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Factors Influencing Household Satisfaction with Public Healthcare Services

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Abstract

The aim of this study is to investigate the various factors that exert an influence on the satisfaction of households with public healthcare services in the context of Pakistan. The effect of these factors was assessed by incorporating various covariates, including socioeconomic factors, demographic characteristics, regional influences, and healthcare facility-related variables. The empirical analysis in the study utilised data obtained from the PSLM survey conducted during 2019-2020. The empirical evidence presented in this study is derived from the Logit model. The empirical findings reveal a significant positive association between literacy rate, employed rate, and household income variables with the probability of experiencing satisfaction with public healthcare services. In a parallel manner, it has been noted that households with disabled persons within developed provinces, particularly those classified as poor, demonstrate a lower propensity to experience satisfaction with public healthcare services. It was also observed that healthcare utilisation, quality, distance, and time to reach the healthcare unit are essential in determining household satisfaction. The implications of the study's findings are important, as they provide valuable insights into enhancing satisfaction and suggest potential policy measures based on the observed outcomes.

Keywords: Public healthcare, Healthcare satisfaction, Healthcare utilisation, Poverty

1. Introduction

Healthcare utilisation refers to the act of an individual utilising healthcare services to prevent and treat health issues, foster health and well-being maintenance, or acquire information regarding their health status and prognosis. The underlying premise of healthcare utilisation is predicated on the notion that healthcare services are readily available and easily accessible to a given population, despite the potential presence of barriers that may impede their availability or accessibility. Moreover, it is posited that a deliberate selection process influences the decision to utilise healthcare services. The availability and utilisation of healthcare services significantly impact the satisfaction levels of individuals seeking healthcare.

Every nation possesses a distinct healthcare system customised to address the specific healthcare requirements of its populace within a particular social and cultural context. The primary objective of the healthcare system is to provide healthcare services that are equitable, effective, and accessible, with the ultimate aim of improving patient satisfaction (WHO, 2000). The concept of patient or customer satisfaction is a diverse and comprehensive structure that encompasses various dimensions. It incorporates individuals' subjective perceptions, expectations, and overall experiences (Bleich et al., 2009). Satisfaction, as observed in the context of healthcare, is a complex and subjective phenomenon. It involves an individual's personal evaluation, or assessment, of the healthcare services they have received, juxtaposed against their pre-existing expectations (Hills & Kitchen, 2007). This evaluative process is characterised by the individual's reaction to crucial aspects of their healthcare experience. In essence, satisfaction is the recipient's response to salient elements of the service they have encountered.

Public health services in various communities are typically generated through the collaborative efforts of diverse governmental agencies and private organisations, which exhibit considerable variation in their available resources, overarching objectives, and operational strategies (Katyal et al., 2015; Rout et al., 2021). Public health delivery systems are intricate and flexible and interact with diverse actors. These actors encompass local and state public health agencies, law enforcement and public safety agencies, community-based organisations, health care providers and insurers, businesses, educational institutions, and numerous other organisations (Erixon & Van der Marel, 2011; Sen et al., 2018). Gaining a more comprehensive comprehension of the various attributes of the local public health system is of utmost importance to ascertain the extent to which they impact the accessibility and efficacy of public health services. This initial phase is crucial in unveiling potential avenues for enhancing the delivery of public health services. The prioritisation of health is typically observed as a critical focus area for governments. The current state of the public healthcare sector in Pakistan needs to indicate a satisfactory position. The observed phenomenon can be ascribed to the consistent nature of health expenditure as a proportion of the Gross Domestic Product (GDP) over the last twenty years. This proportion has exhibited a fluctuation occurring within 2 to 3 per cent, as represented in Figure 1. The ratio of health expenditure to GDP is notably lower compared to the expenditure levels observed in low-income, middle-income, and high-income economies like Organisation for Economic Co-operation and Development (OECD).

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In high-income economies, it has been observed that the expenditure-to-GDP ratio surpasses 10 per cent. According to Toor and Butt (2005), it has been observed that lower health expenditure curbs economic growth by reducing productivity in developing countries like Pakistan. Lower health expenditure has implications for healthcare coverage, access, and utilisation at the micro level, subsequently influencing the level of satisfaction derived from healthcare services.

The existing literature has extensively investigated the relationship between health expenditure and macroeconomic variables. Further investigation is required to examine the specific effects of micro-level factors on household-level satisfaction with public health services in Pakistan. The available literature about Pakistan primarily focuses on two key areas: the macro-level analysis and the utilisation/demand of healthcare services. The existing body of literature, as per our current understanding, comprises the following studies: Toor and Butt (2005), Callen et al. (2013), Punjani et al. (2014), and Ullah et al. (2022). The present investigation, however, constitutes a preliminary investigation employing nationally representative microdata to gain insight into the factors influencing public health service satisfaction at the household level. The findings of this study will offer valuable insights to researchers and health economists who are intended to model healthcare service satisfaction using binary outcomes. Moreover, the results will make a valuable contribution towards forecasting household satisfaction levels with public health facilities. Furthermore, this research endeavour will function as a significant instrument for the government to improve the level of satisfaction experienced by households through the provision of essential services.

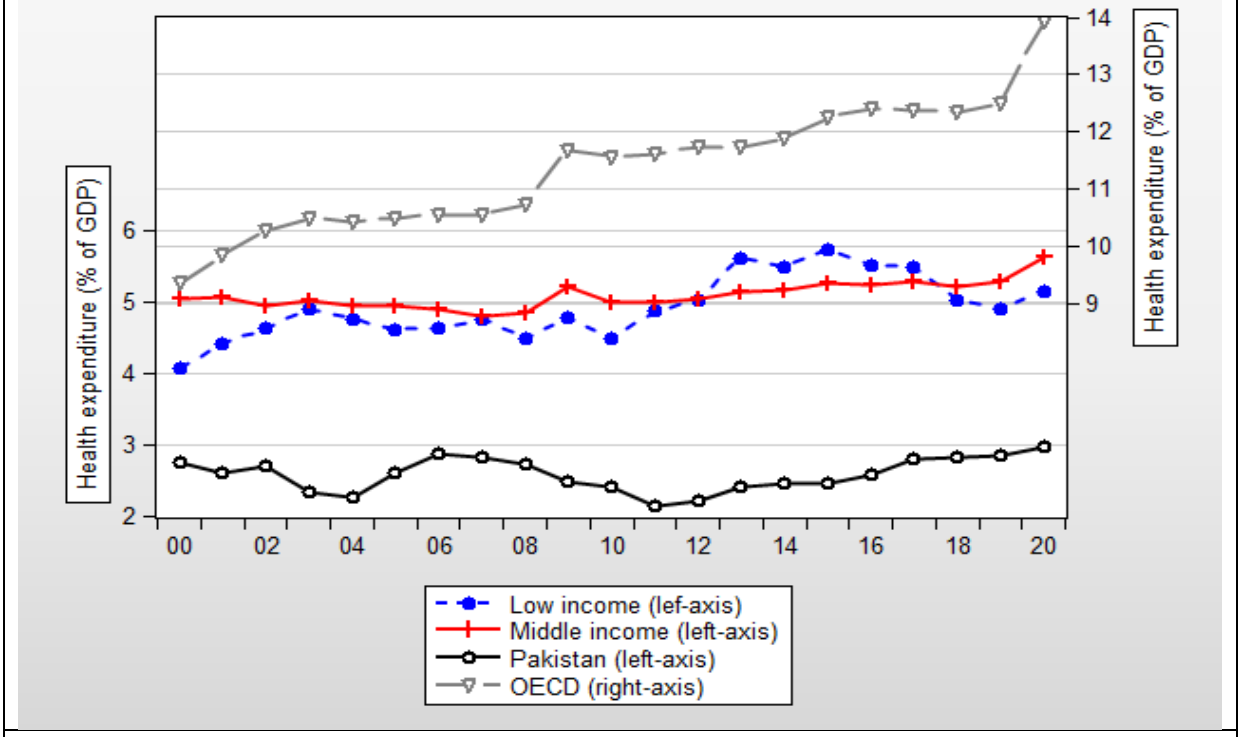

Figure 1. Dynamic pattern of health expenditure as % of GDP for the Pakistan, OECD, and low-income, and middle-income economies

Based on the seminal work by Grossman (1972), the concept of health can be understood as an essential element within the framework of human capital. The present viewpoint asserts that individuals experience diverse benefits in consumption and production due to their health condition. The adequate allocation of time to engage in leisure activities is paramount in maintaining overall well-being and fostering a healthy lifestyle. The allocation of dedicated time to engage in specific activities enables individuals to derive direct utility, similar to the satisfaction experienced from consuming goods and services. The allocation of time towards maintaining good health has been identified as a significant factor contributing to income generation. Grossman posits that the generation of health is contingent upon the utilisation of medical care and can manifest through either consumption or production via diverse lifestyle choices. Additional determinants, such as the decision to retire, early childhood investments and endowments, stress, social

capital, and socioeconomic status, have been integrated by scholars into the preexisting framework (Bolin et al., 2003; Galama & van Kippersluis, 2013).

The existing body of literature on the factors influencing satisfaction with public health care indicates that a potential cause of dissatisfaction is the limited duration of consultations and inadequate availability of medical personnel (Andaleeb et al., 2003). The assessment of patient satisfaction in public health services encompasses various factors, including the hospital infrastructure, quality of food, and waiting time (Ashrafun & Uddin, 2011). These elements collectively contribute to the overall satisfaction experienced by patients. In addition, it is worth noting that there exists a prevalent practice known as a bribe or gift culture within the healthcare system, whereby patients must provide monetary compensation to various service providers under the guise of gifts or tips. This particular phenomenon has been identified as a noteworthy contributor to patient dissatisfaction.

The literature has extensively examined the various individual and household characteristics that impact the satisfaction outcome. The variables identified as influential in socioeconomic outcomes include income, education, employment status, and disability. The literature acknowledges these determinants (Andaleeb et al., 2007). Additionally, demographic characteristics such as household size, gender, age, religion, marital status, race, and ethnicity have been found to shape socioeconomic disparities. Finally, regional factors, specifically area, district, and province, have also been identified as critical contextual variables in understanding socioeconomic outcomes (Andaleeb et al., 2007; Amorim et al., 2019; Cohen et al., 2022). The present investigation aims to examine the satisfaction among households regarding their utilisation of public health services, focusing specifically on the household's perspective rather than that of the individual patient.

2. Methodology

The study's objective is to examine the factors affecting households' satisfaction with public healthcare services. In the sample, the household that used public health was asked regarding their satisfaction with the quality of the public health. Satisfaction with the quality of public health is a binary outcome related to satisfied or not satisfied. We convert the binary qualitative variable into a dichotomous variable coded 1 if the household is satisfied with the quality of public health and zero otherwise. After transforming into the dummy dependent dichotomous variable, the econometric model would be as follow:

$$y = \boldsymbol{x}'\gamma + u \qquad (1)$$

where y is a dependent variable coded 1 if household is satisfied with the quality of the health service, zero otherwise. $\boldsymbol{x}$ is the vector of independent variables; u is the error term, and γ is the vector of regression coefficients which we wish to estimate.

The estimation of equation 1 by using the Ordinary Least Square (OLS) is an outcome of the Linear Probability (LP) model. The LP model must be correctly specified due to the exclusion of nonlinear effects, which can lead to biased estimates of some parameters of interest (see Berkson, 1944; Long & Freese, 2014). However, in the dichotomous dependent variable setting, estimating the coefficient using the Logistic regression model is preferable. The logit model is as follows:

$$\Pr(y \neq 0|\mathrm{x}) = \frac{\exp(\mathrm{x}'\gamma)}{1 + \exp(\mathrm{x}'\gamma)} \qquad (2)$$

where y is a dependent variable coded 1 if household is satisfied with the quality of the health service, zero otherwise. x' is the transpose of the vector of independent variables; and γ is the vector of regression coefficients which we wish to estimate.

3. Data and descriptive analysis

3.1. Data source

The present study employs an empirical analysis approach, drawing upon data from the Pakistan Social and Living Standards Measurements (PSLM) survey conducted during 2019-20. The data utilised in this study was sourced from the official website of the Pakistan Bureau of Statistics (PBS). The PSLM 2019-20 district-level survey was conducted across a sample of 5,893 blocks comprising 176,790 households. The primary objective of the survey was to collect complete data on a range of district-level indicators related to Education, Health, Housing, Water Sanitation & Hygiene, Information Communication & Technology (ICT), Food Insecurity Experience Scale (FIES), Functional Limitation (Disability), and lifetime Migration. The principal aim of this survey was to conduct ongoing monitoring of 21 indicators related to the Sustainable Development Goals (SDGs).

The data was processed in a manner conducive to facilitating regression analysis. During our investigation, it has been observed that the variables under consideration exhibit a diverse range of characteristics. Specifically, we have identified both continuous variables, which possess an unbroken range of values, and dichotomous variables, which can only assume one of two distinct values. Additionally, we have encountered nominal categorical variables, which

represent unordered categories lacking any inherent numerical significance, and ordinal categorical variables, which exhibit a meaningful order among their categories. Lastly, we have encountered discrete variables characterised by a countable and finite set of possible values. The variables utilised in the study are explicated in Table 1.

Table 1. Definition of the variables

Variable	Description
Dependent variable	
Satisfied	A dichotomous variable coded 1 if household responded satisfied with the quality of the public health service.
Independent variables	
Disable	A dichotomous variable coded 1 if household respond the presence of disable in the household.
Literacy rate	A ratio variable comprises the literate person to total household size. The illiterate person defined as no year of education.
Employed rate	A ratio variable comprises the employed person to total working age person in the household. The working age person does not include the children, students, retirees, and disables.
Urban	A dichotomous variable coded 1 if household is from urban area, 0 otherwise.
Poor	A dichotomous variable coded 1 if household is poor, 0 otherwise. The poverty line defined as the one dollar per day per capita income. The average dollar during the reference period of survey was 160PKR/1USD.
Remittance	A dichotomous variable coded 1 if household receives remittance, 0 otherwise.
Province	A nominal categorical variable comprises four categories. These categories consist of Sindh, Punjab, Balochistan and Khyber Pakhtunkhwa (KPK).
HHincome	A continuous variable consists of all source of household income. These sources include the labor income and nonlabor income. The nonlabor income comprises remittances, rental income, and pension.
Use	An ordinal categorical variable comprises three categories. The utilisation of public healthcare services are: once a while, often, and always.
Quality	An ordinal categorical variable comprises three outcomes on the observed quality of the health service. These are worst, like before, and better than before.
Distance	An ordinal categorical variable comprises five categories on the distance of the household to public health service. The categories of distance are: 0-0.5(km), 0.5-1 (km), 1-2 (km), 2-5 (km), and 5+ (km)
Time to reach	An ordinal categorical variable consist of five categories on the time takes by household to reach the public health unit. These categories related to time required to reach the public health unit are: 0-14(min), 15-29 (min), 30-44 (min), 45-59 (min), and 60+ (min)

3.2. Descriptive analysis

Table 2 presents the descriptive statistics of the variables used in the study. The study's sample consists of a total of 144,269 households. The descriptive statistics were given for the whole sample and for the subsets of households that reported being satisfied and not satisfied. In the provided sample, it was observed that 87 per cent of households expressed their satisfaction with the existing state of public health services. The findings indicate that households with disabled individuals exhibit a slightly lower level of satisfaction as their share is higher in the not satisfied group. Specifically, 38.7 per cent of households with disabled persons reported being satisfied, while 38.9 per cent expressed dissatisfaction. The data indicates that households with higher levels of satisfaction tend to exhibit a correspondingly higher literacy rate than households with lower levels of satisfaction. A notable disparity in employment rates between households that report higher levels of satisfaction and those that do not.

In contrast, it is observed that a greater proportion of households classified as poor exhibit lower levels of satisfaction compared to those classified as not satisfied. Based on the data collected, it has been observed that 50% of the poor participants expressed satisfaction, whereas 60% of the poor participants reported dissatisfaction. A higher proportion of the remittance-receiving household is in the satisfied group (6.2 per cent) than the not-satisfied (4.4 per cent). The data reveals a notable disparity in household income levels between households that report being satisfied and those that do not. It has been observed that 5 out of 10 households are satisfied belonging to the relatively advanced province of Punjab.

Table 2. Descriptive statistics

Variable	Whole sample N=144,269	Satisfied N=124,388	Not satisfied N=19,881
Satisfied (=1)	0.862	1	0
Disable (=1)	0.387	0.387	0.389
Literacy rate	0.562	0.579	0.45
Employed rate	0.4	0.398	0.412
Urban (=1)	0.319	0.331	0.248
Poor (=1)	0.485	0.471	0.573
Remittance (=1)	0.06	0.062	0.044
Ln(hhincome)	10.116	10.14	9.963
Province:			
KPK (=1)	0.185	0.181	0.211
Punjab (=1)	0.501	0.534	0.295
Sindh (=1)	0.22	0.221	0.216
Balochistan (=1)	0.093	0.064	0.278
Utilisation:			
Once a while	0.170	0.140	0.370
Often	0.633	0.660	0.493
Always	0.200	0.404	0.140
Performance:			
Worst	0.045	0.004	0.302
Like before	0.779	0.797	0.66
Better than before	0.177	0.199	0.038
Distance:			
0-0.5 (km)	0.177	0.189	0.103
0.5-1 (km)	0.131	0.137	0.093
1-2 (km)	0.17	0.175	0.135
2-5 (km)	0.184	0.184	0.183
5+ (km)	0.338	0.315	0.487
Time to reach:			
0-14(min)	0.351	0.372	0.224
15-29 (min)	0.348	0.353	0.317
30-44 (min)	0.162	0.158	0.19
45-59 (min)	0.057	0.053	0.085
60+ (min)	0.082	0.065	0.184

Amongst the covariates, the factors related to healthcare are utilisation, quality, distance, and time to reach the healthcare unit. The utilisation of healthcare is reported in Table 2 and also in Figure 2. The descriptive analysis states that the proportion of households increases from less frequent to more frequent utilisation of health care services. Similarly, the proportion of dissatisfied households tends to be downward following the occasional utilisation to consistent utilisation of healthcare services. It shows an association between satisfaction and utilisation of healthcare services. A similar pattern observes in the satisfaction and quality of healthcare services. As quality varied from worst to better, the proportion of satisfied households increased (see Figure 3). Likewise, quality improvement tends in the opposite direction, with a lower proportion of dissatisfied households.

The role of distance to health care service plays an important role in determining the satisfaction of the household from health care service. 1 out of 2 households are unsatisfied with the public health care service and responded to above the 5-kilometre distance to the health care unit (see figure 4). Similarly, less proportion of households are not satisfied at a lower distance, while higher are at a higher distance. Likewise, 7 out of 10 households are satisfied and reported less than half an hour to reach the health care service (see Figure 5). It depicts the trend that a lower time to reach follows a higher proportion of satisfied households.

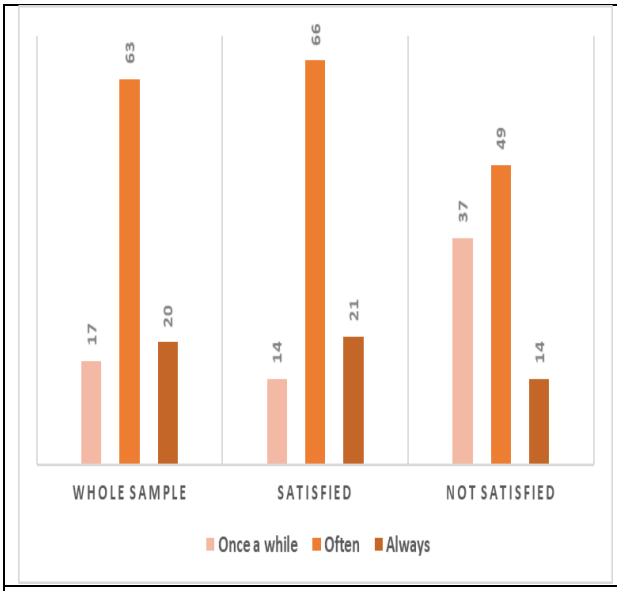

Figure 2. Reason for not using public health service

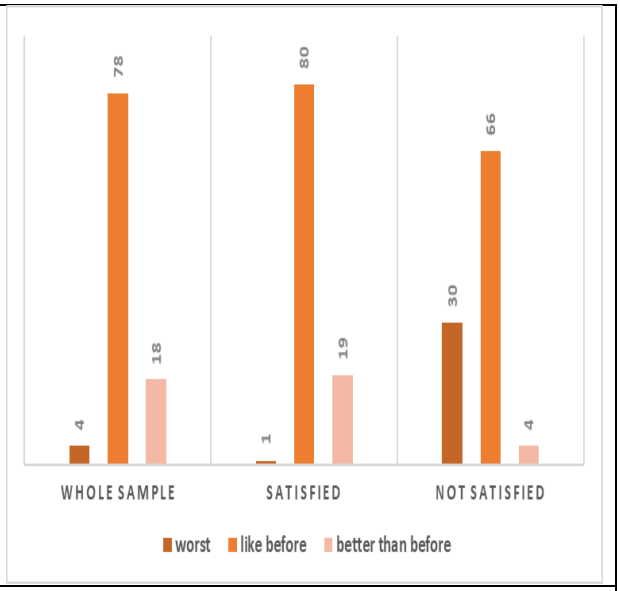

Figure 3. Perceived quality of public health service amongst the satisfied and non-satisfied households

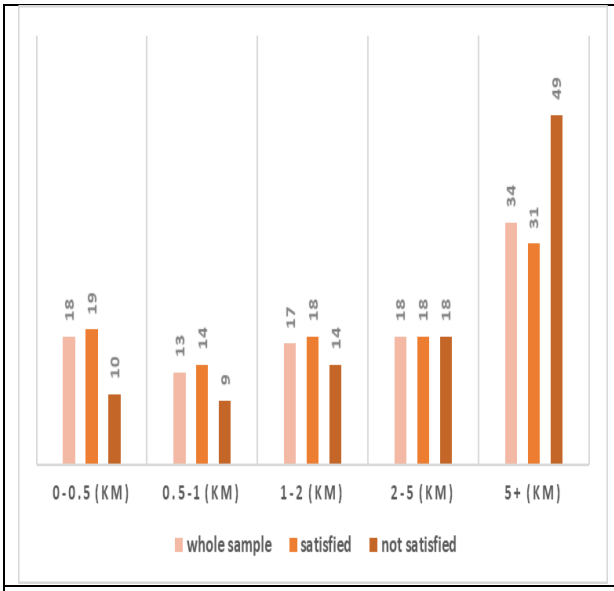

Figure 4. Distribution of distance to public health unit

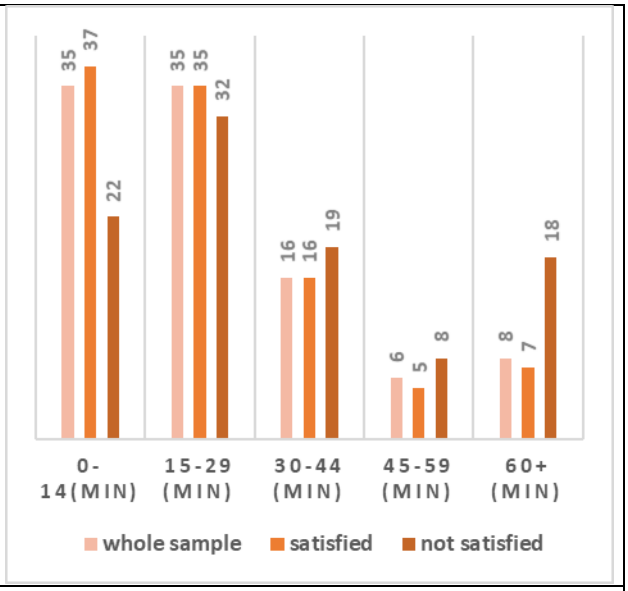

Figure 5. Distribution of time to reach to public health unit

4. Regression analysis

4.1. Determinants of public health satisfaction

The marginal effect of the covariates on household satisfaction from public healthcare services is presented in Table 3. We also introduced the predicted probability for each outcome of the covariates in Figures 6 and 7. According to the findings of the logit model analysis, it can be inferred that households with a disabled member exhibit a slightly lower probability, approximately 1 per cent, of expressing satisfaction with healthcare services. The observed lesser satisfaction levels among households with disabled individuals suggest a corresponding increase in reliance on public healthcare services. This heightened frequency of utilisation requires a greater allocation of resources to facilitate access to these facilities. Additionally, it is important to note that households with disabled individuals often experience increased health-related expenses. This, in turn, reduces non-health-related expenditures due to the trade-off imposed by limited resources. Against this backdrop, it is evident that households with disabled individuals express lower levels of satisfaction with the existing public healthcare services.

A positive relationship exists between the literacy rate and the probability of experiencing satisfaction with healthcare services. As an observed phenomenon, it has been noted that a 10 per cent increase in the literacy rate within households is associated with a corresponding increase in the likelihood of experiencing satisfaction by 0.2 per cent. The higher household literacy rate correlated with access to contemporary sources of information in the digital era (Shair et al., 2022a; Shair et al., 2022b). Access to accurate and comprehensive information is crucial in enabling individuals to make informed decisions regarding their choice of the healthcare facility. By accessing such information, individuals are better equipped to identify healthcare units with better infrastructure and offer a wide range of health services. Consequently, this enhanced knowledge empowers households to make choices that align with their specific healthcare needs and preferences, ultimately leading to increased satisfaction with public healthcare services.

Table 3. Estimates of the Logit model for the satisfaction from public health

Variables	Marginal effects	Std. Errors
Disable (=1)	-0.00935***	(0.00157)
Literacy rate	0.0221***	(0.00254)
Employed ratio	0.0163***	(0.00331)
Urban (=1)	-0.00414**	(0.00205)
Poor (=1)	-0.00630***	(0.00185)
Remittance (=1)	0.00245	(0.00343)
Ln(hhincome)	0.00465***	(0.00111)
Province:		
Balochistan (base)		
KPK (=1)	0.0672***	(0.00145)
Punjab (=1)	0.144***	(0.00266)
Sindh (=1)	0.0834***	(0.00150)
Utilisation:		
Once a while (base)		
Often	0.105***	(0.00231)
Always	0.0860***	(0.00133)
Quality:		
Worst (base)		
Like before	0.753***	(0.00708)
Better than before	0.215***	(0.00235)
Distance:		
0-0.5 (km) (base)		
0.5-1 (km)	-0.0111***	(0.00356)
1-2 (km)	-0.0111***	(0.00343)
2-5 (km)	-0.0339***	(0.00400)
5+ (km)	-0.0330***	(0.00377)
Time to reach:		
0-14(min) (base)		
15-29 (min)	-0.0109***	(0.00247)
30-44 (min)	-0.0202***	(0.00336)
45-59 (min)	-0.0570***	(0.00539)
60+ (min)	-0.0782***	(0.00558)
Log likelihood	-38261.956	
LR chi^2	36943.52	
Prob > chi^2	0.0000	
Pseudo R^2	0.3256	
Observations	142,415	

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

The empirical findings suggest a positive correlation between the employed ratio and the probability of experiencing satisfaction with healthcare services. In the context of our study, it is observed that a 10 per cent increase in the

household literacy rate corresponds to a subsequent increase in the likelihood of experiencing satisfaction by 0.16 per cent. A higher ratio of employed individuals suggests a greater level of diversity in their experiences, which may appear in various ways, such as access to employer-provided health insurance or the dissemination of information within the workplace pertaining to the selection of better public healthcare providers. The choice of a better healthcare facility contributes to an increased level of satisfaction among households seeking public healthcare services.

The findings suggest that households residing in urban areas exhibit a 0.41 per cent lower probability of being satisfied with public healthcare services than those in rural areas. The level of household satisfaction in urban neighbourhoods needs to align with initial expectations, potentially attributed to better infrastructure and health facilities. Based on the available contextual information, it can be established that public healthcare units in urban areas often face competition from private healthcare units. The remote healthcare unit is primarily distinguished by its highly competent and dedicated staff, state-of-the-art technological infrastructure, and extensive services. The less competitiveness of the public healthcare unit leads to a lower level of satisfaction experienced by households residing in urban areas regarding public healthcare services. On the other hand, research suggests that households in relatively advanced provinces are more likely to express higher satisfaction levels with public healthcare services than those in somewhat deprived provinces. The relative likelihood of satisfaction with public healthcare ranges from 7% to 14%.

The findings reveal a 0.63% lower likelihood of satisfaction with public healthcare services among poor households than among non-poor households. The lowered level of satisfaction experienced by poor households can be attributed to their limited access to healthcare services, which is characterised by a lower level of resource endowment within these households. Additionally, it is worth noting that the lowered level of satisfaction among poor households suggests a need for more inclusiveness within the existing public healthcare services. This may be attributed to the cost associated with accessing such services.

The findings of this study indicate that households receiving remittances are 0.2 per cent more likely to satisfaction with public healthcare services than households that do not receive remittances. Having a number of external migrants within a household has been observed to possess relatively higher financial resources (Shair & Anwar, 2023; Shair et al., 2023). The presence of multiple sources of income within the household has been found to enhance the ability to obtain goods and services (Shair & Majeed, 2020). Furthermore, individuals who have migrated and possess foreign experience can potentially contribute significantly to selecting better public healthcare facilities, thereby improving their overall satisfaction.

This study's findings indicate a positive relationship between household income and satisfaction with public healthcare services. Specifically, an increase of 1 log point in household income is associated with a 0.5 per cent increase in the likelihood of being satisfied with these services. Income is a crucial determinant of purchasing power, subsequently enhancing a household's capacity to access medical services. Furthermore, it has been observed that an increase in household income has a positive association with the ability to cover the expenses related to the utilisation of public healthcare services.

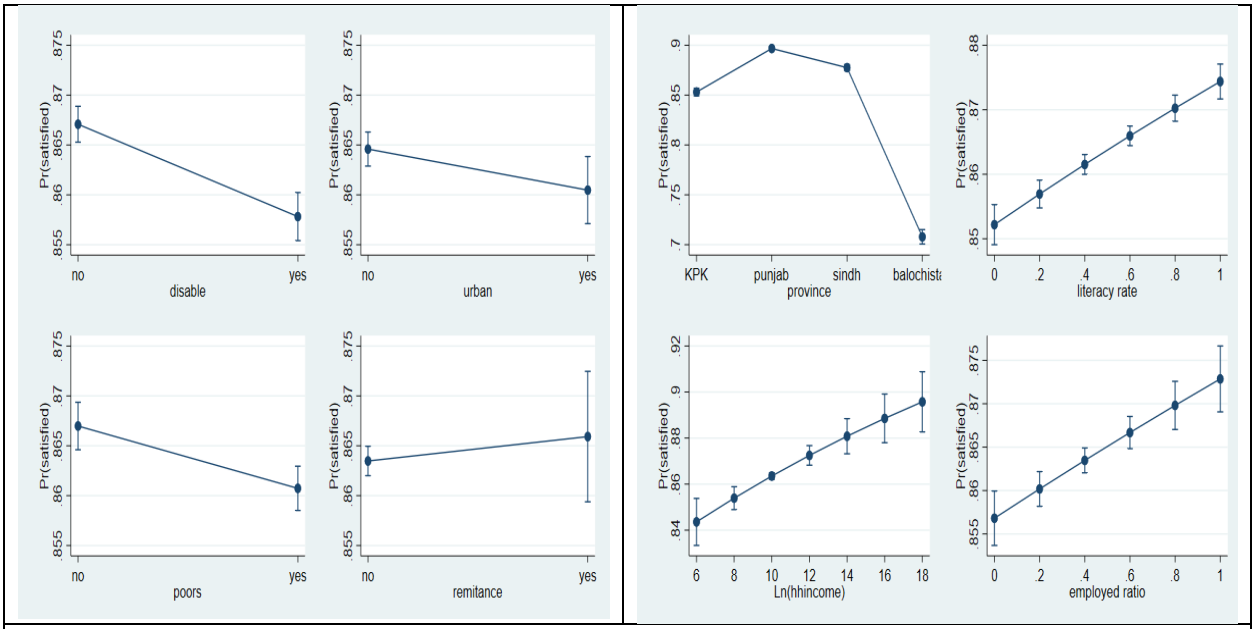

Figure 6. Predicted probability of covariates on satisfied from public health service

The utilisation of healthcare services plays a significant role in determining household satisfaction levels. Specifically, households that utilise healthcare services frequently and consistently have a 10% higher likelihood of being satisfied than households that only use healthcare services occasionally. The assessment of healthcare service utilisation serves as an indicator of the household's experience with healthcare services. Regular and persistent utilisation of healthcare services suggests greater experience and knowledge acquired through practical use. The acquisition of experience plays a pivotal role in selecting an ideal healthcare facility that offers subsidised services and demonstrates high professionalism. Consequently, this contributes to enhanced satisfaction among households seeking healthcare services.

The quality of healthcare services is a crucial factor in determining healthcare delivery's overall effectiveness and efficiency. The study observed that households experienced either improved or unchanged services over the past year. Interestingly, those households that reported better or no change in the quality of services were more likely to express satisfaction than those that reported the worst quality of services. The assessment of healthcare service quality is contingent upon several factors, including coverage, services offered, timeliness, and the composition of the healthcare workforce (Healthy People, 2020).

The distance from a household to a healthcare facility is a significant factor influencing the level of satisfaction with healthcare services. According to empirical observations, households with a travel distance of less than half a kilometre to reach a healthcare unit tend to exhibit higher satisfaction levels than households with longer travel distances. The empirical findings presented in the observation indicate a negative association between the distance to the healthcare unit and the level of satisfaction experienced by individuals, as illustrated in Figure 7. The relationship between distance and travel cost is positively correlated, indicating that the associated travel cost increases as the distance increases. Additionally, there is an implicit consideration of the opportunity cost of time required to complete medication. The satisfaction of households is negatively impacted by comparatively higher associated costs measured as a distance.

There exists a negative relationship between the time it takes for a household to reach a healthcare unit and their level of satisfaction with the healthcare services they receive. The observed negative relationship between the time taken to complete medical treatment and the individual or household suggests the presence of implicit costs. This cost is associated with the time required to reach the healthcare unit and the time to undergo the treatment process. The higher time needed to reach and waiting time due to the limited supply of medical professionals, in turn, lower the satisfaction of the household.

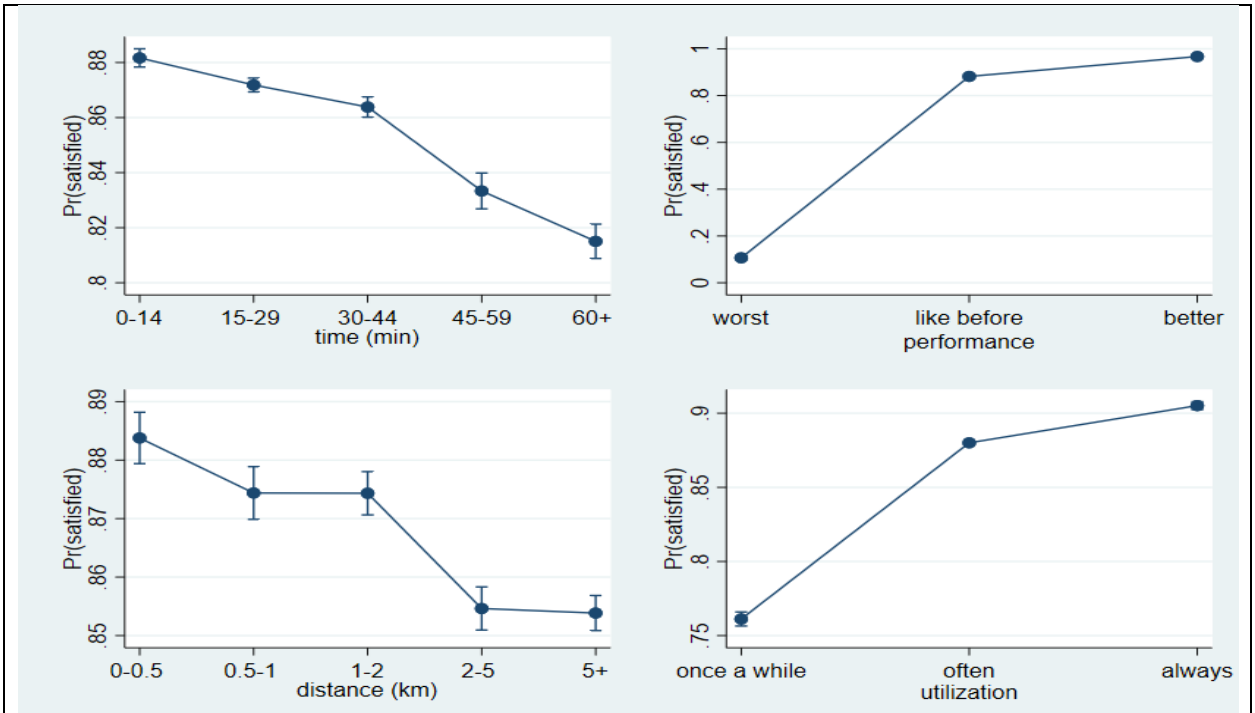

Figure 7. Predicted probability of the determinants on satisfied from public health service

5. Conclusion

The aim of this study is to investigate the various factors that exert an influence on the satisfaction levels of households about public healthcare services in the context of Pakistan. The determination of satisfaction with public healthcare services was assessed in this study by incorporating various covariates, including socioeconomic factors, demographic characteristics, regional influences, and healthcare facility-related variables. The results obtained from the Logit model analysis reveal a significant positive association between literacy rate, employed rate, and household income variables with the probability of experiencing satisfaction with public healthcare services. In a parallel manner, it has been noted that households without disabled individuals residing in rural regions within developed provinces, particularly those classified as non-poor households, and reporting the presence of external migrants within the household, demonstrate an increased propensity to experience satisfaction with public healthcare services. In contrast, it has been observed that there is a positive relationship between heightened healthcare utilisation, enhanced quality of care, reduced distance, and decreased time required to access healthcare facilities, and the level of satisfaction experienced by individuals receiving healthcare services.

The findings of this study have significant implications, particularly in relation to addressing regional disparities at the province level. These disparities have emerged due to the implementation of provincial autonomy following the 18th Amendment. To ensure the inclusive and equitable distribution of social security benefits, it is imperative to incorporate households with disabled individuals and those experiencing poverty into the programme. This can be achieved by extending cost-free medical services to these specific groups. It is imperative to increase household income through various income-enhancing policies. The assessment of household satisfaction necessitates careful consideration of healthcare service quality, as subpar healthcare services have been found to diminish overall satisfaction levels. The steps need to take by the provincial government to reduce the distance and time to public healthcare services. The provincial government must undertake a series of strategic measures to mitigate the distance and time associated with accessing public healthcare services. These steps should enhance the overall accessibility and efficiency of healthcare services, thereby ensuring that households can promptly and conveniently avail themselves of the necessary medical assistance.

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