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Barriers to healthcare access and healthcare seeking for childhood illnesses among childbearing women in Burundi

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Abstract

Introduction

Poor health seeking behaviour continues to be major challenge in accessing healthcare in sub-Saharan Africa despite the availability of effective treatment for most childhood illnesses. The current study investigated the barriers to healthcare access and health seeking for childhood illnesses in Burundi.

Methods

The study utilized data from the 2016–17 Burundi Demographic and Health Survey (BDHS). A total of 2173 children under five of childbearing women were included in our study. The outcome variable for the study was healthcare seeking for childbood illnesses (diarrhea and fever/cough). Barriers to healthcare access were the explanatory variables and maternal and child factors were the control variables. Chi-square test of independence and a binary logistic regression modelling were carried out to generate the results.

Results

Overall, less than 50% of children in Burundi who were ill two weeks before the survey obtained healthcare. We found that children of mothers who perceived getting money for medical care for self as a big problem [aOR = 0.75; CI = 0.60-0.93] and considered going for medical care alone as a big problem [aOR = 0.71; CI = 0.55-0.91] had lower odds of getting healthcare, compared to those of mothers who considered these indicators as not a big problem. The results also showed that children of mothers who had three [aOR = 1.48; 1.02-2.15] and four [aOR = 1.62; 1.10-2.39], children were more likely to get healthcare for

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childhood illnesses compared to those whose mothers had one child. Children of mothers with single birth children were less likely to get healthcare compared to those whose mothers had multiple births.

Conclusion

Findings of the low prevalence of healthcare for childhood illnesses in Burundi suggest the need for government and non-governmental health organizations to strengthen women's healthcare accessibility for child healthcare services and health seeking behaviours. The Burundian government through multi-sectoral partnership should strengthen health systems for maternal health and address structural determinants of women's health by creating favourable conditions to improve the status of women and foster their overall socioeconomic well-being. Free child healthcare policies in Burundi should be strengthened to enhance the utilization of child healthcare services in Burundi.

Introduction

Despite the tremendous progress made in reducing childhood morbidity and mortality globally, the situation in sub-Saharan Africa (SSA) still remains a major public health concern. For instance, in 2018, the UN Inter-agency Group for Child Mortality Estimation (UN IGME) estimated that 3.3 million children under aged 15 years died in SSA, representing 53% of childhood deaths globally (6.2 million) in the world [1]. Averagely, 1 in 13 children died in SSA compared to 1 in 199 in high income countries in 2019, with most of these childhood deaths (85%) occurring in the first years of life [1,2]. Thus, under-five morbidity and mortality continue to be major public health challenges in SSA. Although under-five mortality rates in Burundi have declined significantly from 174 deaths per 1,000 live births in 1990 to 58 deaths per 1,000 live births in 2018 [1], the rate still remains high, considering the global target of reducing under five mortality to 25 per 1000 live births by 2030 through SDG-3.2.

Childhood deaths are often caused by treatable or preventable diseases such as diarrhoea, malaria, pneumonia, and preterm birth complications [1,2]. In 2010, approximately 93% of all hospitalisation of children between 1 to 59 months in Burundi were due to malaria, respiratory tract infections, and acute diarrhoea [3]. Meanwhile, available evidence suggests that inade-quate access to healthcare services [4,5] and inappropriate health seeking behaviour [6] significantly account for most childhood illnesses and resultant deaths in SSA. According to UN IGME [1], about 50% of under-five mortality could be prevented by having timely access to quality healthcare. Access to healthcare continue to be a major challenge in Burundi as the country is ranked 186 out of 195 countries who had best access to quality healthcare in 2016 despite the existence of free child healthcare policies in the country [4].

Accessing healthcare for childhood illnesses is not only determined by distance to healthcare facilities and cost of obtaining healthcare services [5,7], but also the health seeking behaviours of parents/guardians, most notably the mother [8,9]. Akinyemi et al. [10] suggested that poor health seeking behaviour continues to be a major challenge in accessing healthcare in SSA despite the availability of effective treatment for most childhood illnesses. Studies have shown that the decision to seek healthcare for a sick child in SSA is largely determined by the child's age [11–13], mother's educational level and marital status [7], mother's age [14], family size, previous experience of similar illness, history of under-five mortality [12], mother's knowledge level on danger signs of childhood illnesses such as fever [11], family income [9,15], geographic location or distance [7,11], and ethnicity [8,16]. For example, perceived non-seriousness of a child's illness delayed or prevented mothers from seeking healthcare services for their children in Ethiopia [17]. Also, parents/guardians in Kenya, who lived more than a kilometre from a health facility, were less likely to seek care for their sick children [7].

Considering the importance of timely access to healthcare and appropriate health seeking behaviour in reducing the severity of childhood illnesses and associated deaths, it is important to investigate the specific barriers to healthcare access and health seeking behaviour, to develop specific strategies that could address them. Therefore, this current study investigated the barriers to healthcare access and health seeking behaviour for childhood illnesses in Burundi. Findings from the study would help make recommendations that could potentially address these barriers and improve childhood morbidity and mortality in the country.

Materials and methods

Data source and study design

The study employed a cross-sectional study design and used data from the 2016-17 Burundi Demographic and Health Survey (DHS). Specifically, data from the birth recode file, which has one record for every child ever born to interviewed women was used. The DHS is a nationally representative survey that is conducted in over 85 low-and middle-income countries globally. The survey focuses on essential maternal and child health markers including "health seeking behaviour" [18]. The study by Aliaga and Ruilin [19] provides details of the sampling process. The surveys employ a two-stage stratified sampling technique, which makes the survey data nationally representative [19]. The first stage involves the generation of a sampling frame from enumeration areas (EAs) that covered the given country. The EAs are mostly generated from the most recent national census data in the country. Each EA is subsequently segmented into standard size segments of about 100-500 households per segment. The second stage involves a systematic selection of households from the EAs and an in-person interviews in selected households with the various target populations: women (15-49) and men (15-64). The number of selected households per EA ranged from 30 to 40 households/women per rural cluster and from 20 to 25 households/women per urban cluster. A total of 2173 children under five of childbearing women who had complete information on all the variables of interest were included in our study. Since the authors used a secondary data, they were not directly involved in the data collection. However, data collection was done by trained field staff who were responsible for data collection for the survey in Burundi. Fig.1 shows how we arrived at the sample.

Definition of variables

Outcome variable. The outcome variable for the study was health seeking behaviour for childhood illnesses. It was derived as a composite variable from two questions, "Did [NAME] receive treatment for diarrhea?", and "Did [NAME] receive treatment for fever/cough?" The responses were "yes" and "no". Women whose children suffered from either diarrhea or fever/ cough two weeks prior to the survey responded to these questions. Women who responded that they sought healthcare for either treatment for diarrhea or fever/cough or both were considered as seeking healthcare for childhood illnesses and were given the code 1 = yes while those who responded that they neither sought for treatment for diarrhea nor fever/cough were considered as those who never sought healthcare for childhood illnesses and were coded as 0 = no.



Fig 1. Flowchart showing the sample.

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Explanatory variables. The study looked at barriers in accessing healthcare as the explanatory variable. In the DHS, barriers in accessing healthcare was generated by asking women if they had serious problems in accessing healthcare for themselves when they are sick. The problems were difficulty with distance to the facility, difficulty in getting money for treatment, difficulty with getting permission to visit health facility, and difficulty in not wanting to go for medical help alone. For each of these questions, the responses were 'big problem' and 'not a big problem'. Although these indicators are asked of women and are not linked to healthcare seeking for the child, we consider these indicators as proxy for accessing barriers women go through when seeking healthcare for the child.

Covariates. Fourteen variables were considered in the study as covariates. The variables were age, marital status, employment status, parity, religion, exposure to mass media (radio, television and newspaper), size of child at birth, birth order, twin status, and sex of child. The other variables were sex of household head, community literacy level, community socio-economic status, and place of residence. The variables were not determined a priori; instead, based on parsimony, theoretical relevance and practical significance with health seeking behaviour for childhood illnesses [11,20]. Marriage was recoded into "never married (0)", "married (1)", "cohabiting (2)", "widowed (3)", and "divorced (4)". We recoded parity (birth

order) as "one birth (1)", "two births (2)", "three births (3)", and "four or more births (4)"; religion as "Christianity (1)", "Islam (2)", "Traditionalist (3)", and "no religion (4)"; size of child at birth as "larger than average", "average", and "smaller than average"; and twin status as "single birth" and "multiple birth". Exposure to media was coded as yes and no, signifying whether a woman reads newspaper, listens to radio or watches television or not.

Statistical analyses

The data were analysed with Stata version 14.2. The analyses were done in three steps. The first step was the computation of the prevalence of women's health seeking behaviour for childhood illnesses in Burundi. The second step was a bivariate analysis using Pearson's chi-square test of independence that calculated the prevalence and proportions of health seeking behaviour for childhood illnesses across the independent variables with their significance levels. Statistical significance was considered at a p-value less than 0.20. The choice of a P < 0.20, instead of the usual P \leq 0.05, were influenced by two main reasons (a) the purpose of the bivariate analyses was to identify potential predictor variables for the multivariate analyses rather than testing hypothesis, and b) it would minimize the risk of excluding variables with a biological (theoretical) plausibility from the multivariate analyses due to reasons, including confounding [21,22]. However, the statistical significance of the results of the binary logistic regression analysis was determined at P \leq 0.05, because of its common usage in medical research. Before conducting the binary logistic regression analysis, a multi-collinearity test was carried out among all the statistically significant variables to determine if there was evidence of multicollinearity between them. Using the variance inflation factor (VIF), the multicollinearity test showed that there was no evidence of collinearity among the explanatory variables (Mean VIF = 1.20, Max VIF = 1.53, Minimum = 1.03). In all, two models were generated from the binary logistic regression analysis. The first model (Model I) was the bivariate analysis between each of the explanatory variables, covariates, and health seeking behavior for childhood illnesses. Model II which is the complete model, was a multivariate logistic regression analysis where all the variables were used against the dependent variable. The results of the regression analyses were presented as crude odds ratio (cOR) and adjusted odds ratio (aOR). A sample weight (v005/ 1,000,000) to correct for over and under sampling was applied and the "svy" command to account for the complex survey design and generalizability of the findings was also used. In this study, we relied on the Strengthening the Reporting of Observational Studies in Epidemiology' (STROBE) statement in writing the manuscript [23].

Ethical approval

This study used secondary data and therefore no further approval was required because the data is available in the public domain. However, the authors sought permission to use the data by applying to MEASURE DHS and obtained approval to use the data.

Results

Prevalence of healthcare seeking for childhood illnesses in Burundi

Fig 2 displays results from the study on the prevalence of healthcare seeking for childhood illnesses in Burundi. Overall, less than 50% of children in Burundi who were ill two weeks before the survey obtained healthcare.

Healthcare seeking behavior for childhood illness across independent variables. Table 1 shows results of the distribution of barriers to healthcare, control variables, and healthcare seeking for childhood illnesses among childbearing women in Burundi. At p<0.20, all the





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explanatory variables showed significant associations with healthcare seeking for childhood illnesses. Specifically, 65.8% of children of mothers who indicated that getting permission for medical care for self was not a big problem got healthcare for childhood illnesses while 59.8% of those whose mothers indicated that getting permission for medical care for self was a big problem did not get healthcare for childhood illnesses. Again, 70.8% of children of mothers who indicated that getting money for medical care for self was not a big problem got healthcare for childhood illnesses while 62.8% of those whose mothers indicated that getting money for medical care for self was a big problem did not get healthcare for childhood illnesses. Moreover, 66.7% of children of mothers indicated that distance to facility for medical care for self was not a big problem got healthcare for childhood illnesses while 62.9% of those whose mothers indicated that distance to facility for medical care for self was a big problem did not get healthcare for childhood illnesses. Finally, 67.1% of children of mothers who indicated that wanting to go for medical care alone was not a big problem got healthcare for childhood illnesses while 58.1% of those whose mothers indicated that wanting to go for medical care alone was a big problem got healthcare for childhood illnesses. In terms of the control variables, parity, religion, size of the child at birth, twin status, community literacy level, community socioeconomic status and place of residence showed significant associations with healthcare seeking for childhood illnesses.

Binary logistic regression results on the predictors of healthcare seeking for childhood illnesses in Burundi. Table 2 shows the results on factors associated with healthcare seeking for childhood illnesses among childbearing women in Burundi. In the fully adjusted model, we found that children of mothers who perceived getting money for medical care for self as a big problem [aOR = 0.75; CI = 0.60-0.93] and considered going for medical care alone as a big problem [aOR = 0.71; CI = 0.55-0.91] had lower odds of getting healthcare, compared to those of mothers who considered these indicators as not a big problem. The results also showed that children of mothers who had three [aOR = 1.48; 1.02-2.15] and four [aOR = 1.62; 1.10-2.39], children were more likely to get healthcare for childhood illnesses compared to those whose

| Variable | Weighted N | Weighted % | Health seeking behavior | χ2 (p-value) |
|--|------------|------------|-------------------------|---------------|
| Getting permission for medical care for self | | | | 2.9 (0.090) |
| Big problem | 142 | 6.5 | 59.8 | |
| Not a big problem | 2031 | 93.5 | 65.8 | |
| Getting money for medical care for self | | | | 13.2 (<0.001) |
| Big problem | 1494 | 68.7 | 62.9 | |
| Not a big problem | 679 | 31.3 | 70.8 | |
| Distance to facility for medical care for self | | | | 4.4 (0.04) |
| Big problem | 743 | 34.2 | 62.9 | |
| Not a big problem | 1430 | 65.8 | 66.7 | |
| Wanting to go for medical care alone | | | | 15.5 (<0.001) |
| Big problem | 413 | 19.0 | 58.1 | |
| Not a big problem | 1760 | 81.0 | 67.1 | |
| Age | | | | 14.2 (0.028) |
| 15–19 | 51 | 2.4 | 49.1 | |
| 20–24 | 488 | 22.5 | 65.7 | |
| 25–29 | 634 | 29.2 | 68.3 | |
| 30-34 | 482 | 22.2 | 67.3 | |
| 35–39 | 309 | 14.2 | 61.5 | |
| 40-44 | 162 | 7.4 | 65.6 | |
| 45–49 | 46 | 2.1 | 46.1 | |
| Marital status | | | | 3.4 (0.500) |
| Not married | 62 | 2.8 | 53.6 | |
| Married | 1282 | 59.0 | 66.3 | |
| Cohabiting | 614 | 28.2 | 66.6 | |
| Widowed | 39 | 1.8 | 56.9 | |
| Divorced | 176 | 8.1 | 60.7 | |
| Parity | | | | 7.4 (0.061) |
| One birth | 283 | 13.0 | 59.7 | |
| Two births | 403 | 18.6 | 65.7 | |
| Three births | 400 | 18.4 | 67.8 | |
| Four or more births | 1087 | 50.0 | 65.9 | |
| Employment status | | | | 0.08 (0.783) |
| Not working | 108 | 5.0 | 64.6 | |
| Working | 2065 | 95.0 | 65.4 | |
| Religion | | | | 4.9 (0.084) |
| Christianity | 2028 | 93.3 | 65.2 | |
| Islam | 63 | 2.9 | 78.9 | |
| No religion | 82 | 3.8 | 60.5 | |
| Exposure to mass media | 1 | | | 1.1 (0.297) |
| No | 1683 | 77.5 | 65.7 | |
| Yes | 490 | 22.5 | 64.6 | |
| Sex of household head | | | | 1.5 (0.225) |
| Male | 1714 | 78.9 | 66.7 | |
| Female | 459 | 21.1 | 60.7 | |
| Size of child at birth | | | | 7.4 (0.025) |
| Larger than average | 737 | 33.9 | 61.9 | |
| | 991 | 45.6 | 68.1 | |

Table 1. Healthcare seeking behavior for childhood illness across independent variables.

(Continued)

| Variable | Weighted N | Weighted % | Health seeking behavior | χ2 (p-value) |
|---------------------------------|------------|------------|-------------------------|---------------|
| Smaller than average | 445 | 20.5 | 65.2 | |
| Birth order | | | | 1.8 (0.410) |
| First | 431 | 19.9 | 65.3 | |
| 2-4 | 1024 | 47.1 | 67.1 | |
| 5+ | 718 | 33.0 | 63.0 | |
| Twin status | | | | 21.1 (<0.001) |
| Single birth | 2046 | 94.2 | 64.1 | |
| Multiple birth | 127 | 5.8 | 85.7 | |
| Sex of child | | | | 0.8 (0.373) |
| Male | 1150 | 52.9 | 66.1 | |
| Female | 1023 | 47.1 | 64.6 | |
| Community literacy level | | | | 3.9 (0.146) |
| Low | 796 | 36.6 | 65.1 | |
| Medium | 799 | 36.8 | 64.3 | |
| High | 578 | 26.6 | 67.4 | |
| Community socio-economic status | | | | 4.1 (0.042) |
| Low | 1537 | 70.7 | 64.5 | |
| High | 636 | 29.3 | 67.6 | |
| Place of residence | | | | 4.9 (0.027) |
| Urban | 129 | 5.9 | 68.1 | |
| Rural | 2044 | 94.1 | 65.2 | |

Table 1. (Continued)

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mothers had one child. Children of mothers with single birth children were less likely to get healthcare compared to those whose mothers had multiple births.

Discussion

The current study investigated the barriers to healthcare access and health seeking for childhood illnesses in Burundi. We found that less than 50% of children in Burundi who were ill two weeks before the survey obtained healthcare. The prevalence of healthcare seeking for childhood illness was lower than what was recorded in Gabon with 75.0% [24]. Disparity in socio-cultural factors could influence the difference in the prevalence of healthcare seeking for childhood illness among countries. Again, the disparities in the findings could also be due to differences in sample size.

Children of mothers who had a big problem getting money for medical care for self were less likely to get healthcare for their illnesses as compared to those of mothers who had no problem getting money for healthcare. This finding supports other studies conducted in Ethiopia [25] and Kenya, Niger and Nigeria [26] that financial problem is a barrier to healthcare seeking behaviour for childhood illness. The current finding lends support to other array of research that have established strong connection between wealth and various health outcomes. Women from the poorest wealth quintile or poorest households usually demonstrate considerable poorer maternal health outcomes in low- and middle–income countries [27–30]. Such women might prioritize and use their less finances on other pressing needs such as food for the family at the expense of accessing healthcare for their children. For countries within SSA that have health insurance schemes such as Ethiopia, Ghana, Kenya and Rwanda [31], the barrier to healthcare seeking for childhood illnesses may not be financial matters but the involvement of other associated costs such as the cost of transportation to the health facilities [32].

| Variables | Model I cOR [95% CI | Model I aOR [95%CI] | |
|--|------------------------|------------------------|--|
| Getting permission for medical care for self | | | |
| Big problem | 0.74 (0.53-1.05) | 0.93 (0.65-1.35) | |
| Not a big problem | Reference (1.0) | Reference (1.0) | |
| Getting money for medical care for self | | | |
| Big problem | 0.70*** (0.57-0.85) | 0.75*** (0.61-0.93) | |
| Not a big problem | Reference (1.0) | Reference (1.0) | |
| Distance to facility for medical care for self | | | |
| Big problem | 0.82* (0.69-0.99) | 1.02 (0.81-1.27) | |
| Not a big problem | Reference (1.0) | Reference (1.0) | |
| Wanting to go for medical care alone | | | |
| Big problem | 0.65*** (0.52-0.81) | 0.71*** (0.55-0.91) | |
| Not a big problem | Reference (1.0) | Reference (1.0) | |
| Age | | | |
| 5-19 | Reference (1.0) | Reference (1.0) | |
| 20-24 | 2.10* (1.18–3.74) | 1.71 (0.93–3.12) | |
| 25-29 | 2.24** (1.27-3.96) | 1.56 (0.83–2.92) | |
| 30-34 | 2.02* (1.14-3.60) | 1.22 (0.63–2.38) | |
| 35-39 | 1.91* (1.06–3.45) | 1.12 (0.56–2.24) | |
| 0-44 | 1.89* (1.01-3.53) | 1.13 (0.55–2.33) | |
| 15-49 | 1.04 (0.47-2.28) | 0.62 (0.26–1.50) | |
| Parity | | | |
| Dne birth | Reference (1.0) | Reference (1.0) | |
| Two births | 1.25 (0.91–1.71) | 1.16 (0.82–1.64) | |
| Three births | 1.52* (1.10-2.10) | 1.48* (1.02–2.15) | |
| Four or more births | 1.37* (1.04–1.80) | 1.62* (1.10-2.39) | |
| Religion | 1.57 (1.04 1.00) | 1.02 (1.10 2.37) | |
| Christianity | 1.07 (0.66–1.71) | 0.95 (0.57–1.57) | |
| Íslam | 1.96 (0.96–4.00) | 1.46 (0.68–3.12) | |
| No religion | Reference (1.0) | Reference (1.0) | |
| Size of child at birth | | | |
| Larger than average | 0.84 (0.65–1.07) | 0.89 (0.69–1.16) | |
| 0 0 | 1.10 (0.87–1.39) | | |
| Average | Reference (1.0) | 1.17 (0.92–1.50) | |
| Smaller than average | Reference (1.0) | Reference (1.0) | |
| Fwin status | 0.24*** (0.21.0.55) | 0.20*** (0.22, 0.42) | |
| Single birth | 0.34*** (0.21–0.55) | 0.38*** (0.23–0.63) | |
| Multiple birth | Reference (1.0) | Reference (1.0) | |
| Community literacy level | | | |
| LOW Contraction of the second se | Reference (1.0) | Reference (1.0) | |
| Viedium | 0.91 (0.74–1.11) | 0.88 (0.71–1.10) | |
| High | 1.14 (0.91–1.42) | 1.04 (0.82–1.33) | |
| Community socio-economic status | | | |
| Low | Reference (1.0) | Reference (1.0) | |
| High | 1.22* (1.01–1.49) | 1.16 (0.93–1.44) | |
| Residence | | | |
| Urban | Reference (1.0) | Reference (1.0) | |

Table 2. Binary logistic regression results on the predictors of healthcare seeking for childhood illnesses in Burundi.

(Continued)

| Table 2. (| Continued) |
|------------|------------|
|------------|------------|

| Variables | Model I cOR [95% CI | Model I aOR [95%CI] |
|-----------|------------------------|------------------------|
| Rural | 0.72* (0.53-0.96) | 0.82 (0.59–1.15) |

Exponentiated coefficients; 95% confidence intervals in brackets; cOR = Crude odds ratio; aOR = Adjusted odds ratio.

* *p* < 0.05

** *p* < 0.01

*** *p* < 0.001.

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Leveraging the free health care policy in Burundi targeting pregnant women and children under-five, the Health Sector Development Support Project introduced in 2006 seeks to increase health service utilization among pregnant women, children under-five and couples of reproductive age [33]. The government of Burundi should strengthen the zhealth system for maternal and child health and make additional investments in infrastructure and equipment to increase the utilization of healthcare for childhood illnesses.

Children of mothers who considered going for medical care alone as a big problem had lower odds of getting healthcare for their illnesses. The plausible explanation for this finding could be that men play a paramount role in determining the health needs of the family in SSA [34]. This is because men control most of the resources in marriages and hence, they decide where and when women should seek healthcare for childhood illnesses [35]. In view of this, women consider going for medical care alone as a big problem and this has a serious impact on health in particular on the women and children. Fenny, Yates and Thompson [31] also reported that some countries within the sub-Saharan African region with health insurance schemes, the barrier to seek for healthcare for their children could be associated with indirect costs of healthcare such as transportation cost to health facilities.

We found that children of mothers with high parity and those who had twins were more likely to get healthcare for childhood illnesses. This finding contradicts the findings of Abegaz, Berhe and Gebretekle [12] in Ethiopia who reported that women with low parity were more likely to seek healthcare for the sick child as compared to women with high parity. Abegaz, Berhe and Gebretekle [12] further elaborated that mothers' high workload due to large family size could bring about giving lesser attention to the sick child.

Strengths and limitations

The study has some strengths and limitations. The secondary data used for the analysis was drawn from a nationally representative survey collected by employing a two-stage stratified sampling technique. The analyses with discrete regression models using confidence intervals helps to determine the level of precision, provide more credible findings. However, the cross-sectional nature of the survey limits causal inferences and noted findings should be interpreted with caution. Finally, we hypothesized that personal health seeking behavior and mothers' health seeking behaviour for a child will be similar. However, this may not always be true and limits the generalisability of the findings.

Practical implications. Burundi's existing governmental initiatives could target women in poor households in order to remove the financial barriers they face when accessing healthcare. For example, lessening and/ or removal of all forms of user fees in government health care facilities would be productive towards the protection of households from expensive costs of illness.

Conclusion

Findings of the low prevalence of healthcare for childhood illnesses in Burundi suggest the need for government and non-governmental organizations to strengthen women's healthcare accessibility for child healthcare services and health seeking behaviours. The Burundian government through multi-sectoral partnership should strengthen health system for maternal health and address structural determinants of women's health by creating favourable conditions to improve the status of women and foster their overall socioeconomic well-being. Free child healthcare policies in Burundi should be strengthened to enhance the utilization of child healthcare services in Burundi.

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