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ABSTRACT

Economic progress is intricately tied to the concept of human capital. The active participation of women who earn income plays a significant role in mitigating poverty and addressing gender disparities. Consequently, in the pursuit of fostering sustainable economic development, a comprehensive exploration of women's health concerns becomes imperative. The acquisition of accessible and qualified medical care stands as a vital component in preserving overall well-being. Regrettably, women residing in numerous underdeveloped nations often neglect this fundamental necessity. Improving healthcare-seeking behavior (HSB) is considered a vital strategy to optimize the utilization of healthcare services. However, women in the majority of developing countries demonstrate inadequate healthcare-seeking behavior (HSB). This study seeks to evaluate the influence of women's earning status and other socioeconomic factors on their HSB, using data from the Bangladesh Household Income and Expenditure Survey (HIES) 2016. Here we considered those women who were ill and sought any type of treatment during the 30 days of the survey. Based on Andersen's behavioral model of health services use, this study employed a multinomial logistic regression model. The findings indicate that while women's educational attainment, urban residence, and chronic illness elevate the likelihood of seeking qualified healthcare

providers, women who have income are more inclined to seek treatment from a pharmacy/traditional/self-care. These findings underscore the necessity for initiatives aimed at improving the HSB among women who have income and those residing in rural areas.

1. Introduction

There is a prevailing belief that the value attributed to women's health is predominantly associated with their reproductive capacity (Bustreo et al., 2012). However, the domain of women's health has undergone significant transformations, shifting its focus from a limited emphasis on child and maternal health to a broader framework encompassing sexual and reproductive health. Moreover, this broader perspective has further expanded to incorporate the holistic concept of women's health, which is based on a life-course perspective. Women's healthcare plays a crucial role in fostering social development by empowering women, amplifying their contributions to society, and promoting sustainable development (Langer et al., 2015). The health of women exerts a substantial and positive influence on enhancing economic growth in underdeveloped nations (Bloom et al., 2019, 2020).

In most developing countries, women are more vulnerable to extreme poverty. However, combating hunger and poverty requires the empowerment of women (FAO, 2017). Through active engagement in the labor market and participation in community affairs, women assume a pivotal role in the implementation of poverty alleviation strategies. Enhancing female employment opportunities and augmenting their income levels substantively contribute to the reduction of poverty rates and foster economic growth (Maligalig et al., 2019). Empirical evidence from China affirms a positive correlation between women's empowerment and the mitigation of poverty (Gu & Nie, 2021).

In the world survey on the role of women in development, it has been found that due to their disproportionate share of unpaid caregiving and household work, women face significant time limitations, restricted access to adequate jobs, healthcare, and education, and the risk of capacity depletion in the absence of supportive legislative frameworks (UN Women, 2020). The simultaneous responsibilities of caring for family members and maintaining employment pose significant risks to women's health, which can lead to adverse outcomes (Chen et al., 2020). However, negative health outcomes affect their productivity. It is evident from research done by the Work and Opportunities for Women (WOW) program in Bangladesh that women experience health issues and exhaustion as a result of performing dual jobs. Women claim that missing work damages their professional reputation, increases their chances of job loss, and prevents them from being promoted to better jobs (WOW, 2020).

Higher women empowerment means higher use of healthcare facilities (Ahmmed, 2022), and it also increases maternal healthcare utilization (Haider et al., 2017). Health and women's empowerment are intrinsically linked. We can improve women's quality of life and, in turn, contribute to their empowerment by offering better health services (Panchani, 2014). However, better health outcomes are unlikely to result from increasing access to subpar treatment (Kruk et al., 2018). It was estimated that a significant proportion of antibiotic prescriptions in Bangladesh, specifically 63%, originates from unqualified healthcare providers. Moreover, antibiotics are

prescribed in almost half, precisely 44%, of all consultations within primary healthcare settings (SIAPS, 2015).

Frequently, healthcare prescribers would diagnose a microbial infection relying on signs and symptoms, choosing to prescribe antimicrobials based on empirical evidence rather than adhering strictly to established treatment protocols (Faiz & Basher, 2011). This phenomenon results in the generation of misconceptions and dissemination of inaccurate information regarding illnesses and diseases, ultimately leading to the irrational and improper administration of antibiotics among various patients (Nahar et al., 2020; Pulla, 2016).

Improving healthcare-seeking behavior (HSB) is considered a vital strategy to optimize the utilization of healthcare services. HSB can be defined as the actions taken by individuals who subjectively experience or perceive themselves to be unwell or facing a health issue to identify an appropriate solution (Ward et al., 1997). However, HSB among women is poor in most developing countries. In Eastern Ethiopia, 74.3% of women sought antenatal healthcare from a healthcare facility, whereas only 22.6% sought postnatal healthcare (Kifle et al., 2017). In Zambia, around 60% of patients sought treatment from healthcare providers, 30% treated themselves, and 10% did not seek any type of treatment (Masiye & Kaonga, 2016). This relates not only to maternal healthcare; during pregnancy, women experienced illnesses and did not seek proper healthcare.

In China, only 25.97% of women with female diseases (such as menopausal symptoms) sought healthcare (Du et al., 2020). In Egypt, a significant majority of women, amounting to 89.2%, refrain from seeking medical treatment for urinary incontinence (Ahmed & Zaky, 2016). Only 14.2% of women with cervical cancer sought healthcare in Ethiopia (Habtu et al., 2018). In Nepal, around 50% of women experiencing any illness first sought treatment from traditional healers (Shrestha et al., 2017). One study (Reddy et al., 2020) reported that only 34% of rural women in Telangana, India, sought medical treatment after the symptoms of illness appeared. In Bangladesh, women's healthcare-seeking behavior is inadequate (Hamiduzzaman et al., 2023; Khan et al., 2018; Yaya et al., 2017). A prior investigation carried out in Bangladesh revealed that 47.3% of women residing in rural areas did not avail themselves of any medical examinations throughout their pregnancies (Hossain, 2020).

The purpose of this study is to emphasize the need for policymakers to prioritize the improvement of women's health-seeking behavior (HSB) in relation to various illnesses rather than solely focusing on maternal healthcare-related concerns. However, a significant proportion of women still do not seek proper treatment in developing nations, which may harm health outcomes. As the dual jobs of women affect their health, it is of utmost importance to examine the effects of women's earning status and other socioeconomic factors on their healthcare-seeking behavior. This examination will help policymakers realize where and how to focus their efforts in contributing to improving women's healthcare, better employment, and empowerment, ultimately leading to social and economic development in developing countries.

2. Literature Review

The demand for modern healthcare depends on age, user fees, education, economic well-being, and distance to healthcare providers (Masiye & Kaonga, 2016; Paudel, 2019; Wellay et al., 2018; Zhang et al., 2020). The age of women and chronic illness are influential factors in their health-seeking behavior and exhibit a positive correlation in Egypt, as indicated by Ahmed and Zaky (2016). The type of illness is a significant factor influencing HSB. Women who have chronic illnesses are more inclined to seek healthcare services from qualified providers (Ahmed & Zaky,

2016; Gabrani et al., 2021). The distance and region of residence have a significant impact on the choice of healthcare providers (Kassim, 2021; Liu et al., 2019; Masiye & Kaonga, 2016).

Various factors, including individual, societal, sociodemographic, and health service factors, have an impact on the maternal healthcare-seeking behavior of women (Kifle et al., 2017). In China, urban women exhibit a higher propensity to pursue medical treatment in secondary or tertiary healthcare facilities in comparison to their rural counterparts (Liu et al., 2019; Yanikkerem et al., 2013). Whether in rural or urban areas, the education and paid employment of women have a positive impact on their utilization of healthcare services (Wado, 2018).

Women who have income are expected to improve their socioeconomic status, which can influence their decision-making power and result in their seeking proper healthcare. Women's empowerment and proximity to healthcare facilities are significant factors influencing healthcare-seeking behavior among rural women (Reddy et al., 2020). Numerous studies have established a strong and positive correlation between employed women and maternal or reproductive HSB in Bangladesh (Hossain, 2020) and in Ethiopia (Wado, 2018), as well as making their own healthcare decisions in Bangladesh (Hasan & Uddin, 2016). In contrast, in Nepal, although women's education was positively related to maternal healthcare service use, women's employment was negatively related to maternal healthcare service use (Matsumura & Gubhaju, 2001). Most studies have focused on maternal healthcare among women.

3. Methodology

3.1. *Theoretical Background*

The Behavioral Model of Health Services Use (Andersen, 1968) has been applied in this study, following previous studies (Khanam & Hasan, 2020; Lo et al., 2016; Slobbe et al., 2017; Sreeramareddy et al., 2012), to determine influential factors of HSB among ill women in Bangladesh. This theory (Andersen, 1968), moderated by Andersen and Newman (1973), assumes that the utilization of healthcare services by an individual is influenced by three distinct factors: predisposing, enabling, and need factors (also known as severity of illness).

The predisposing component attempts to explain an individual's inclination to seek medical assistance before the onset of a sickness episode. It includes characteristics related to demographics, social structure, and beliefs. Variables that contribute to the fulfillment of an individual's healthcare needs are commonly identified as enabling factors. They consist of variables that indicate family characteristics and community resources. The severity of an individual's illness determines whether or not they need to seek medical help. It includes the individual's perceptions of sickness and their assessed levels of illness.

3.2. Data Source

This research constitutes a cross-sectional study that relies on secondary sources of data. The data were collected from the Bangladesh Household Income and Expenditure Survey (HIES) 2016, which was carried out by the Bangladesh Bureau of Statistics (BBS) of the Statistics and Informatics Division (SID). The World Bank and World Food Programme provided financial and technical assistance. In the process of collecting data, a stratified two-stage clustered sampling design was used in the HIES 2016 (BBS, 2017).
This study included a sample of women who were 18 years old and above and who had suffered from any illnesses during the last 30 days of the survey and sought any type of treatment. After cleaning the data, the total number of observations in this study was 11,967.

3.3. *Statistical Analysis*

Descriptive analysis has been conducted using frequency distribution, and a multinomial logistic regression (Ausserhofer et al., 2022; Wang et al., 2015) was used to examine the impact of the earning status of women and other socioeconomic variables on HSB in accordance with Andersen's behavioral model of health services use.

In the end, some diagnostic tests were run regarding the results of the multinomial logistic regression. The Hausman test, the Small-Hsiao test of the Independence of Irrelevant Alternatives (IIA) assumption, and the Wald test for the goodness of fit of the model were applied. All the data were analyzed using STATA 16.

3.4. *Conceptual Framework*

The conceptual framework of this study is illustrated in Figure 1, in which the earning status of women is identified as a predisposing factor. Additional socioeconomic factors are categorized into predisposing, enabling, and need factors in accordance with the definitions outlined in Andersen's behavioral model of health services use, as modified by Andersen and Newman (1973). In Figure 1, the predisposing factors encompass the age of women, religion, education level, and earning status of women. Enabling factors include the wealth index, size of the household, and distance to healthcare providers. Need factors consist of type of illness, health status, and delayed treatment.

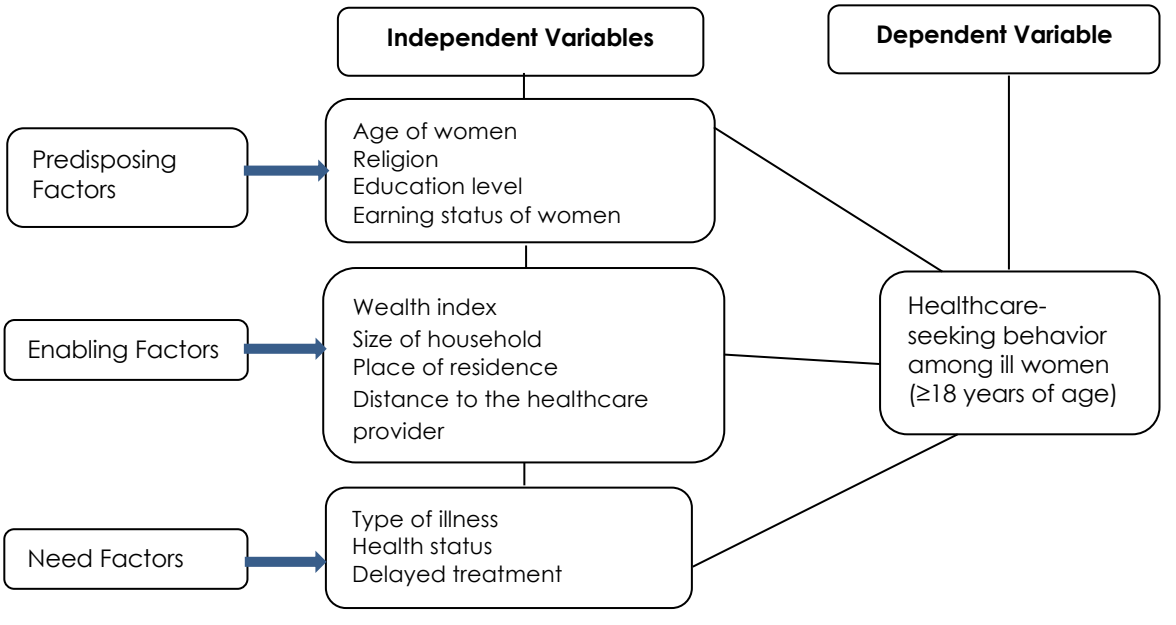

Figure 1. Conceptual Framework for HSB among ill Women

3.5. *Variables Description*

In this study, the HSB among ill women (≥18 years of age) is defined or measured as a categorical variable, including the following options:

(i) Qualified healthcare provider
(ii) Non-qualified healthcare provider
(iii) Pharmacy/traditional/self-care

A qualified healthcare provider is defined as a registered and trained physician who obtained an MBBS degree. A non-qualified healthcare provider has no MBBS degree but has some kind of training or experience (Rasul et al., 2019). Pharmacy/traditional/self-care refers to a healthcare provider operating in a pharmacy or dispensary; homeopath; ayurbed, kabiraj, or hakim; or other traditional, spiritual, or self-treatment.

For implementing the objective of this study, the model can be written as:

$$Y_i=\beta_0+\beta_1X_{1i}+\beta_2X_{2i}+\beta_3X_{3i}+\beta_4X_{4i}+\beta_5X_{5i}+\beta_6X_{6i}+\beta_7X_{7i}+\beta_8X_{8i}+\beta_9X_{9i}+\beta_{10}X_{10i}+\beta_{11}X_{11i}+\varepsilon \ldots\ldots\ldots \quad (1)$$

Where Y is the dependent variable; β0 is the intercept term; β_1, β_2, β_3…are parameters; X_1, X_2, X_3… are independent variables; and ε is the random disturbance term. For Model (1), the dependent and independent variables, based on the conceptual framework and the available data, are defined in Table 1.

In Table 1, socioeconomic status is expressed as a wealth index (Amin et al., 2010; Ahmed & Yunus, 2020; Tahsina, 2017). It is a composite index composed of the key asset ownership of households (Bhuiya et al., 2007; Mahmood et al., 2010). Principal component analysis (PCA) was applied to produce a factor score for each household based on the assets list; then these were grouped into five quintiles from lowest to highest (poorest, poor, middle, rich, richest). We used the "pca" command in STATA 16.

Table 1
Dependent and Independent Variables

Variables		**Definition**
Dependent variable Healthcare–seeking behavior among women (≥18 years of age) (Y)		= 1 if treatment is sought from a qualified healthcare provider = 2 if treatment is sought from a non-qualified healthcare provider = 3 if treatment is sought from a pharmacy/traditional/self-care
Independent variables		
Predisposing factors	Age of women (X_1)	In years (continuous variable)
	Religion (X_2)	= 1 if Islam = 0 others (Hindus, Christians, Buddhists)
	Education level (X_3)	= 1 if passed primary level or more = 0 if otherwise (less than primary level)

	Earning status of women (X_4)	= 1 if women have income = 0 if women have no income
Enabling factors	Place of residence (X_5)	1= rural 2= urban
	Size of household (X_6)	In numbers (discrete variable)
	Wealth index (X_7)	Wealth index (poorest, poor, middle, rich, richest)
	Distance to the healthcare provider (X_8)	= 1 if time to reach is >0.4 hour = 0 if time to reach is <0.4 hours
Need factors	Type of illness (X_9)	= 1 if fever = 2 if diarrhea = 3 if pain/injury = 4 if blood pressure/heart disease = 5 if respiratory diseases = 6 if weakness/dizziness = 7 if female disease/pregnancy-related = 8 if others
	Health status (X_{10})	= 1 if women have any chronic illness = 0 if there is no chronic illness
	Delayed treatment (X_{11})	Delayed treatment = 0 if no delay = 1 if delayed 1 to 2 days = 2 if delayed 3 to 4 days = 3 if delayed 5 days or more

4. Results

Table 2 displays the descriptive statistics of healthcare-seeking behavior (HSB) among ill women. Approximately 43% of women seek treatment from qualified healthcare providers. About 23% of women seek treatment from non-qualified healthcare providers, and 34% seek treatment from pharmacy/traditional/self-care. The average age is about 41 years, and the average size of a household is 4.179. In our sample, about 90% of the women in this study follow the Islamic religion. About 45.20% of women have completed at least primary education. The percentage of women who have income, regardless of occupation, is 11.20%, and more women who have income sought treatment from pharmacy/traditional/self-care. More than 70% of ill women live in rural areas. Approximately 42% of ill women take more than 0.4 hours, or 24 minutes, to reach the healthcare provider. Additionally, 45.40% of women suffer from chronic illnesses. More women seek pharmacy/traditional/self-care for fever. Only 27.37% of ill women did not delay seeking treatment.

Table 2
Descriptive statistics of healthcare-seeking behavior (HSB) among ill Women

Characteristics	Total Population (N=11,967)		Qualified healthcare provider (n=5,117)		Non-qualified healthcare provider (n=2,763)		Pharmacy/traditional/self-care (n=4,087)	
	mean	**Std.**	**mean**	**Std.**	**mean**	**Std.**	**mean**	**Std.**
Age (years)	40.979	15.781	41.502	15.839	41.195	15.840	40.178	15.638
Size of household (numbers)	4.179	1.721	4.280	1.781	4.005	1.581	4.169	1.732
	N=11967	**100%**	**n=5117**	**42.76%**	**n=2763**	**23.09%**	**n=4087**	**34.15%**
Religion								
Islam	10711	89.50	4636	38.74	2473	20.67	3602	30.10
Others (Hindus, Christians, Buddhists)	1256	10.50	481	4.02	290	2.42	485	4.05
Education level								
Completed primary level or more	5409	45.20	2545	21.27	1061	8.87	1803	15.07
Otherwise (less than primary level)	6558	54.80	2572	21.49	1702	14.22	2284	19.09
Earning status of women								
Have income	1340	11.20	476	3.98	319	2.67	545	4.55
Have no income	10627	88.80	4641	38.78	2444	20.42	3542	29.60
Residence								
Urban	3483	29.11	1672	13.97	544	4.55	1267	10.59
Rural	8484	70.89	3445	28.79	2219	18.54	2820	23.56

Wealth index								
Poorest	2216	18.52	811	6.78	551	4.60	854	7.14
Poor	2394	20.00	898	7.50	652	5.45	844	7.05
Middle	2477	20.70	984	8.22	648	5.14	845	7.06
Rich	2435	20.35	1063	8.88	528	4.41	844	7.05
Richest	2445	20.43	1361	11.37	384	3.21	700	5.85
Distance to the healthcare provider								
Distance >0.4 hour	5032	42.05	3321	27.75	777	6.49	934	7.80
Distance <.04 hours	6935	57.95	1796	15.01	1968	16.60	3153	26.35
Health status								
Have chronic illness	5433	45.40	2717	22.70	1231	10.29	1485	12.41
No chronic illness	6534	54.60	2400	20.06	1532	12.80	2602	21.74
Type of illness								
Fever	4787	40.00	1380	11.53	1271	10.62	2136	17.85
Diarrhea	504	4.21	175	1.46	143	1.19	186	1.55
Pain/injury	2282	19.07	1108	9.26	489	4.09	685	5.72
Blood pressure/heart diseases	704	5.88	414	3.46	139	1.15	151	1.26
Respiratory diseases	499	4.17	273	2.28	115	0.96	111	0.93
Weakness/ dizziness	966	8.07	413	3.45	249	2.08	304	2.54
Female diseases /pregnancy-related	662	5.53	476	3.98	77	0.64	109	0.91

Others	1563	13.06	878	7.34	280	2.34	405	3.38
Delayed treatment								
No delay	3275	27.37	1366	11.41	738	6.17	1171	9.79
Delayed 1/2 days	5161	43.13	1719	14.36	1324	11.06	2118	17.70
Delayed 3/4 days	1505	12.58	696	5.82	371	3.10	438	3.66
Delayed 5/more days	2026	16.93	1336	11.16	330	2.76	360	3.01

Source: Bangladesh HIES 2016; calculated by the author

The findings of the multinomial logistic regression analysis are displayed in Table 3 below, with results expressed in terms of both coefficients and average marginal effects (AME). The coefficient of the multinomial logit model can be interpreted in relation to the relative probabilities, while the average marginal effects can interpret the actual probabilities of any outcomes.

In Table 3, the average marginal effect of women's age is positive. This finding suggests that as women age, they are more inclined to seek healthcare services from qualified providers and less likely to seek help from non-qualified healthcare providers. However, women who belong to the Islamic religion are more inclined to seek qualified healthcare providers compared to those of other religions. Additionally, women who have completed at least primary education have a higher tendency to seek care from qualified healthcare providers compared to those with no education or lower than primary education. Women who earn or have income are less inclined to seek care from qualified providers and more likely to seek treatment from pharmacies/traditional/self-care, in contrast to non-earners or those who have no income.

The total number of household members also affects women's HSB. Women from households with a higher wealth index have an increased likelihood of seeking care from qualified healthcare providers and a decreased likelihood of seeking care from non-qualified providers, as well as pharmacies/traditional/self-care. Moreover, women residing in urban areas demonstrate a propensity to seek healthcare services from qualified professionals in comparison to their counterparts in rural areas. However, the greater distance does not hinder women from seeking qualified healthcare providers but rather discourages their utilization of pharmacy/traditional/self-care. Women with chronic illnesses are more likely to avail themselves of the services of qualified healthcare providers, while they are less likely to seek treatment from a pharmacy/traditional/self-care compared to women without chronic illnesses.

The type of illness that women experience is a key factor in determining their HSB. Specifically, women who suffer from conditions such as pain/injury, blood pressure/heart diseases, respiratory diseases, and female diseases/pregnancy-related issues are more likely to seek professional healthcare services and less likely to resort to pharmacy/traditional/self-care compared to those who are afflicted with fever. Delayed treatment for five days or longer increases the likelihood of seeking qualified healthcare compared to women who did not delay seeking treatment.

Table 3
Results of multinomial logistic regression with coefficients and average marginal effects (AME).

Variables	Qualified healthcare provider		Non-qualified healthcare provider		Pharmacy/traditional/ self-care	
	Coefficient	AME	Coefficient	AME	Coefficient	AME
Age (in years**)**	0.004** (0.002)	0.0009***	-0.003 (0.002)	-.0008***		-.0001
Religion (reference group: others such as Hindus, Christians, Buddhists) Islam	0.289*** (0.078)	0.0459***	0.097 (0.081)	-.0061		-.0399***
Education level (reference group: less than primary level) Completed primary level or more	0.189*** (0.057)	0.0488***	-0.183*** (0.061)	-.0450***		-.0039
Earning status of women(reference group: have no income) Have income	-0.175** (0.077)	-.0228*	-0.122 (0.079)	-.0069		0.0298**
Wealth index (reference group: poorest)						
Poor	0.113 (0.078)	0.0053	0.207*** (0.077)	0.0277**		-.0329***
Middle	0.291*** (0.078)	0.0324***	0.274*** (0.078)	0.0254**		-.0578***
Rich	0.446*** (0.079)	0.0689***	0.178** (0.082)	-.0034		-.0656***
Richest	0.820*** (0.083)	0.1421***	0.152* (0.091)	-.0366***		-.1054***
Size of household	0.009 (0.014)	0.0064***	-0.061*** (0.015)	-.0109***		0.0045*
Residence (reference group: rural) Urban	0.376*** (0.055)	0.1115***	-0.552*** (0.062	-.1208***		0.0093
Distance to the healthcare provider(reference group: distance<0.4 hours)	1.748*** (0.052)	0.3131***	0.114* (0.058)	-.1149***		-.1981***

Distance >0.4 hours						
Health status (reference group: no chronic illness) Have chronic illness	0.390*** (0.051)	0.0508***	0.275*** (0.054)	0.0159**		-.0667***
Type of illness (reference group: fever)						
Diarrhea	0.247** (0.121)	0.0285	0.224* (0.118)	0.0214		-.0499***
Pain/injury	0.525*** (0.067)	0.0917***	0.108 (0.071)	-.0219**		-.0697***
Blood pressure/heart diseases	0.965*** (0.112)	0.1585***	0.344*** (0.126)	-.0221		-.1364***
Respiratory diseases	0.775*** (0.129)	0.1146***	0.407*** (0.141)	.0068		-.1214***
Weakness/dizziness	0.475*** (0.092)	0.0733***	0.212** (0.094)	-.0001		-.0731***
Female disease/pregnancy-related	1.541*** (0.121)	0.2875***	0.153 (0.156)	-.0989 ***		-.1886***
Others	0.632*** (0.078)	0.1183***	0.040 (0.088)	-.0415 ***		-.0769***
Delayed treatment (reference group: no delay)						
Delayed 1/2 days	-0.196*** (0.058)	-.0372***	0.006 (0.060)	0.0157*		0.0216**
Delayed 3/4 days	0.275*** (0.081)	0.0311**	0.264*** (0.086)	0.0224*		-.0535***
Delayed 5/more days	0.779*** (0.079)	0.1291***	0.272*** (0.092)	-.0214*		-.1076***
_Constant	-2.549*** (0.170)		0.226 (0.174)			

LR $chi^2(46) = 1181.94$; Prob > chi2 = 0.0000; Pseudo $R^2 = 0.0819$; ***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively; standard errors in parentheses.

The following Table 4 displays the outcomes of both the Hausman test and the Small-Hsiao test regarding the IIA assumption. For the Hausman test of the IIA assumption, negative test results are frequently observed (Hausman & McFadden, 1984), leading to the conclusion that a negative result provides evidence of the absence of a violation of the IIA. The Small-Hsiao test was then conducted to confirm the outcome, and the findings concluded that the IIA assumption was valid in this study.

Table 4
Hausman test and Small-Hsiao test of IIA assumption (N=11,967)

H_0: Odds (Outcome J vs Outcome K) are independent of other alternative L						
Hausman test of IIA assumption						
Categories		Chi^2	df	$P>chi^2$		Evidence
Qualified healthcare provider (J)		-12.670	23	-		for H_0
Non-qualified healthcare provider (L)		-306.933	23	-		for H_0
Pharmacy/traditional/self-care (K)		28.095	23	0.212		for H_0
Small-Hsiao test of IIA assumption						
Categories	lnL(full)	lnL(omit)	Chi^2	df	$P>chi^2$	Evidence
Qualified healthcare provider	-2250.866	-2239.601	22.530	23	0.488	for H_0
Non-qualified healthcare provider	-2489.886	-2479.373	21.024	23	0.580	for H_0
Pharmacy/traditional/self-care	-2098.242	-2091.522	13.441	23	0.942	for H_0

Table 5 presents the outcomes of the Wald test, which indicates the goodness of fit of the model. In Table 5, the results of the Wald test indicate that the categories of the outcome (qualified health care providers, non-qualified health care providers, and pharmacy/traditional/self-care) are distinguished by the predictor variables in the model. This means that merging or combining some of the categories of the healthcare providers sought would not result in a more efficient estimate (Long & Freese, 2014; Müller et al., 2021).

Table 5
Wald test for combining alternatives (N=11,967)

H0: All coefficients except intercepts associated with a given pair of alternatives are 0 (i.e. alternatives can be combined)				
Combination tested	chi^2	df	$P>chi^2$	Evidence
Qualified healthcare provider vs non-qualified healthcare provider	1515.283	22	0.000	against H_0
Qualified healthcare provider vs Pharmacy/traditional/self-care	2035.656	22	0.000	against H_0

Non-qualified healthcare provider vs Pharmacy/traditional/self-care	234.471	22	0.000	against H_0

5. Discussion

As women age, they are more likely to seek qualified healthcare providers, which is similar to the past study where a positive association was found between age and women's healthcare-seeking behavior in Egypt (Ahmed & Zaky, 2016). Older women are also more likely to have higher maternal healthcare utilization in Malaysia (Yeoh et al., 2016) and are prone to more complications of diseases that need better treatment in China (Du et al., 2020). Women who adhere to the Islamic faith display a greater likelihood of seeking healthcare services from qualified providers, in contrast to women practicing other religions, such as Hinduism, Christianity, and Buddhism. However, it is important to note that these findings are inconsistent with previous research (Hasan & Uddin, 2016; Mainuddin et al., 2015), where it was found to be insignificant. This study found a significant correlation between the educational attainment of women and their inclination to consult qualified healthcare providers, which is consistent with previous studies conducted in Bangladesh (Hasan et al., 2021; Yaya et al., 2017), Telangana (Reddy et al., 2020), and Nepal (Adhikari, 2016). However, women with higher educational attainment were less likely to seek non-qualified healthcare providers.

It was anticipated that women who have income would experience an enhancement in their social and financial standing, thereby potentially improving their healthcare-seeking behavior (HSB). However, our findings revealed a negative correlation between women who earn or have income and their inclination to seek healthcare from qualified providers, while a positive correlation was observed with their tendency to seek healthcare from pharmacies/traditional/self-care. This finding is consistent with the study conducted by Du et al. (2020), which revealed that women who were unemployed showed a higher inclination toward seeking medical treatment for ailments specific to females. Moreover, unemployed women in South Africa were more prone to reporting non-communicable diseases (Lopes Ibanez-Gonzalez et al., 2014). However, another study conducted in Ethiopia found that employed women were less inclined to avail themselves of healthcare services (Kifle et al., 2017).

Sometimes, women tend to disregard their health issues until they escalate into more serious conditions. According to a study by Schreiber Pedersen et al. (2018), only 25.3% of Danish women suffering from urinary incontinence sought medical assistance, in comparison to 31.4% of German women. The severity of the illness was identified as the primary factor influencing their healthcare-seeking behavior. On the other hand, women may not have the autonomy to make healthcare decisions independently, regardless of their employment status. Their healthcare choices may be influenced by their partners or family members (Kassim, 2021), or they may face time constraints. More in-depth analysis is needed to investigate why employed women struggle to improve their HSB when it comes to their health conditions. Moreover, the present study revealed a positive correlation between a larger family size and women's HSB, which is substantiated by a previous investigation conducted by Untari and Nugroho (2019).

Furthermore, urban women are more likely than rural women to seek care from qualified healthcare providers, and women from wealthier households are more inclined to seek care from qualified healthcare providers. These findings are consistent with numerous previous studies conducted in different countries (Du et al., 2020; Habtu et al., 2018; Hasan et al., 2021; Kifle et al., 2017; Liu et al., 2019; Rasul et al., 2019; Uddin & Mazur, 2015; Yaya et al., 2017). The findings also

indicate that, rather than reducing, long distances actually increase the likelihood of women seeking qualified healthcare. In Kenya, women travel greater distances to access services from public hospitals (Escamilla et al., 2018).

Women afflicted with respiratory diseases demonstrate a greater propensity to seek healthcare from qualified providers in comparison to experiencing fever. Therefore, women's HSB varies with the types of illnesses (Meng et al., 2016). Women with chronic illnesses are more inclined to seek healthcare from qualified providers, a trend supported by numerous previous studies conducted in Egypt (Ahmed & Zaky, 2016), Albania (Gabrani et al., 2021), and Bangladesh (Rasul et al., 2019). Delaying seeking treatment exacerbates the severity of illnesses, necessitating higher-quality healthcare. In a study conducted in urban Kenya (Escamilla et al., 2018), individuals initially disregard their illnesses or rely on home remedies. However, when their condition fails to improve or worsens, they seek high-quality treatment, resulting in increased treatment costs (Pajuelo et al., 2018). The duration or severity of illnesses intensifies the demand for modern healthcare (Wellay et al., 2018).

6. Conclusion

This study investigated the effects of women's earning status and other socioeconomic characteristics on their health-seeking behavior (HSB) by focusing exclusively on women who are ill and seeking any form of treatment. The study found that several factors influenced the likelihood of seeking out qualified healthcare providers. These factors included predisposing factors such as the age and education level of women, enabling factors such as economic well-being and urban residence, and need factors such as chronic illness, types of illnesses, and delayed treatment. Notably, the distance to healthcare services was no longer found to be a limiting factor in seeking qualified healthcare. However, the study revealed that one of the predisposing factors, namely the earning status of women, had a negative impact on HSB. It is, therefore, important to create a positive environment for women that encourages, rather than discourages, their earning potential, as this can contribute to gender equality and poverty reduction. To ensure that women have access to the necessary support and appropriate healthcare when needed and to minimize rural-urban disparities, it is recommended to organize awareness campaigns about the significance of women's health. Such implications can be extrapolated to developing countries that exhibit comparable socioeconomic and demographic conditions to those found in Bangladesh. This advances the field's understanding of earning women's subpar healthcare utilization.

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Authors Contributions
First author: Conceptualization, Methodology, Data curation and analysis, and Writing the original draft.
Second author: Supervision, Methodology, Writing-reviewing and editing.

Conflict of Interest
There are no conflicts of interest to declare.

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