The concept of social order is a basic premise of the theory of structural functionalism. In his work, Durkheim stated that the mechanisms of social life are like biological organisms, consisting of different organs, all interdependent. Durkheim states that this dependence is an agreement that must be made in order for the organism to survive. However, the goals of structural-functional theory are in line with other theories that aim to achieve social order. For Durkheim, society is a unity, a system consisting of different parts. Each part in the system must carry out its function so that the system remains balanced. Basically, every part is interconnected and interdependent.

One of the limitations of this research is the small number of informants, which was only five. This limited sample size may reduce the generalizability of the findings and the ability to capture diverse perspectives and experiences among parents in Palopo. Future research with a larger and more varied sample is recommended to provide a more comprehensive understanding of the phenomenon studied.

### 3. Result and Discussion

#### **Behavioral Analysis of Online Information Seeking Regarding Stunting in Parents in Palopo**

In this study, it was found that parents in Palopo have a pattern of searching for health information that is quite active through the internet, especially regarding the topic of stunting which they consider important for children's health and development. The majority of parents in Palopo use *smartphones* as their main device to access the internet. Ease of use and freedom of time to search for various information make *smartphones* the main choice in finding information, including information about stunting. *Google* is the platform most often used by parents to find information related to stunting. By typing keywords such as "causes of stunting" or "how to prevent stunting," parents can find a variety of articles and resources from health websites.

*YouTube* It is the second choice platform, especially for parents who prefer visual explanations. The ease of digesting information in the form of videos makes youtube the choice of parents to find out about stunting. They watch videos from doctors, nutritionists, or health influencers who provide education about child nutrition and preventive measures stunting. Information in the form of videos will make it faster and easier for a person to understand the information in the video (Rohman & Husna, 2017). The simultaneous incorporation of audio and video makes the information conveyed more interesting and easier to understand. In addition, the convenience and ease of stopping or pausing the video gives viewers full control while watching. Not only does it provide full control, but it also allows the freedom to choose the video that suits the desired information needs (Derma & Darwinsyah, 2023). Therefore, *YouTube* becoming one of the popular online media today (Panggabean, 2024) and useful for meeting information needs, including about stunting.

The findings also showed that the intensity of information search increased, especially after parents found out that there was a potential risk of stunting in children or after receiving an initial diagnosis from health workers. In these cases, parents often seek information several times a day, especially when facing symptoms they are worried about or when looking for solutions to prevent stunting.

In addition to general information about stunting, parents are also actively looking for specific topics related to aspects of parenting and child nutrition. Parents find out about the ideal sleep schedule for the child, especially how long the child needs to sleep during the day and night to support optimal growth. They sought information on sleep duration appropriate to the child's age and how sleep quality can affect growth and development, especially in the context of preventing stunting. Information about good types of milk and the nutritional content in it is also often sought, especially regarding vitamins and minerals that can support children's growth. Parents are interested in knowing the content such as protein, calcium, vitamin D, and iron in milk, because these nutrients are considered important in preventing malnutrition that can cause stunting. They also compare different milk brands to determine whether the product meets the nutritional needs of children or if there are special milk options recommended for children with stunting potential.

Parents are not only looking for general information about healthy eating, but also nutritional details in the food they serve. They also look for recommendations for certain food ingredients, such as green vegetables, nuts, as well as good cooking methods so that nutrients are not lost during the processing process. This information helps them ensure that children get a balanced intake to prevent malnutrition that risks stunting growth.

The intensity and depth of this search shows the great need for parents to feel confident that they are providing the best care for their children, especially in preventing stunting. Research shows that parents often experience anxiety related to their children's health (Zheng & Tandoc, 2022). In context stunting, this anxiety can increase when they find the risk or early symptoms in the child. Parents with high levels of anxiety tend to search for health information online more often, especially on specific topics that they feel are important, such as sleep schedules or food nutrition. This is related to the desire to gain more confidence in their actions, so that the feeling of security in parenting and caring for children is fulfilled. Information search becomes a mechanism *Coping with* to address their concerns (Svestkova et al., 2024), which allows parents to feel more informed and empowered in making health decisions. However, greater vigilance of health symptoms can also create a negative impact, namely overdiagnosis and unnecessary intervention (Thorgaard et al., 2017). Fear of possible health problems can cause parents to overreact.

#### **Factors Encouraging Parents to Choose the Internet as a Source of Health Information**

One of the main factors that encourage parents to search for health information on the internet is the ease of access and use. With commonly used digital devices, such as *smartphones*, parents can quickly

and easily access the information they need anytime and anywhere. This easy access makes the internet a more practical option compared to traditional sources of information, such as a visit to the doctor. The use of digital devices, such as *smartphones*, has become very common among parents. The existence of a stable internet connection makes parents can access information easily and find relevant information quickly.

The search features provided by search engines like Google make it possible for parents to find specific information quickly. Parents can simply type in relevant keywords, such as "stunting in children" or "symptoms stunting," and in a matter of seconds, relevant search results will appear. This is very different from looking for information at the health center, which requires more time and effort to find the necessary information (Rohman & Husna, 2017).

The internet provides a variety of resources that include health articles, educational videos, discussion forums, and blogs written by health professionals and other parent experiences. This diversity allows parents to gain different perspectives and find solutions that suit their needs. In addition, parents can also compare information from various sources. This is as well as what was found by Zucco et al. (2018) that through the internet and social media, users can find various opinions, reviews of other patients, and user experiences related to certain health information. This is sometimes felt to provide a broader perspective than the advice of just one doctor.

The internet also provides easy access that is not limited by time and location. In contrast to traditional sources of information, such as doctor's consultation schedules that are limited by working hours, the internet allows parents to find information anytime they need it. Parents can look for health information at any time, either in the morning before leaving for work, while waiting in the queue, or at night when the children are already asleep. This flexibility is essential for parents to seek information at the time that is most convenient for them.

When parents find an emergency situation or urgent concern related to their child's health, they can immediately search for relevant information without having to wait until the next consultation schedule. For example, if a child shows suspicious symptoms or parents get new information about a potential health problem, they can immediately find out more about the situation and take appropriate action. It provides a sense of calm and control in situations that are often stressful.

In online information searches, parents often use certain keywords that reflect what they are looking for. For example, they type words like "how to prevent stunting," "Best Nutrition for 2-Year-Olds," or "Symptoms stunting on children." By using the right keywords, they can filter the search results to find more relevant and useful information, saving time and effort in the search process. By focusing on searching for these topics through digital platforms, parents can gain deeper and more targeted insights into ways to support their child's health and growth (Sudiati et al., 2023). Often, searching for specific information on the internet is also done in response to an urgent symptom or situation (Riska & Mahir, 2023). For example, if a child shows signs of malnutrition, parents should immediately seek information about "quick solutions to address malnutrition in children." In this way, the search for information is carried out with the aim of finding solutions that can be implemented immediately to maintain the health of the child.

Unsatisfactory interaction with health workers is also one of the significant factors that encourage parents to seek information about stunting on the internet. Parents who have negative experiences in interacting with health workers feel less satisfied with the services received. For example, if when consulting a doctor or health worker does not give full attention, does not explain the child's condition clearly, or seems rushed, this makes parents feel neglected. This dissatisfaction drives them to seek answers to their concerns through other sources, such as the internet, where they hope to find more adequate and satisfactory information. When the interaction with health workers is not satisfactory, parents feel that they have lost control and information that does not meet their expectations so that searching for information on the internet can satisfy the need for information about stunting (Setyowati et al., 2022). The internet allows them to choose topics that are relevant to their own situation and explore information from different points of view, which can give them a greater sense of control over their child's health decisions.

The behavior of seeking online information about stunting in parents in Palopo can be understood through the lens of Emile Durkheim's structural functionalism theory. This theory emphasizes that society is made up of parts that interact with each other and function to maintain social stability and individual well-being. Durkheim argues that social solidarity and the norms that prevail in society influence individual behavior. In the case of parents in Palopo, there are strong norms and values related to child health and stunting prevention. Parents feel a responsibility to provide the best for their children, and information about stunting is considered very important in fulfilling this responsibility. When parents feel the risk of stunting in their children, they are encouraged to actively seek information to meet existing social expectations and norms.

In the perspective of structural functionalism, information serves as a tool to maintain social balance. When parents feel anxious about their child's health, online information search can be considered a coping mechanism that helps them relieve that anxiety. By getting the information they are looking for, parents can feel more confident and able to overcome the problems they are facing. This shows that the search for information not only serves to meet individual needs but also supports social stability by increasing the role of parents in parenting and child care.

Structural functionalism highlights the importance of adaptation to social change. In today's digital era, the use of the internet as a source of health information reflects a change in the way parents seek knowledge. Easy and fast access to information through digital devices creates opportunities for parents to adapt to the demands of the times. In this context, the use of *smartphones* and online platforms such as Google and YouTube shows that parents are able to adapt to technology to meet urgent health information needs. Through the lens of Durkheim's structural functionalism theory, it can be seen that this search for information not only serves as a response to individual needs, but also as part of a larger mechanism for maintaining social balance and adaptation to social change.

#### 4. Conclusions

Based on the results of the research and discussions that have been presented, it can be concluded that parents in Palopo show active online information search behavior related to stunting, driven by various factors including ease of access, preference for visual formats, and the need to overcome anxiety about children's health. The use of smartphones as the main tool to access information shows adaptation to technological advances and changes in the way parents acquire knowledge.

Parents tend to use search engines like Google and video platforms like YouTube to search for relevant information, focusing on specific aspects related to parenting and nutrition. This online information search serves as a coping mechanism that helps relieve anxiety and increase parents' confidence in making health decisions. Furthermore, unsatisfactory interactions with health workers also encourage parents to search the internet, where they hope to find more adequate answers. Through the perspective of Durkheim's structural functionalism, this online search for information is not only seen as an individual response, but also as part of a collective effort to maintain social balance and meet the norms and expectations that prevail in society regarding child health.

However, this study has its limitations. The research only involved 5 informants, which may restrict the generalizability of the findings. The limited sample size makes it challenging to capture a broader perspective and diversity of experiences among parents in Palopo. Future research with a larger and more varied sample is recommended to provide a more comprehensive understanding of online information-seeking behavior in the context of stunting.

Overall, this study shows the importance of understanding parents' online information-seeking behavior in the context of stunting, as well as its implications for children's health and well-being, which is a social responsibility carried by parents. This emphasizes the need to improve health services and better support for parents, as well as harness the potential of online information for stunting education and prevention.

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