Do Parents Use The Internet And Social Media To Child Health-Seeking Information?

Apakah Orang Tua Menggunakan Internet dan Media Sosial dalam Pencarian Informasi Kesehatan Anak?

Riza Hayati Ifroh1*, Lies Permana2

1Department of Health Promotion, Faculty of Public Health, Mulawarman University; rizahayatifiroh@fkm.unmul.ac.id
2Department of Health Promotion, Faculty of Public Health, Mulawarman University; liespermana92@gmail.com

ABSTRACT

Parents in the digital era increasingly use the internet and social media to search for health information on their children, as well as provide opportunities to interact with other users to discuss children's health issues. The purposes of this study is to analyze the patterns of internet use and social media use by parents based on the age category of the child and the most of platform and health topic information that access by parents. This cross-sectional quantitative study with target group research was parents who have children aged < 5 to 12 years, have internet access, actively use gadgets, and agreed to be a participant. The technique of sampling used with accidental sampling. The data was taken by Google form application to 285 respondents. The results of this study were most of the parents were in urban areas (65.3%) and majority being housewives (79.6%). The use of the internet by parents to search for health information with a frequency of less than 2 times per week (47.4%) uses a smartphone (91.9%). There is a statistical difference in the use of Instagram social media for parents in the digital era. The results of this study is most of the parents were in urban areas (65.3%) and majority being housewives (79.6%). The use of the internet by parents to search for health information with a frequency of less than 2 times per week (47.4%) uses a smartphone (91.9%). There is a statistically significant difference in the use of Instagram social media for parents in the digital era. The results of this study is most of the parents were in urban areas (65.3%) and majority being housewives (79.6%). The use of the internet by parents to search for health information with a frequency of less than 2 times per week (47.4%) uses a smartphone (91.9%).

Keywords: Social media, Internet, Child health

ABSTRAK

Orang tua di era digital semakin memanfaatkan internet dan media sosial untuk mencari informasi kesehatan pada anaknya, serta memberikan kesempatan untuk berinteraksi dengan pengguna lain untuk membahas masalah kesehatan anak. Tujuan penelitian adalah menganalisis pola penggunaan internet dan penggunaan media sosial oleh orang tua serta topik kesehatan yang paling banyak diakses oleh orang tua. Hasil penelitian ini, diketahui bahwa orang tua yang memiliki anak usia < 5 - 12 tahun, memiliki akses internet, aktif menggunakan gadget, dan bersedia berpartisipasi dalam penelitian ini. Teknik pengambilan sampel accidental sampling. Pengambilan data melalui Google form kepada 285 responden. Hasil penelitian ini, diketahui bahwa orang tua berada di wilayah perkotaan (65,3%) dan mayoritas ibu rumah tangga (79,6%). Frekuensi pencarian informasi kesehatan melalui internet kurang dari 2 kali per minggu (47,4%) dan menggunakan smartphone (91,9%). Ada perbedaan penggunaan media sosial Instagram pada orang tua dalam pencarian informasi kesehatan dan non kesehatan (p-value: <0.001), dan penggunaan Tiktok untuk informasi non kesehatan (p-value: <0.001). Topik yang paling banyak diulah oleh orang tua dengan anak di bawah usia 5 tahun adalah alergi, nutrisi anak, dan bahaya penggunaan gadget. Orang tua yang memiliki anak berusia 5-11 tahun dan 12 tahun ke atas juga mencari informasi tentang nutrisi anak, bahaya penggunaan gawai, dan kecelakaan, penindasan dan kesehatan reproduksi remaja.

Keywords: Internet, Kesehatan anak, Media sosial

Correspondence: Riza Hayati Ifroh
Email: rizahayatifiroh@fkm.unmul.ac.id

ISSN : 2088-7612 • e-ISSN : 2548-8538 • DOI: https://doi.org/10.25311/keskom.Vol8.Iss2.1209
INTRODUCTION

Digital media and online network accessibility are ubiquitous in the daily lives of people who are constantly looking for health-related information online to support their needs (Holmberg et al., 2019). This is supported by results of research conducted on digital intervention-based health literacy in Ethiopia, which explained that the background of urban parental and socio-demographic characteristics is the determining effects in receiving health messages through digital media and health literacy (Hassen et al., 2020). Parents in the digital era increasingly use the internet and social media to search for health information on their children, as well as provide opportunities to interact with other users to discuss children's health issues (Grajales et al., 2014; Maeve et al., 2015). In spite of the varying quality and health topics, few parents use social media and the internet in online child health care, they prefer to check their children's health at health providers (Antheunis et al., 2013). The previous studies regarding the use of the internet and social media in searching for health information focused on parents who have young children and adolescents (Davis et al., 2015; Lawrence et al., 2021).

The development of children is indeed a concern for parents, especially mothers (Masefield et al., 2022). Mother’s high health knowledge regarding child growth and development is expected to reduce the number of failures to develop in children (Masefield et al., 2022; Permama et al., 2021). Previous studies found that there was a significant relationship between knowledge of growth and development and mother's education on the development of toddlers aged 1-3 years (Syahailatua & Kartini, 2020). Several studies have evaluated the quality of online information used by parents and medical personnel, that it is necessary to make adjustments between the health information needs needed and the accuracy and reliability of the information (Bryan et al., 2020; Wang et al., 2021).

This Decade, the use of social media and activities of using smartphone and screens time is increasing (Liu et al., 2020; Watkins & Xie, 2014). The misuse of digital-based social media can increase the risk of problems for children and adolescent in a more serious direction in health, social aspects and health guidance. (Kiss et al., 2020) The link access to information through online media, parental skills in processing and interpretation of health messages into one of the foundations on which to improve functional health literacy (Holmberg et al., 2019; Manganello, 2008). Digital health literacy which people capacity to receive, understand, conclude and apply information to make health decisions including healthy behavior and family or self-care activities (Soroya et al., 2021). The level of health literacy can be influenced by accessibility to the health information provided, how they can choose the correct health information, use social media wisely and apply it in their lives (Nutbeam, 2000).

East Kalimantan is one of the provinces in Indonesia with diverse cultures (areas with various ethnicities) due to the large number of immigrants and consists of several urban and rural areas, some of which are still not covered by an adequate internet network (Central Bureau of Statistics of East Kalimantan, 2021). More in-depth studies is needed to obtain valid and accurate statistical assumptions so as to provide comprehensive information to describe the overview of the use of social media and the internet in searching for health information on parents. The objectives of this study are 1) Identifying respondent characteristics and patterns of internet use and social media use based on the age category of the child; 2) Identifying differences in the use of social media for health and non-health based on the age categories of children; 3) Identifying the topic of health information that is most frequently used in the community access by parents based on the characteristics of the respondents and the age category of the child.

METHOD

The design study of this research was a cross-sectional quantitative study with a survey
approach. The research was conducted in January 2021. The target group research was parents who have children aged < 5 to 12 years, have internet access, actively use gadgets, and agreed to be a participant in this study. They were also domiciled in East Kalimantan, including in the municipality and regency. The technique of sampling used nonprobability sampling with accidental sampling. The data was taken by Google form application with the participants as many as 285 respondents. The theoretical framework adopted in this study is to use the theory of media dependency:

![Figure 1. Media dependency theory by Sandra Ball Rokeach and Malvin Defluer (1998) (Masefield et al., 2022; Rafiq, 2012)](image)

Based on this theory, the audience or target of communication is very dependent on information and media to meet their needs, people believe that the greater their level of dependence on a food media, the greater the possibility that the media can influence the knowledge, attitudes, beliefs and even behavior of the audience. This theory also emphasizes the level of experience of media exposure to support public awareness regarding a problem (Patwardhan & Yang, 2003; Rafiq, 2012).

The following socioeconomic and demographic data were collected by indicator for socioeconomic status such as region of origin, gender, occupation, education level of parents (Nagy-p & Vincze, 2020). On the characteristics of parents’ internet and social media usage measurements, a frequency distribution analysis was also conducted by identifying the frequency of online information use, types of devices, social media use, duration of use, and access to children's health information (Bryan et al., 2020).

In a more detailed component of the use of social media, the questions lead to the types of platforms that are used in general, the use of platforms that are used to search for health issues and not, and the types of information that are searched with high frequency (Bryan et al., 2020; Ifroh & Asrian, 2020).

The dependent variable analyzed is a dichotomous variable, subgroup analyzes to identifying differences in the use of social media for health and non-health based on the age categories of children by using Kruskal–Wallis test. All analyzes were conducted by using statistical software. Approval of the ethics commission of the Faculty of Medicine, Mulawarman University with numbers 32/KEPK-FK/IX/2020 in the implementation of this study.

**RESULT**

The results of this study have been completed by 285 parents as respondents. They were parents of children under 5 years old (30.2%), parents of children between 5 – 11 years old (34.7%) and also parent of children over 12 years old (35.1%). This research data was collected in East Kalimantan, regency and municipal areas.

There were 285 parents studied, with 86 parents of children under the age of five, 99 parents of children aged five to eleven, and 100 parents of children aged twelve or older. Nearly all parents (98.2%) used a social media platform in the past month (95.8%). In addition, 84.9% use social media to learn about their children’s health, according to the study. A higher percentage of all parents with children under the age of five believe that accessing social media is beneficial to their children (100%). Almost every parent has a smartphone and uses it to access social media (91.9%). Parents access or seek health information via online media is less than twice a week on average (47.4%) (table 1). The second goal of this study was to identification the differences of used social media for health and
non-health information by parents with children under the age of five, parents of children between the ages of five and eleven, and parents of children above the age of twelve (table 2):

**Table 1. Demographics and The Internet and Social Media Use by Child Age Categories**

| Variables               | All Parents n = 285, (%) | Parents of Children <5 Years n = 86, (%) | Parents of Children 5-11 Years n = 99, (%) | Parents of Children ≥12 Years n = 100, (%) |
|-------------------------|--------------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|
| **Socio-demographic**   |                          |                                          |                                            |                                            |
| Residence               |                          |                                          |                                            |                                            |
| Regency                 | 99 (34.7)                | 32 (37.2)                                | 35 (35.4)                                  | 32 (32)                                    |
| Municipality            | 186 (65.3)               | 54 (64.8)                                | 64 (64.6)                                  | 68 (68)                                    |
| Sex                     |                          |                                          |                                            |                                            |
| Male                    | 58 (20.4)                | 14 (16.3)                                | 13 (13.1)                                  | 31 (31)                                    |
| Female                  | 227 (79.6)               | 72 (83.7)                                | 86 (86.9)                                  | 69 (69)                                    |
| Profession              |                          |                                          |                                            |                                            |
| Civil                   | 40 (14.0)                | 9 (10.5)                                 | 19 (19.2)                                  | 12 (12)                                    |
| Servant/Police/Army     | 36 (12.6)                | 10 (11.6)                                | 11 (11.1)                                  | 36 (12.6)                                  |
| Private Employee        | 28 (9.8)                 | 4 (4.7)                                  | 7 (7.1)                                    | 28 (9.8)                                   |
| Entrepreneur            | 154 (54)                 | 53 (61.6)                                | 58 (58.6)                                  | 154 (54)                                   |
| Housewife               | 27 (9.5)                 | 10 (11.6)                                | 4 (4)                                      | 27 (9.5)                                   |
| Etc.                    | 14 (4.9)                 | 3 (3.5)                                  | 4 (4)                                      | 7 (7)                                      |
| Education               |                          |                                          |                                            |                                            |
| Primary School          | 14 (4.9)                 | 3 (3.5)                                  | 4 (4)                                      | 7 (7)                                      |
| Junior High School      | 29 (10.2)                | 6 (7.0)                                  | 12 (12.1)                                  | 11 (11)                                    |
| Senior High School      | 147 (51.6)               | 45 (52.3)                                | 46 (46.5)                                  | 56 (56)                                    |
| College                 | 95 (33.3)                | 32 (37.2)                                | 37 (37.4)                                  | 26 (26)                                    |
| **Internet Use**        |                          |                                          |                                            |                                            |
| Use of online health information | Yes | 264 (92.6) | 84 (97.7) | 93 (93.3) | 87 (87) |
|                         | No                       | 21 (7.4)                                 | 2 (2.3)                                    | 6 (6.1)                                    | 13 (13)                                   |
| Frequency of use of online health information | Never | 21 (7.4) | 2 (2.3) | 6 (6.1) | 13 (13) |
|                         | < 2 times/week           | 135 (47.4)                               | 35 (40.7)                                  | 52 (52.5)                                  | 48 (48)                                   |
|                         | ≥ 3 – 4 times/week       | 108 (37.9)                               | 41 (47.7)                                  | 33 (33.3)                                  | 34 (34)                                   |
|                         | Everyday                 | 21 (7.4)                                 | 8 (9.3)                                    | 8 (8.1)                                    | 5 (5)                                     |
| Type of device used most frequently | Don’t have | 15 (5.3) | 1 (1.2) | 4 (4.0) | 10 (10) |
|                         | Desktop                  | 1 (0.4)                                  | 0 (0)                                      | 1 (1.0)                                    | 0 (0)                                     |
|                         | Smartphone               | 263 (91.9)                               | 84 (97.7)                                  | 91 (91.9)                                  | 87 (87)                                   |
|                         | Tab                      | 1 (0.4)                                  | 1 (0.4)                                    | 1 (1.0)                                    | 0 (0)                                     |
|                         | Etc.                     | 6 (2.1)                                  | 2 (1.2)                                    | 2 (2.0)                                    | 3 (3)                                     |
| **Social Media Use**    |                          |                                          |                                            |                                            |
| Use Social media        | 280 (98.2)               | 86 (100)                                 | 98 (99.0)                                  | 96 (96.0)                                  |
| How long use social media | Don’t use | 3 (1.1) | 0 (0) | 1 (1) | 2 (2) |
|                         | < 1 month                | 9 (3.2)                                  | 1 (1.2)                                    | 1 (1)                                      | 7 (7)                                     |
|                         | ≥ 1 month                | 273 (95.8)                               | 85 (98.8)                                  | 97 (98)                                    | 91 (91)                                   |
| Use social media to access about child health | 242 (84.9) | 81 (94.2) | 89 (89.9) | 72 (72) |
Only a few show significant differences between the use of social media and the age of the child, as seen in the table above. There are significant differences in the search for health and non-health material on Instagram between parents with children of that age group. There is no difference between parents in the child’s age group to accessing health information through the media. However, significant differences were found in the search for non-health information, specifically on Telegram and Tiktok. This means that many parents use the two media to find information that isn’t related to their children’s health. Identify the topic of health information...
that parents most frequently access based on the characteristics of the respondents and the child's age group is the third purpose of this study. Table 3 illustrates that children's nutrition is available to all parents (76.1%) and has been described in the following table:

| Table 3. Children’s Health Topics Most Frequently Searched By Parents |
|---------------------------------------------------------------|
| **All Parents** n = 285, (%)                                 |
| **Parents of Children**                                     |
| **<5 Years** n = 86, (%)                                    |
| **5-11 Years** n = 99, (%)                                  |
| **≥12 Years** n = 100, (%)                                 |
| **Child Nutrition (217, 76.1)**                             |
| Child Nutrition (79, 79.8)                                  |
| Screen time dangerous (213, 74.7)                           |
| Screen time dangerous (79, 79.8)                            |
| Skin health and allergies (206, 72.3)                       |
| Screen time dangerous (75, 75.8)                            |
| Accidents and injuries (179, 62.8)                          |
| Vaccine (56, 65.1)                                          |
| Reproductive health & sexuality (163, 57.2)                 |
| Accidents and injuries (54, 62.8)                           |
| Vaccine (58, 58.6)                                          |
| Mental health (137, 48.1)                                   |
| Mental health (41, 47.7)                                    |
| Bullying (115, 40.4)                                        |
| Lactation (40, 46.5)                                        |
| Smoking dangerous (123, 43.2)                               |
| Bullying (31, 36)                                           |
| Lactation (95, 33.3)                                        |
| Smoking dangerous (30, 34.9)                                |
| Etc. (67, 23.5)                                             |
| Etc. (15, 17.4)                                             |

**DISCUSSION**

The use of social media to browse and share parenting advice during the growth and development phase, this is also a place for them to share their feelings and experiences in parenting. Share photos and advice on helping distant relatives or family members feel close in the parenting process and not feel isolated (Davis et al., 2015). The reason behind the search for information on groups of parents who have children and adolescents is as a way to increase alertness and prevention in the event of an emergency condition in their child (Wisniewski et al., 2015). The concept of using social media by parents is one of the potential prevention and protection measures to reach children's activities in social media and protect their children both at school age regarding exposure to online dangers or potential cyber bullying in the school environment (Mesch, 2009). Based on previous study (Saari & Downing, 2022) that the use of the internet in children's learning processes is currently also the responsibility of parents to monitor children's academic achievements, in addition, parental involvement in ownership and being connected to children's social media is an effort to maintain good relations between children and parents and directly monitor children's activities.

Based on the analysis of the use of social media above (table 2), it is known that Facebook is one of the platforms used to access both health and non-health information. Based on previous studies (Pretorius et al., 2019; Wisniewski et al., 2015), it is known that Facebook is effective and easy to use based on broader racial/ethnic characteristics, besides that the health topics identified are the concept of parental support which can be seen through social media, adolescent nutrition health issues and forms of study (Saari & Downing, 2022) that the use of the internet in children's learning processes is currently also the responsibility of parents to monitor children's academic achievements, in addition, parental involvement in ownership and being connected to children's social media is an effort to maintain good relations between children and parents and directly monitor children's activities.
implementation of health practices in children (Preterius et al., 2019). In this study, YouTube is also one of the social media platforms used in terms of finding children's health information, based on previous studies that the most common issue which parents utilized on the internet and social media was talking about breastfeeding to infant practice, and Youtube also helped them to explain the specific steps of parenting such as baby bathing techniques, baby massage and others (Henshaw et al., 2018).

This study also shows that Instagram has different uses between parents who have children, based on several studies it is known that Instagram is one of the effective media in providing information briefly and clearly through short videos, short messages or health expert quotes (Ashfield & Donelle, 2020). The previous research about internet-based interventions have been developed and it has advantages over face-to-face interventions (cost-effectiveness, personal and need suitability, interesting, and accessibility) (Fischer et al., 2021). Previously, digital-based health campaigns had been carried out and were effective in increasing the understanding and behavior of people with affective topics such as deserter health behavior or high risk behavior (Hirvonen et al., 2021; Stead et al., 2019).

According to research conducted by (Hart et al., 2015) it was found that parents, especially in early adolescence, are concerned about their children’s body image, therefore they seek information about child nutrition. However, this knowledge about children's nutrition is important because there are still many cases of malnutrition, particularly among toddlers. According to RISKESDAS data from 2018, children under the age of five still had 3.9 percent cases of severe malnutrition and 13.8 percent cases of moderate malnutrition (Badan Penelitian dan Pengembangan kesehatan Kementerian Kesehatan RI, 2018). This suggests that parents want their children to grow up with adequate nutrition so that they do not become underweight. Another finding was that elderly under the age of 5 years old were more likely to look for information on skin health and allergies. This is because that age group is more susceptible to skin problems, and because babies' skin is so sensitive, they must have depth understanding of how to treat them. In this situation, allergies can affect a child’s growth and development, potentially resulting in malnutrition (Ayu Rini, 2015). In other problems, many other parents are looking for information regarding the dangers of using gadgets or screen time, especially for those who have children over 5 years old. Even parents with children aged 12 and up have the most access to information about this. Over 13% of 5 year olds are exposed to more than 2 hours of screen time per day, which should not be more than 1 hour of screen time per day (Tamana et al., 2019).

Based on previous studies, it is known that parents who spend most of their time using the internet and social media, have been shown to hinder positive communication and interaction opportunities with their children (Dennis et al., 2022). In addition, the role of parents is not only to provide supervision on the use of the internet and social media by their children but how they can process and choose the right health information and from official sources or institutions so that the information read is valid and has trustworthiness (Maeve et al., 2015; Putri et al., 2022). Based on the results of this study and supported by related literacy, parents need internet skills, digital literacy skills, internet usage experience, and attitudes in receiving information on the internet and social media based on the nature and type of anxiety and level of concern that parents have (Sorbring, 2014; Yaman et al., 2021).

The limitations of this study are that the sample selection process was conducted incidentally and could not be classified based on geographical boundaries in East Kalimantan or based on other clusters. In addition, this study has limitations in the form of response bias from respondents. Information provided by respondents through online questionnaires sometimes does not show the true opinion of respondents. This may be due to the respondent's inability to understand the
content of the question and the respondent's dishonesty in answering questions and the timing of filling out the questionnaire was not appropriate.

CONCLUSION

The conclusion of the study is that the majority of parents are in the municipality and are women or mothers, with the work background of mostly housewives. Parents' use of the internet to search for health information is high with a frequency of 2-4 times per week using smartphones. The majority of social media use is more than one month with the highest frequency of platforms such as YouTube, Facebook, and Instagram. In the analysis of differences in the use of social media for health and non-health based on the age categories of children, it is known that the platform has statistical differences in use of Instagram. Instagram is attractive to parents in accessing short videos, images containing health quotes, and expert information. The topics that are most reviewed by parents with children under the age of 5 are allergies, child nutrition, and the dangers of using gadgets in children (screen time).

Parents who have children aged 5-11 years and 12 years and over are also looking for information about child nutrition, screen time, and extras such as accidents, bullying, and reproductive health. Suggestions that can be given based on the results of the study are that parents are expected to increase their knowledge and skills in digital literacy, especially in filtering correct information regarding children's physical and mental health. Parents need to increase wisdom, attitudes and positive affirmations in using the internet and social media and actively translate the information obtained so that it can be used to support children's growth and development.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

ACKNOWLEDGEMENTS

We would like to thank the members of the Faculty of Public Health, Mulawarman University, Mr. Agus Wiranto the Laboran of Faculty of Public Health who participated in finishing the project in this research and all parties who have provided support in carrying out this research properly.

REFERENCES

Antheunis, M. L., Tates, K., & Nieboer, T. E. (2013). Patients’ and health professionals’ use of social media in health care: Motives, barriers and expectations. Patient Education and Counseling, 92(3), 426–431. https://doi.org/10.1016/j.pec.2013.06.020

Ashfield, S., & Donelle, L. (2020). Parental Online Information Access and Childhood Vaccination Decisions in North America: Scoping Review. Journal of Medical Internet Research, 22(10), 1–11. https://doi.org/10.2196/20002

Badan Penelitian dan Pengembangan kesehatan Kementerian Kesehatan RI. (2018). Riskesdas 2018.

Bryan, M. A., Evans, Y., Morishita, C., Midamba, N., & Moreno, M. (2020). Parental Perceptions of the Internet and Social Media as a Source of Pediatric Health Information. Academic Pediatrics, 20(1), 31–38. https://doi.org/10.1016/j.acap.2019.09.009

Central Bureau of Statistics of East Kalimantan. (2021). East Kalimantan Province in Numbers.

Davis, M., Clark, S. J., Singer, D. C., Hale, K., Matos-Moreno, A., & Kauffman, A. D. (2015). Parents on social media: Likes and dislikes of sharenting. Access On, 6(2), 2019.

Dennis, C. L., Carsley, S., Brennenstuhl, S., Brown, H. K., Marini, F., Bell, R. C., Miller, A., Ravindran, S., D’Paiva, V., Dol, J., & Birken, C. S. (2022). Screen use and internet addiction among parents of young children: A nationwide Canadian cross-sectional survey. PLoS ONE, 17(1 January), 1–13. https://doi.org/10.1371/journal.pone.0257831

Fischer, V. J., Andersson, G., Billieux, J., & Vögele, C. (2021). A randomized controlled
trial of an Internet-based emotion regulation intervention for sexual health: study protocol. *Trials*, 22(1), 1–11. https://doi.org/10.1186/s13063-021-05586-x

Grajales, F. J., Sheps, S., Ho, K., Novak-Lauscher, H., & Eysenbach, G. (2014). Social media: A review and tutorial of applications in medicine and health care. *Journal of Medical Internet Research*, 16(2). https://doi.org/10.2196/jmir.2912

Hart, L. M., Damiano, S. R., Cornell, C., & Paxton, S. J. (2015). What parents know and want to learn about healthy eating and body image in preschool children: A triangulated qualitative study with parents and Early Childhood Professionals. *BMC Public Health*, 15(1), 1–13. https://doi.org/10.1186/s12889-015-1865-4

Hassen, H. M., Behera, M. R., Jena, P. K., & Satpathy, S. K. (2020). A quasi-experimental and Guided Social Media Intervention to Improve Mental Health Literacy Level of Urban School Adolescents in Ethiopia: A Detailed Study Protocol, 1–18. https://doi.org/10.21203/rs.3.rs-17074/v1

Henshaw, E. J., Cooper, M. A., Jaramillo, M., Lamp, J. M., Jones, A. L., & Wood, T. L. (2018). “Trying to Figure Out If You’re Doing Things Right, and Where to Get the Info”: Parents Recall Information and Support Needed During the First 6 weeks Postpartum. *Maternal and Child Health Journal*, 22(11), 1668–1675. https://doi.org/10.1007/s10995-018-2565-3

Hirvonen, M., Purcell, C., Elliott, L., Bailey, J. V., Simpson, S. A., McDaid, L., Moore, L., Mitchell, K. R., Forsyth, R., Barry, S., Hunter, R., McCann, M., Wetherall, K., & Broccatelli, C. (2021). Peer-to-peer sharing of social media messages on sexual health in a school-based intervention: Opportunities and challenges identified in the stash feasibility trial. *Journal of Medical Internet Research*, 23(2), 1–9. https://doi.org/10.2196/20898

Holmberg, C., Berg, C., Dahlgren, J., Lissner, L., & Chaplin, J. E. (2019). Health literacy in a complex digital media landscape: Pediatric obesity patients’ experiences with online weight, food, and health information. *Health Informatics Journal*, 25(4), 1343–1357. https://doi.org/10.1177/1460458218759699

Ifroh, R. H., & Asrianti, T. (2020). Health Literacy, Media Exposure and Behavior Among Young Adults During the Covid-19 Pandemic. *Jurnal Ilmu Kesehatan Masyarakat*, 11(3), 223–236. https://doi.org/10.26553/jikm.2020.11.3.223-235

Kiss, H., Fitzpatrick, K. M., & Piko, B. F. (2020). The digital divide: Risk and protective factors and the differences in problematic use of digital devices among Hungarian youth. *Children and Youth Services Review*, 108(November 2019), 104612. https://doi.org/10.1016/j.childyouth.2019.10.4612

Lawrence, P. R., Feinberg, I., & Spratling, R. (2021). The relationship of parental health literacy to health outcomes of children with medical complexity. *Journal of Pediatric Nursing*, 60, 65–70. https://doi.org/10.1016/j.jpeds.2021.02.014

Liu, Q., Zheng, Z., Zheng, J., Chen, Q., & Liu, G. (2020). Health Communication Through News Media During the Early Stage of the COVID-19 Outbreak in China: Digital Topic Modeling Approach Corresponding Author: 22. https://doi.org/10.2196/19118

Maeve, D., Amanda, L., Cliffe, L., & Ellison, N. B. (2015). Parents and Social Media. *Pew Research Center*, July, 1–36. http://www.pewinternet.org/2015/07/16/parents-and-social-media/

Manganello, J. A. (2008). Health literacy and adolescents: A framework and agenda for future research. *Health Education Research*, 23(5), 840–847. https://doi.org/10.1093/her/cym069

Masefield, S. C., Prady, S. L., Sheldon, T. A., Small, N., Jarvis, S., & Pickett, K. E. (2022). The Effects of Caring for Young Children with Developmental Disabilities on Mothers’ Health and Healthcare Use: Analysis of Primary Care Data in the Born in Bradford Cohort. *Journal of Developmental and Physical Disabilities*, 34(1), 67–87. https://doi.org/10.1007/s10882-021-09789-7

Mesch, G. S. (2009). Parental mediation, online activities, and cyberbullying. *Cyberpsychology and Behavior*, 12(4), 387–393. https://doi.org/10.1089/cpb.2009.0068

Nagy-p, G., & Vincze, F. (2020). Contributing Factors in Adolescents ’ Mental Well-Being — The Role of Socioeconomic Status ,
Social Support, and Health Behavior. *Sustainability*, 12(9597), 1–17.

Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15(3), 259–267. https://doi.org/10.1093/heapro/15.3.259

Patwardhan, P., & Yang, J. (2003). Internet Dependency Relations and Online Consumer Behavior. *Journal of Interactive Advertising*, 3(2), 57–69. https://doi.org/10.1080/15252074.2003.1072074

Permana, L., Ifroh, R. H., & Wiranto, A. (2021). Pola Pencarian Informasi Kesehatan Anak dan Komunikasi Ibu Balita di Kalimantan Timur. *Jurnal Inovasi Penelitian*, 2(1), 167–180.

Pretorius, K., Johnson, K. E., & Rew, L. (2019). An Integrative Review: Understanding Parental Use of Social Media to Influence Infant and Child Health. *Maternal and Child Health Journal*, 23(10), 1360–1370. https://doi.org/10.1007/s10995-019-02781-w

Putri, A. N., Setiawati, Y., Shieh, Y. T., & Lin, S.-H. (2022). High-Risk Internet Addiction in Adolescents During Pandemic COVID-19 and Parents’ Role. *Jurnal Berkala Epidemiologi*, 10(1), 11–20. https://doi.org/10.20473/jbe.v10i12022.11

Rafiq, M. (2012). Dependency Theory (Melvin L. DeFleur dan Sandra Ball Rokeach). *HIKMAH*, Vol. VI, No.01 Januari 2012, 01-13, VI(2), 01–13.

Saari, M., & Downing, K. J. (2022). Exploring Parents Perception Of Online Learning Through A Systematic Literature Review. *Borneo International Journal*, 5(1), 8–15.

Sorbring, E. (2014). Parents’ Concerns About Their Teenage Children’s Internet Use. *Journal of Family Issues*, 35(1), 75–96. https://doi.org/10.1177/0192513X12467754

Soroya, S. H., Farooq, A., Mahmood, K., Isoah, J., & Zara, S. e. (2021). From information seeking to information avoidance: Understanding the health information behavior during a global health crisis. *Information Processing and Management*, 58(2), 102440. https://doi.org/10.1016/j.ipm.2020.102440

Stead, M., Angus, K., Langley, T., Katükireddi, S. V., Hinds, K., Hilton, S., Lewis, S., Thomas, J., Campbell, M., Young, B., & Bauld, L. (2019). Mass media to communicate public health messages in six health topic areas: a systematic review and other reviews of the evidence. *Public Health Research*, 7(8). https://doi.org/10.3310/phr07080

Syahailatua, J., & Kartini, K. (2020). Pengetahuan ibu tentang tumbuh kembang berhubungan dengan perkembangan anak usia 1-3 tahun. *Jurnal Biomedika Dan Kesehatan*, 3(2), 77–83. https://doi.org/10.18051/jbiomedkes.2020.v3.77-83

Tamaña, S. K., Ezeugwu, V., Chikumba, J., Lefebvre, D. L., Azad, M. B., Moraes, T. J., Subbarao, P., Becker, A. B., Turvey, S. E., Sears, M. R., Dick, B. D., Carson, V., Rasmussen, C., Pei, J., & Mandhane, P. J. (2019). Screen-time is associated with inattention problems in preschoolers: Results from the CHILD birth cohort study. *PLoS ONE*, 14(4), 1–15. https://doi.org/10.1371/journal.pone.0213995

Wang, X., Shi, J., & Kong, H. (2021). Online Health Information Seeking: A Review and Meta-Analysis. *Health Communication*, 36(10), 1163–1175. https://doi.org/10.1080/10410236.2020.1748829

Watkins, I., & Xie, B. (2014). *eHealth Interventions for Older Adults: A Systematic Review of the Literature Corresponding Author*: 16. https://doi.org/10.2196/jmir.3318

Wisniewski, P., Jia, H., Xu, H., Rosson, M. B., & Carroll, J. M. (2015). “preventative” vs. “reactive”: How parental mediation influences teens’ social media privacy behaviors. *CSCW 2015 - Proceedings of the 2015 ACM International Conference on Computer-Supported Cooperative Work and Social Computing*, 302–316. https://doi.org/10.1145/2675133.2675293

Yaman, F., Çubukçu, A., Küçükali, M., & Yurdakul, I. K. (2021). An Investigation of Parents’ Use of Digital Media. *Shanlax International Journal of Education*, 10(1), 76–88. https://doi.org/10.34293/education.v10i1.4327

Keskom, Vol 8, No 2, Agustus 2022