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Determininants of Diarrhea-Related Health Care Seeking Behavior among Indonesian Mothers with Under-five Children during the COVID-19 Pandemic

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Abstract

This study investigated factors influencing healthcare-seeking behaviours of Indonesian mothers during the COVID-19 pandemic when their children had diarrhea. The 117 participants completed a self-report which measured the socio-demographic condition, knowledge about diarrhea, illness perception, anxiety, and health care seeking behavior for diarrhea. The data were analyzed with the descriptive statistics, Chi-square, and logistic multinomial regression analysis. Analysis revealed critical determinants including child age, maternal occupation, education, transportation availability, knowledge of diarrhea, and illness perception. The model accurately predicted 84.6% of healthcare-seeking behaviours, with mothers favoring formal care for younger children and education positively influencing formal healthcare utilization. The type of public transportation availability significantly influenced healthcare-seeking behavior. While accurate knowledge of diarrhea increased professional care seeking, the model explained only 5.61% of behavior variation, suggesting unexplored factors. Addressing these factors could improve child health outcomes during pandemics. Policy enhancements and cultural sensitivity in health education are vital for efficacy. Deepening understanding and developing effective interventions amidst pandemics require further research.

Keywords: *Determinants of Diarrhea-Related Health Care, Indonesian Mothers, COVID-19 Pandemic.*

Introduction

Diarrhea is the second-leading cause of under-5 children's death and accounts for around 525,000 deaths per year. All over the world, 780 million people have no access to good drink water and 2.5 billion lack sanitation (WHO, 2017). Diarrhea can last for a few days, and can cause dehydration and loss of salt that are required for survival. For most people, severe dehydration and liquid loss were the major causes of death caused by diarrhea in the past (WHO, 2013). Today, other causes of death, such as septic bacterial infection, tend to increase the proportion of all diarrhea-related deaths. In low-income countries, under-three children commonly suffer from three diarrhea episodes every year (WHO, 2017). Every episode causes children loss nutrition required for growth.

According to the reports, there were 21 occurrences of extraordinary events in Indonesia. In 2017, the Ministry of Health Republic of Indonesia (*Kemenkes RI*, 2018) reported that 1725 people suffered from diarrhea, and 34 of them died (CFR, 1.97%) (*Kemenkes RI*, 2019). Data from *Kemenkes RI* (2019) in Basic Health Research (Riskedas) for 2018 showed that the age group 1-4 years old (12.8%) and female children (8.3%) were the groups who mostly suffered from diarrhea. The data from Bali province also shows an increase in the number of under 5 children who suffer from diarrhea from year to year. It was estimated that 48,734 children under 5 who suffered from diarrhea in Bali in 2018 (*Kemenkes RI*, 2018). The *Kemenkes RI* data for 2019 showed an increase in the number of children under 5 years old who suffered from diarrhea which was 54,364 and only 29.6% of them got adequate health services (*Kemenkes RI*, 2020).

Meanwhile, some people's diarrhea management behaviours at home in Indonesia have not yet shown

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improvement and have not met the expectation. When it comes to managing diarrhea at home, 73.22% of the population visited health facilities, yet only 36.18% received ORS (Soepardi, 2011) This is similar to the data from Indonesia's Health Demographic Survey (SDKI) 2017 which showed that 92% of the respondents knew about ORS, but only 36% consistently used ORS in diarrhea management. Hence, there is a need to reorient this by focusing on diarrhea management program for under-5 children.

The empirical evidence is still lacking to target important, specific risk factors that can significantly contribute to diarrhea-related health care seeking behavior in Indonesia during COVID-19 pandemic in general, and in the present population study in particular. WHO (2020) (Yuniarti, 2007) conducted a survey in 155 countries, including Indonesia, which revealed that the COVID-19 pandemic disrupted efforts to prevent and conduct public screening for other infectious and non-infectious diseases. This disruption has the potential to worsen public health due to a specific medical condition. Moreover, people with low income who live in places which are less reachable by health facilities will find it increasingly difficult to access essential health services. Of course, this can directly have an effect on the quality of people live.

In Indonesia, people view diarrhea as a non-life-threatening disease and self-treat it with traditional herbs prepared by shamans and freely available for purchase (Supono, 2008). The challenge in managing diarrhea stems from people's relaxed attitude towards the disease (Supono, 2008; Yuniarti, 2007; Widiono, 2001), which makes it challenging to swiftly reduce the prevalence and death rates. Perception serves as a strategic variable for intervention, as it provides a basis for behavior prediction (Ferguson & Bargh, 2004).

Other factors such as mother's knowledge about diarrhea and her socio-demographic factors can be used as other determinants in diarrhea related health care seeking behavior. A previous study by Malikhah, Sari, & Bangun (2012) showed that a mother's knowledge has a great effect on her attitude in overcoming diarrhea in the under-five-years-old children. Many developing countries care for most diarrhea episodes at home, with mothers being the primary caregivers for children under 5 years old (Ghasemi, Talebian, Alavi, & Mousavi, 2013). They make decisions about the children's diet and independently treat the disease. Therefore, their understanding pf this prevalent disease holds significance important. Individual awareness and perception of diarrhea, along with individual and family preventive actions, play crucial role in reducing diarrhea-related morbidity and mortality (Othero, et al., 2009). On the other hand, insufficient knowledge and wrong perception of mothers about the cause of diarrhea can limit their ability to take appropriate action at the right time (Merga & Alemayehu, 2015).

Furthermore, the age and sex of the children, the mother's age, ethnicity, religion, education and job status, income level, and family's expense are among the socio-demographic factors that are associated with the behavior of seeking health care to manage contagious diseases (Taffa & Chepngeno, 2005). El Kahi, Abi Rizk, Hlais, & Chepngeno (2005) also link anxiety to health care-seeking behavior. Anxiety can be associated with uncertainty about the disease's cause or the treatment given to handle it. In pandemics such as the current one, the level of anxiety resulting from diseases is on the rise. This is due to mobility restrictions, including a reduction in access to public health services Health anxiety influences the search for health-related information, the selection of information sources, the duration ofinformation sources, and the search for health-related information in libraries (Musarezaie, Samouei, & Shahrzadi, 2019). On the basis of the explanation above, this study investigated the effect of socio-demographic factors, knowledge about diarrhea, perception toward diarrhea, and anxiety on health care seeking behavior related to children under 5 years old in Bali, Indonesia during the COVID-19 pandemic. Given the aforementioned context, we can formulate the research problem as follows: "What are the factors that influence the health care-seeking behavior of mothers with children under five years old during the COVID-19 pandemic?" The study's findings can provide health care providers valuable insights into promoting health, specifically addressing the health care seeking behavior associated with diarrhea among mothers with children under five during the COVID-19 pandemic.

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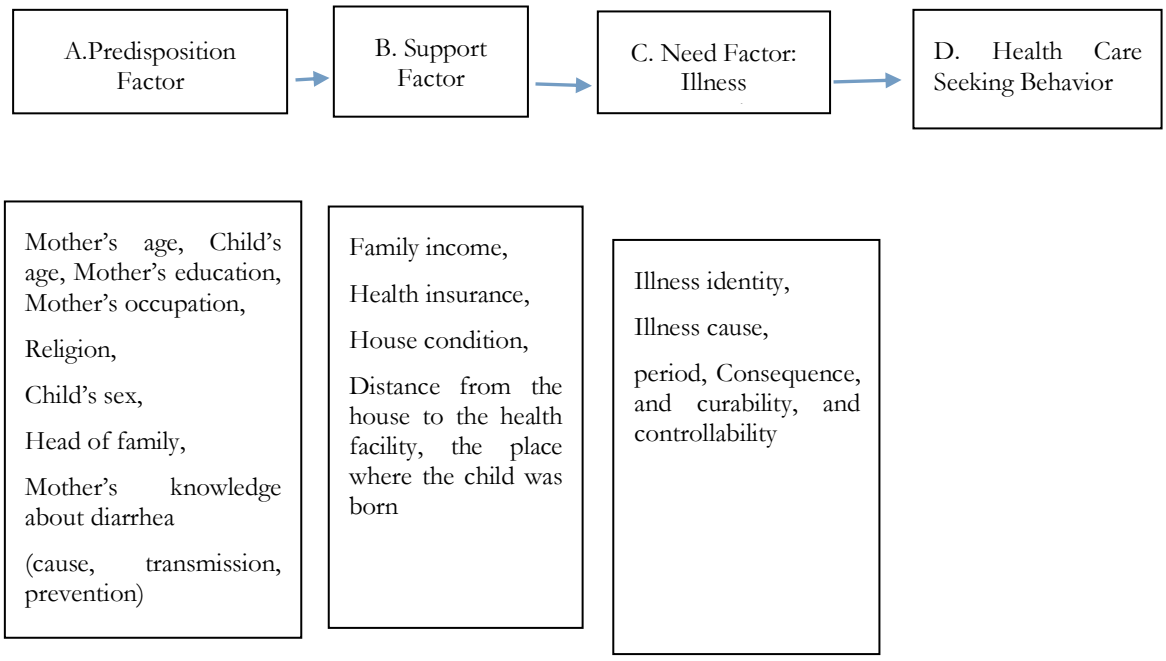

Figure 1. Conceptual Framework of Health Care Seeking Behavior

This study used a conceptual framework of analysis based on Anderson's health care behavior model (Bradley, 2002). The researchers widely accept and use this health care behavior model to identify the determinants of health service utilization. As shown in Figure 1 above, this model explains that three domains determine health care utilization: predisposition, which includes socio-demographic aspects, illness knowledge, and anxiety; support factors, which include family and community resources and their accessibility; and need factors, which include the individual's felt and evaluated functional capacity, symptoms, and general health conditions. According to the Anderson model, health care utilization is the sequential and conditioned function of these three factors. The predisposition factor reflects the family's tendency to use health services when children suffer from diarrhea, while the support factor either supports or hinders the use of health services in managing diarrhea. The first two factors do not adequately show the family dynamics of health care behavior for their child's diarrhea. Identification of health care behavior requires a perception of the severity of the diarrhea. Hence, there are three factors that serve as "need" factors and are the most direct reasons for diarrhea management, according to Anderson (Sreeramareddy, Sathyanarayana, & Kumar, 2012).

Research Methodology

Study Design

This study employed the quantitative descriptive method, which aims to describe a phenomenon within a society or population. The term "quantitative" refers to the production of data in the form of figures (Sugiyono, 2010). This study employed the cross-sectional time approach, a method that observes each subject once and measures their character or variable either during the examination or at a later time (Notoatmodjo, 2012).

Study Participant and Sampling

This research was carried out in Bali, Indonesia, at community health clinics, public hospitals, and hospitals run by the government and private organizations. Between the months of January and August of 2023, we carried out our investigation.

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The inclusion criteria in this study were mothers with 1–5 years old children who once suffered from diarrhea and visited government and private public hospitals in Bali, Indonesia, in May 2021–August 2021. The exclusion criteria in this study were mothers with physical disabilities such as hard hearing, blindness, and speech defects; mothers with mental illness; and mothers who refused to give their informed consent. The sample was taken using the purposive random sampling technique. We determined the sample size using the (Vittinghoff & McCulloch, 2007) which states that in various types of logistic model regression, a significant result requires 5 to 9 observations per independent variable. In this study, there were 21 variables, so the total sample size of the study or participants was 110.

The primary data collecting approach was utilized in order to retrieve the information required for this investigation. First-hand information was acquired from moms of children aged 5 years old by means of direct interviews.

Table 1. Data Collection Instrument and Method

Variables	**Data Collecting Instruments**	**Formats**
Mother's age, Child's age, Mother's education, Mother's occupation, Religion, Child's sex, Family Head,	Participants' socio-demographic data	Completion
Mother's knowledge about diarrhea	Knowledge questionnaire that includes diarrhea cause, transmission and prevention	True false, the higher the score the higher mother's knowledge about diarrhea
Family income, Health insurance, House condition, Distance from the house to the health facility, the place where the child was born	Data about family's economic condition	Categorization
Illness perception	Revised Illness Perception scale (Moss-Morris, at al., 2002)	84 items with a 5-point likert scale (agree very much - disagree very much). There are 5 subscales based on illness perception dimension. A high score on the identity, consequence, acute/chronic period represents a strongly held belief about the number of symptoms related, negative consequence, and chronicity and cyclical nature of disease. A high score on personal control and care and coherence subscale represents a positive belief about controllability and personal understanding of the illness.
Anxiety	General Anxiety Disorder Questionnaire which consists of 7 items known as GAD-7 (Spitzer et al, 2006)	GAD-7 can be used to measure anxiety in general and in the research setting (Dear et al. 2011). GAD-7 has good validity and reliability (Kroenke et al., 2007; LÖwe et a., 2008). GAD has 7 items with options

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		that show symptom occurrence intensity. The response to the questionnaire is done by choosing one of the criteria of symptom occurrences (Likert scores 0-3) so that the total score is 21. The higher the score the higher the anxiety. Scores higher than 10 can be interpreted clinically as a condition with anxiety.
Health care seeking behaviour	Health care seeking behaviour (Rasull, et al., 2019)	There is a choice of health care seeking behaviors during COVID-19 pandemic with 4 options, that is, not given any care, self-care, seeking nonprofessional care (medical assistant, midwife, village nurse, chemist's assistant, and traditional healer), and seeking health care from professional figure (medical doctor, pediatrician).

Data Analysis

For the purpose of determining independent predictors of health care seeking behavior, the data were analyzed using the SPSS program for Windows, Chi-square, odds ratios (OR), and 95% confidence intervals (CI). We used logistic multinomial regression analysis to calculate the adjusted odds ratio.

Ethics

The ethical principles in this study encompass everything from proposal writing to the publication of research results. The ethics were examined by the Universitas Pendidikan Ganesha Research Ethics Commission (1081/UN48.16/LT/2023). The participants received the informed consent form prior to data collection.

Results

Based on the data collected during the research, the results of the research analysis can be presented in several tables:

Tabel 2. Socio-demographic Characteristics of Mothers

Variable	**Categorization**	**N**	**%**
Child Age	<6 months old	19	16.2%
	6-11 months old	19	16.2%
	12-23 months old	33	28.2%
	24-59 months old	46	39.3%
Mother	Marital	Married	Mother
Mother Job	Housewives	66	56.4%
	Civil servant	16	13.7%
	Private employee	27	23.1%
	Others	8	6.8%
Mother Education Level	Elementary school	1	0.9%
	Junior high school	7	6.0%
	Senior high school	59	50.4%
	Diploma/Bachelor degree	39	33.3%
	Master Degree	6	5.1%

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	Doctoral Degree	3	2.6%
	Others	2	1.7%
Total Children	1 children	62	53.0%
	More than 1 child	55	47.0%
Mother Age	<30 years old	41	35.0%
	30-39 years old	69	59.0%
	> 40 years old	7	6.0%
Child Sex	Male	62	52.9%
	Female	55	47.1%
Television Availability	Not available	1	0.9%
	Available	116	99.1%
Transportation Availability	Available	117	100.0%
Type of Public Transportation	Walking	10	8.5%
	Taxi	15	12.8%
	Bus	61	52.1%
	Online transportation	21	17.9%

Table 3. Enabling, Need and Health Services Related Characteristics of Mothers

		N	**%**
	Increased thirst	14	12.0%
Diarrhea Symtomps	Easily irritated	2	1.7%
	Reduced fluid intake	7	6.0%
	Sluggish	**25**	**21.4%**
	Symtomps	25	21.4%
	Sunken eyes	8	6.8%
	Bloody stool	5	4.3%
Diarrhea Severity	Mild	34	29.1%
	Moderate	81	69.2%
	Severe	2	1.7%
Previous History of Diarrhea	No	46	39.3%
	Yes	71	60.7%
Definition	Incorrect	50	42.7%
	Correct	67	57.3%
Diarrhea Cause	Incorrect	87	74.4%
	Correct	30	25.6%
Diarrhea Sign Severity	Incorrect	58	49,6%
	Correct	59	50.4%
Dehidration Sign	Incorrect	46	39.3%
	Correct	71	60.7%
Perceived Severity	Lethargy	41	35.0%
	Weight loss	17	14.5%
	Numbness	3	2.6%
	More than one symptom	56	47.9%
Diarrhea Prevention	Incorrect	32	27.4%
	Correct	85	72.6%

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Tabel 4. Health Care Seeking Behavior of Mothers

Health Care Seeking Behaviors	Categorization	N	%
First Source of Treatment	Formal	80	68.4%
	Informal	37	31.6%
Type of Health Care Seeking Behavior	Seeking Midwife (Formal)	24	20.5%
	Seeking Physician (Formal)	11	9.4%
	Seeking Pediatrician (Formal)	15	12.8%
	Seeking Community Health Center (Formal)	30	25.6%
	Did not consult (Informal)	37	31.6%
Cause not Consult in pandemic situation	Spontaneous recovery	44	37.6%
	Medication available at home	11	9.4%
	Financial issues	24	20.5%
	Fear of COVID-19	34	29.1%
	Diarrhea maybe because teething	4	3.4%

We conducted analyses to determine if the study met the necessary assumptions for applying multiple logistic regression. In this case, in the final model, the Omnibus test of model coefficients had a Chi square value of 59.704 and a probability of P = 0.000, and the Hosmer-Lemeshow test had a Chi square value of 8.366 with a significance of 0.399, indicating that the model was a good fit. The model correctly predicted 84.6% of the variables, indicating that all data from the analyzed independent variables influenced the dependent variable value by 84.6% when factoring in the constant parameter. For formal health care seeking behavior, the correct percentage was 91.3%, and for informal health care seeking behavour, it was 70.3%, which influenced the dependent variable following the constant parameter. According to the model summary, the independent variables' ability to explain the dependent variable (health care seeking behavior) was 5.61% in the model, with the remaining 94.39% influenced by factors outside the model. Finally, Table 5 presents the results of the logistic regression component analysis in this study.

Using chi-square and Fisher exact tests, we found that mothers' health care seeking behavior was significantly linked to their child's age (p = 0.0032), her job type (p = 0.001), her level of education (p = 0.005), her age (p = 0.005), the type of public transportation availability used (p = 0.000), her correct knowledge of diarrhea causes (p = 0.022), her correct knowledge of dangerous diarrhea signs (p = 0.010), her correct knowledge of diarrhea effects (p = 0.034), and how she felt about her illness (p = 0.021).

Tabel 5. Correlation in Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1.Timeline Acute/Chronic												
2. Timeline Cyclical	0.000**											
3. Consequences	0.000**	0.000**										
4. Personal Control	0.003**	0.013*	0.007**									
5.Treatment Control	0.020*	0.957	0.037*	0.100								

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6. Illness coherence	0.001 **	0.000 **	0.000 **	0.002 **	0.019 *							
7. Emotional representations	0.030 *	0.002 **	0.000 **	0.000 **	0.144	0.000 **						
8. Illness perceptions	0.000 **	0.000 **	0.000 **	0.000 **	0.000 **	0.000 **	0.000 **					
9. General Anxiety	0.000 **	0.833	0.000 **	0.175	0.118	0.492 *	0.004*	0.003*				
10. Type of Health Care Seeking Behavior	0.425	0.349	0.538	0.589	0.016 *	0.043 *	0.100	0.611	0.178			
11. Cause not Consulting in pandemic	0.234	0.120	0.680	0.003 **	0.560	0.253	0.242	0.248	0.014	0.009 **		
12. Health Care Seeking Behavior (Formal/Informal)	0.212	0/078	0.845	0.335	0.047 *	0.003 **	0.034	0.027*	0.116	0.000 **	0.588	

Tabel 6. Multivariate Logistic Regression for Determining Factors Affecting Health Seeking Behaviors of Mothers

Variables		Health care		Seeking behavior Informal		p-value	Odd Ratios	95% CI
		Formal	%	N	%			
Child Age						0.032 *	1.757	0.808-3.822
	<6 months old	17	21.3 %	2	5.4%			
	6-11 months old	13	16.3 %	6	16.2%			
	12-23 months old	25	31.3 %	8	21.6%			
	24-59 months old	25	31.3 %	21	56.8%			
Mother Job						0.001 **	1.559	0.842-2.887
	Housewives		67.5 %	12	32.4%			
	Civil servant	11	13.8 %	5	13.5%			
	Private Employee	11	13.8 %	16	43.2%			
	Others	4	5.0%	4	10.8%			
Mother Educational Level						0.006 **	1.964	0.946-4.080
	Elementary school	1	1,30 %	0	0,00%			
	Junior High School	7	8,80	0	0,00%			

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			%					
	Senior High School	46	57.5 %	13	35.1%			
	Diploma/Bachelor degree	20	25.0 %	19	51.4%			
	Master degree	4	5.0%	2	5.4%			
	Doctoral degree	2	2.5%	1	2.7%			
	Others	0	0.0%	2	5.4%			
Total Children						0.232	0.430	0.095-1.949
	1 child	39	48.8 %	23	62.2%			
	>1 child	41	51.3 %	14	37.8%			
Type of Public Transportation Availability						0.000 **	1.044	0.550-1.980
	Walking	6	7.5%	4	10.8%			
	Taxi	9	11.3 %	6	16.2%			
	Bus	51	63.8 %	10	27.0%			
	Online Transportation	12	15.0 %	9	24.3%			
Diarrhea Symptoms						0.059	0.956	0.673-1.359
	None	2	2.5%	8	21.6%			
	Sunken Eyes	4	5.0%	4	10.8%			
	Bloody Stool	4	5.0%	1	2.7%			
	More Than One Symptom		55.0 %	12	32.4%			
Perceived Diarrhea Severity						0.845	2.964	0.709-12.394
	Mild	23	28.8 %	11	29.7%			
	Moderate	56	70.0 %	25	67.6%			
	Severe	1	1.3%	1	2.7%			
Previous History of Diarrhea						0.842	1.450	0.405-5.190
	None	32	40.0 %	14	37.8%			
	Yes	48	60.0 %	23	62.2%			
Knowledge of Diarrhea Definition						0.842	0.414	0.096-1.785
	Incorrect	35	43.8 %	15	40.5%			
	Correct	45	56.3 %	22	59.5%			

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Knowledge of Diarrhea Cause						0.022**	4.097	1.061-15.817
	Incorrect	65	81.3%	22	59.5%			
	Correct	15	18.8%	15	40.5%			
Knowledge of Diarrhea Sign Severity						0.010**	0.198	0.026-1.525
	Incorrect	33	41.3%	25	67.6%			
	Correct	47	58.8%	12	32.4%			
Knowledge of Dehidration Sign						0.071	2.879	0.582-14.232
	Incorrect	36	45.0%	10	27.0%			
	Correct	44	55.0%	27	73.0%			
Diarrhea Effect						0.034*	0.967	0.595-1.572
	Lethargy	22	27.5%	19	51.4%			
	Weight lose	11	13.8%	6	16.2%			
Diarrhea Prevention						0.663	9.528	1.847-49.162
	Incorrect	23	28.8%	9	24.3%			
	Correct	57	71.3%	28	75.7%			

*** p<0.05,** **p<0.01, CI (Confidence Interval)

Discussion

The objective of this study was to determine the characteristics that influence the healthcare-seeking behaviours of mothers in Indonesia when their children have diarrhea. The study identified numerous important factors that had a substantial impact on the results. These factors included the child's age, the mother's occupation, the mother's level of education, the mother's age, the type of public transportation used, the knowledge of the causes of diarrhea, the awareness of the indicators of dangerous diarrhea, and the perception of diarrhea-related disease. This study demonstrated that the model accurately predicted 84.6% of the health care-seeking behavior variables. This indicates that when accounting for the constant parameter, all of the studied independent variables influenced the value of the dependent variable by 84.6%. The percentage of individuals engaging in formal health care seeking activity was 91.3%, while the number for informal health care seeking behavior was 70.3%. These percentages had an impact on the dependent variable, which remained constant. The model summary shows that the independent variables explained 5.61% of the variation in health care-seeking behavior, with factors not included in the model accounting for the remaining 94.39%. Using chi-square and Fisher exact tests, bivariate analysis revealed significant links between several factors and mothers' health care-seeking behavior. These factors include child age, mother's job type, mother's education level, mother's age, type of public transportation

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availability, correct knowledge of diarrhea causes, correct knowledge of dangerous diarrhea signs, diarrhea effects, and illness perception regarding diarrhea. Some of these variables consistence with previous study in Ethiopia showed that illness awareness, perceived illness severity, perceived early treatment and having young children were predictors of mothers' health care seeking behaviour.

The child's age had a substantial impact on the mother's healthcare-seeking behavior. Mothers had a higher tendency to pursue professional medical assistance for their younger children (below 6 months of age). However, as the children grew older, there was a growing inclination towards opting for informal health care. The perception of younger children as more susceptible, necessitating formal medical care, could explain this phenomenon (Table 2). Similar results from a study in Nigeria and Uganda revealed that formal health care services prioritized younger children due to their perceived vulnerability (Agunwa et al., 2017; Atuyambe et al., 2008).

The mother's profession also had a pivotal impact. Housewives had a greater propensity for formal health care, whereas private employees showed a stronger preference for informal care (Table 2). Compared to employed mothers, housewives generally have more available time and potentially fewer financial means to use official healthcare services, which explains this phenomenon. In addition, there was a positive correlation between higher levels of education among mothers and an increase in their utilization of formal health care services. Mothers who have received education are more likely to have better access to health information and resources, which in turn increases their comprehension of the importance of formal healthcare. The results align with an Indonesian study that demonstrated the significant influence of mothers' education level on their choice of healthcare services for their children (Schellekens, 2021).

This study found that mothers in the age range of 30-39 years were most likely to seek formal health care. Table 2 indicates their greater experience and improved financial stability compared to younger mothers. Conversely, moms who are under the age of 30 were more likely to prefer informal care, potentially because they had less experience or confidence in handling their child's health problems. A study in ten African countries revealed an age-related pattern, with older moms more likely to use formal health care facilities for their children (He et al., 2022).

The choice of public transportation availability had a substantial impact on individuals' behaviour while seeking health care. Mothers reliant on accessible transportation are more inclined to pursue formal medical care, potentially due to enhanced access to health services. Mothers without mobility options or dependent on ride-hailing services are more inclined to select informal care. The convenience and cost advantages associated with this choice could explain this preference (Table 2). Research in rural India has underscored the significance of transportation accessibility in shaping healthcare service utilization (Jaysawal, 2015).

Understanding the aetiology and symptoms of acute diarrhea was essential in assessing individuals' propensity to seek healthcare (Nielsen et al., 2003). Mothers who possessed accurate knowledge were considerably more inclined to seek professional healthcare services (Table 3). This highlights the significance of health education in improving health outcomes. A study in Nigeria found a correlation between a higher utilization of formal health care facilities and improved maternal understanding of pediatric illnesses (Tinuade, Iyabo, & Durotoye, 2010).

The mothers' perception of the severity of diarrhea and its impact on their children played a significant role in shaping their decision-making. Individuals who saw diarrhea as a significant ailment were more inclined to seek professional medical assistance (Table 3). This discovery is consistent with previous research that emphasizes the significance of individuals illness perceptions in relation to their use of healthcare services (Ghasemi, et al., 2013; Merga & Alemayehu, 2015; Othero et al., 2009. A Canadian and Kolkata study serves as an illustrative case, revealing that women who perceived their illnesses as serious were more likely to seek professional health treatment (Thompson et al., 2016).

The model achieved a precision of 84.6% in predicting health care-seeking behavior. Nevertheless, the independent variables accounted for just 5.61% of the variation in health care-seeking behavior,

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suggesting that there are other unexplored factors that have a considerable impact (Table 6). This indicates the need for further investigation to examine supplementary factors such as cultural attitudes, healthcare service accessibility, and economic obstacles.

This study employed a cross-sectional design, which naturally restricts the capacity to demonstrate a cause-and-effect relationship between the observed factors and health care-seeking behaviours. Future research should prioritize doing longitudinal studies in order to have a deeper understanding of causal linkages. The study's limited geographical scope and relatively small sample size may limit the generalizability of the results to a wider population. Obtaining larger and more diverse samples from other areas would yield a more comprehensive comprehension of health care-seeking behaviours.

The utilization of self-reported data may create response biases, such as recall bias or social desirability bias. Instead of expressing their genuine habits or opinions, participants may have provided responses they perceived as expected. The study specifically examined demographic, socio-economic, and knowledge-related aspects, but it did not investigate other potentially significant variables, such as cultural attitudes, accessibility to health services, economic constraints, and psychological concerns. Incorporating these elements into future research could yield a more exhaustive comprehension. The prevailing COVID-19 pandemic is believed to have had an impact on patterns of seeking healthcare, as numerous mothers refrained from visiting conventional healthcare facilities out of concern for contracting the virus. We did not conduct a detailed analysis of this impact, thereby missing out on valuable insights into the influence of pandemics on healthcare decision-making

There is a distinct requirement for improved health education initiatives that specifically aim at women, with a particular emphasis on the causes, symptoms, and seriousness of diarrhea. Providing education to moms can greatly enhance their capacity to make well-informed healthcare choices for their children. Enhancing the availability of healthcare services, particularly in remote and underprivileged regions, is of utmost importance. This encompasses enhanced transportation alternatives, expanded healthcare infrastructure, and mobile healthcare units capable of accessing rural regions. Expanding telehealth services has the potential to alleviate certain obstacles presented by the COVID-19 epidemic. Telehealth enables prompt medical guidance and decreases the necessity for in-person appointments, thereby mitigating the danger of infection. Implementing support systems for mothers, such as community health professionals or peer support groups, might offer supplementary resources and motivation to seek formal health care. Governments and health organizations should prioritize policy and infrastructure enhancements to ensure health care facilities are adequately prepared to manage pandemics, without compromising the provision of routine care for illnesses like diarrhea. Subsequent studies should examine the enduring effects of the COVID-19 pandemic on patterns of seeking medical care by incorporating larger sample sizes and more diverse populations. Further research should investigate the psychological ramifications of the epidemic on moms and the subsequent influence on their healthcare choices. Research and interventions should demonstrate cultural sensitivity and take into account the beliefs and practices of the local community. Engaging in partnerships with local communities to create health education materials that are culturally suitable can enhance acceptance and efficacy.

Conclusion

The study demonstrates that a multifaceted interaction of demographic, socio-economic, and knowledge-related factors influences the health care-seeking behaviours of mothers. Improving health education and increasing access to healthcare services are essential measures for improving the health outcomes of children with diarrhea. The study emphasizes the complex and diverse nature of health care-seeking behaviours among moms who are managing childhood diarrhea. By acknowledging and overcoming the existing constraints and adopting the recommended approaches, it is possible to get enhanced health results. Comprehensive health education, improved service accessibility, and favorable regulations have a crucial role in promoting the adoption of formal healthcare-seeking habits, especially in times of pandemics such as COVID-19. Further investigation should continue into these domains in order to construct a more resilient comprehension and offer efficacious solutions. Future studies should prioritize

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the use of larger sample sizes and longitudinal studies to confirm causation and investigate additional potential contributing factors.

Conflict of Interests

No competing interests need to be declared.

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