

# Factors Influencing Uptake and Utilization of Mutual Health Insurance in Cameroon: The case of Bamenda Ecclesiastical Province Health Assistance

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## Research Article

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# Abstract

**Background:** Mutual health insurance schemes are a tool to curb excessive out-of-pocket payments for healthcare services to the poor and vulnerable communities. However, the uptake and utilization of these insurance schemes are low. This study explores factors that influence the uptake and utilization of mutual health insurance schemes.

**Methods:** This was a descriptive qualitative case study conducted among 20 Adherents and seven staff of BEPHA Kumbo. Multiple data sources were used, including semi-structured interviews, focus group discussions, and a review of documents. We used the content analysis method to analyze the data.

**Results:** While mutual health insurance schemes can increase access to healthcare and potentially protect households against impoverishment caused by out-of-pocket payments, they face multiple factors that hinder uptake and utilization. The findings revealed that trust and access to the insurer were classified as enablers. At the same time, annual contribution, adverse selection, and no national policy were threats influencing uptake and utilization of the schemes.

**Conclusions:** MHI schemes can expand access to healthcare and improve the quality of care for its members. However, the lack of national policy threatens uptake and utilization and, hence, sustainability of these schemes.

## Background

International organizations have been advocating for mutual health insurance (MHI) schemes as tools to curb out-of-pocket (OOP) payments because these schemes have the potential to expand access to and quality of healthcare for the rural poor and vulnerable members of the community [1, 2]. The schemes protect households against impoverishment caused by OOP payments, thus an indicator towards achieving Universal health coverage (UHC) [3, 4]. Mutual Health Insurance (MHI) schemes are called different names; community-based health insurance and mutual health organizations are all forms of MHI. MHI schemes could be defined as any non-profit health financing scheme. [5]. They are mainly not-for-profit, targeting the informal sector and the marginalized groups of people in the community. The schemes are generally formed on the ethic of mutual aid and collective pooling of health risks. The members participate in its management [5, 6]. According to Preker et al. [7], the primary objective of MHI schemes is to give the marginalized and rural population the opportunity to their own “destinies and make them active participants in managing their resources” (p. 61). Participation in MHI is voluntary, and the primary objective is to provide financial risk protection to the low-income people within rural and informal sectors having irregular salaries and wages [8, 9]. These schemes' primary purpose is to provide financial protection among the registered members by applying the principle of mutual aid or solidarity [10]. Financial protection is defined “as the protection for households or individuals against the financial

consequences of illness and death, or at least from the financial consequences associated with the use of medical care.” [11], (p. 126).

MHI schemes are typically designed to serve a district or a trade association and differ from commercial insurance organizations [6]. Most often, payment of premiums is made monthly, quarterly, or yearly. Although mostly found at the community level, their goals are consistent with and similar to standard health insurance schemes. They have as objective; resource pooling, prepayment and risk-sharing, and negotiation with other partners in the health service to improve access to healthcare services marginalized groups in the community, as they do not have to incur financial costs when receiving healthcare services [12, 13].

Cameroon has a long-standing culture of health insurance, but they are targeting mainly those with former employment while most of the population, 70,42%, finance healthcare through OOP payments [14, 15]. In a low-income country like Cameroon, where more than 50% of the population lives under the poverty threshold, OOP payment remains the primary payment method for healthcare. Unfortunately, this method of payment limits access to quality healthcare. Large OOP payments can dramatically impoverish the entire household [16]. Prepayment and sharing the burden of sickness through MHI have been recognized as keys for making healthcare affordable amongst the poorest [17]. MHI schemes were introduced as an alternative health financing mechanism to OOP payments, particularly in areas where government or employer-based health insurances are limited.

The Bamenda Ecclesiastical Province Health Assistance (BEPHA) is a type of MHI created in 2007 by the Bamenda Provincial Episcopal Conference (BAPEC) [18]. The scheme's primary strategy is to provide affordable care and improve access to quality healthcare services to marginalized people. Although the Catholic mission manages BEPHA, registration is open to all Cameroonians irrespective of tribal, cultural, social, and religious affiliations. Its primary source of funding is the contribution from adherents. The scheme receives financial and technical assistance from the German Catholic Bishops' Organization for Development Cooperation (MISEREOR) to cover its operational and staff salaries [18].

BEPHA has different types of membership [18], honorary and ordinary members. Honorary members are benefactors, who support the scheme financially, materially, technically, and otherwise; they may not necessarily be BEPHA adherents. The ordinary members are heads of households or groups enrolled in the scheme, known as BEPHA adherents. Members pay an annual registration fee in the first year of enrollment, an annual General Assembly fee (AGM), and an annual contribution for themselves and those enlisted as their dependents. A member becomes a BEPHA adherent eligible for healthcare coverage only after paying the annual contribution.

BEPHA's five broad categories of services are consultation, hospitalization, delivery, surgery, and antenatal visits. Members observe a one-month waiting period on consultation and hospitalization and 6-month for delivery and surgery. The scheme imposes co-payment and ceiling per the number of persons enrolled (see table 1). The co-payments system with a moderator ticket of 25% of health care bills is borne by the beneficiary, while the scheme covers 75% upon review of the health bills by a competent

medical adviser. The services offered are capped with a ceiling and a maximum number of covered episodes within one year, as seen in table 1. This is to spread coverage and ensure that everyone benefits from the shared pool. Thus, the emphasis on solidarity and risk-cross subsidization. Members are encouraged to seek care at the health facilities serving and operating as BEPHA partners. Therefore, the scheme creates a partnership with every health facility except for private health facilities in the region.

Table 1: BEPHA Schedule and Basket of Services

List of services	# per year	Ceiling (in frs. CFA)	Waiting period
Registration	Annual	1,000	<b>Not available</b>
General assembly	Annual	1,000	
Contribution	Annual	4,000	
<b>Services Provided</b>			
Consultation (OPD)	3 times	30,000	One month
Hospitalization	2 times	50,000	One month
Delivery		15,000	Six months
Surgery	Once	70,000	Six months
1 <sup>st</sup> Ante-natal visit (ANC)	Once		

Like other LMICs, in 2001, the government of Cameroon signed a Health Sector Strategy (HSS) authorizing the creation of MHI [19]. Ten years later, an assessment was done, and results revealed 120 MHIs. Still, enrolment into the schemes has remained persistently low as only about 2% of Cameroonians had registered, and the schemes continue to go out of business at a very alarming rate [20].

High enrollment in MHI indicates the sustainability of the schemes. In addition, when more households are insured, more people are protected from the financial implications of treatment costs, and more people have access to healthcare services [21]. As in the case of Cameroon with low enrolment, it could be an indication that MHI schemes have failed to achieve their potential, primarily due to low levels of enrolment.

The lack of ability by MHI schemes to attract high enrolment numbers is a significant concern across Sub-Saharan Africa [22], and the situation is even worst in LMICs where MHI schemes hardly achieve up to 10% enrolment among the population. As a result, most of these MHI schemes do not survive a couple of years after creation [22, 23]. Though the problem of low enrolment in MHI schemes has long dominated policy discussion in LMICs [23], this has also been the case in Cameroon.

According to the literature, factors that influence uptake to MHI include distance to the health facilities, and the quality of the services offered negatively influence MHI enrollment [24, 25]. Close distance to the health facility and affordable premiums have increased enrollment to MHI in some cases. Affordable premiums because members generally pay low premiums reflecting their financial positions. [26, 27]. Other factors that have been found to influence MHI include the education level of households and knowledge of the MHI [24]. In Cameroon, results from previous studies on the factors that influenced uptake and utilization of MHI remain scarce. Previous studies have focused on experiences of voluntary health insurance, MHI knowledge, concern, preferences, and financial planning for health care [17], MHI and capital review [28, 23], and attitudes of healthcare providers towards MHI [29, 30]. Other studies have assessed the managerial and financial capacity of state-owned MHIs. While these studies are essential, they were conducted in Yaoundé and Douala; these are the capital and economic cities of the country. In addition, these studies targeted those with formal employment only, while little is known about other groups within the population. Cameroon has a vast rural population working in the informal sector where demand for healthcare is high [23]. This study investigated factors that influenced the uptake and utilization of MHI schemes among the rural and informal populations. The study used BEPHA as the case. Understanding factors that influenced uptake and the utilization of MHI schemes is vital to inform decision and policymakers and could contribute to the existing discussion on MHI in Cameroon and beyond on their efforts to achieve UHC. Presently, Cameroon is exploring different models to adopt UHC using MHI schemes as the framework. Findings from this study could provide practical guidance to practitioners of MHI defining policies on what model to be implemented.

## Methodology

### Study design and settings

This study applied a descriptive qualitative case study design [31]. A descriptive case study was the appropriate choice as it enabled the researcher to have a concise but in-depth description of factors that influence the utilization of MHI. In addition, the design will help the researchers better understand what may help explain the reason for the low uptake and utilization of MHI in a natural setting. Furthermore, the focus of the study is to describe in detail factors that influenced the uptake and utilization of the BEPHA MHI scheme in rural settings in Cameroon. The study was conducted in one region, BEPHA Kumbo, in the North-West regions of Cameroon. The MHI scheme, BEPHA, and the region Kumbo were purposively selected because BEPHA Kumbo has the highest number of registered members, 5% (40,000) of the population compared to other schemes, and most importantly, it was easily accessible [32].

The study was conducted at two health facilities; Shisong hospital is the region's national reference health center, and Djottin Community clinic is a primary health centre (point of first contact). The two health facilities have created partnerships with BEPHA in the region. Data was collected from different levels; grassroots (Adherents), BEPHA staff, and the director at the national level. This was done to have a broader perspective of the research problem [32].

Adherents are members with a valid membership. At each health facility, there is a dedicated BEPHA agent. The agents help members with administrative procedures. Agents contacted and informed adherents about the study as they came for consultation; those interested in participating were asked to stay behind after consultation. Inclusion criteria were those with valid membership with the scheme and registered for at least one year. In this category, those recruited were men and women visiting the health facilities for consultation during data collection. Those recruited were BEPHA members; household heads because they allocate household resources locally. The method we used was not possible to recruit non-adherents. The Adherents responded to broad questions on their understanding of MHI services and reasons for joining BEPHA, and they shared their experiences and perspectives about the services offered.

BEPHA staff - The criteria for selecting staff were full employment for at least one year. The staff responded to broad questions on the job description, experiences, and challenges working with Adherents and managing the scheme. The final category was the director at the national level, who provided information about the state and its stance on MHI. We developed interview guides to target specific categories of respondents. The data collected from BEPHA staff included factors that influenced enrolment to MHI schemes.

## **Data collection techniques**

Data was collected from multiple sources, including interviews, focus group discussions (FGDs), and analysis of documents. When conducting research, data collected from several sources is a strategy to enhance data credibility [31].

### **Interviews and focus group discussions (FGDs)**

Given the research's aim, interviews and FGDs were the primary data sources for gathering the respondents' perspectives and experiences about MHI. The interview guides were used, which encouraged a broader discussion of the issues. The interview guide was piloted among patients accessing health services at the Bamenda provincial hospital. The main issue observed was language; that is, the Adherents' inability to understand the questions. Thus, it was agreed that we employ the services of a translator to help explain the questions in Pidgin English. However, as we started conducting the interviews, the questions were improved.

The first author conducted the interviews and FGDs between December 2020 and February 2021. The interviews were conducted at BEPHA offices, and the FGDs were conducted with Adherents when they visited the health facilities. The FGDs encourage the Adherents to explore each other's views, leading to a more detailed exploration of ideas than in one-to-one interviews. The interviews were conducted in the English language, while FGDs were held in Pidgin English, the lingua franca used by the people in Kumbo. FN read the questions to the Adherents while the Agent translated the questions into Pidgin English in the presence of a Nun as Observer. FN is a trained and experienced facilitator and the first author.

Before the interviews and FGDs, consent was sought, and respondents were informed that participation was voluntary. A total of four FGDs were conducted with five Adherents per group. Each interview lasted between 30 – 35 minutes, and an FGD was 30 minutes long. Four FGDs with twenty BEPHA Adherents were conducted, and seven BEPHA staff were interviewed. The interviews and FGDs were audio-recorded. Table 2 presents the profile of the participants who participated in the study.

We observed data saturation after conducting four FGDs and seven interviews. Data saturation is the point during data collection where no new information is obtained from the participants [34]. Qualitative researchers argue that an FGD should have between six to 12 participants, and 5-8 interviews are enough to achieve saturation [35]. After each interview, the researcher made notes and summarized the main themes discussed with the interviewees. This allowed for an additional check of the accuracy, fairness, and validity of the analyses developed [36]. At the end of data collection, the researcher (FN) presented preliminary findings to the directors of BEPHA in Kumbo and Bamenda. See table 2 presents the list of BEPHA staff interviewed.

Table 2: List of participants interviewed

Level	Respondents	No. of interview	Involvement in the Scheme
Adherents	BEPHA member	20	Members with valid registration BEPHA.
BEPHA staff	Board member and founder	1	Staff members of BEPHA who have worked for not less than one year. They understand the system and have a good understanding of some of the issues facing MHI in general and BEPHA in particular
		2	
	Project Coordinator		
	Registrar	2	
	Assessor	1	
	Health Facility Agent	1	
National level	Director of HMI, Min. of Labor & Social Security.	1	Represent the national government and be involved with the elaboration of MHI policies.

### Documentary evidence

The documentary review was used to complement the interviews and FGDs. Yin [33] (p. 103) states, “because of their overall value, documents play an explicit role in qualitative studies.” Many documents were helpful and added value to the data collected, including unpublished quarterly reports, the BEPHA handbook, and membership cards. These documents were helpful to learn about significant events, historical decisions made, key decision-makers, and their roles. Besides, they gave the researcher background information about the research sites. Most of the documents were reviewed before we started conducting interviews, which proved helpful in the preparation of the interviews. In addition, the information gathered from these sources helped provide rich information about the phenomenon under study.

# Data management and analysis

The data obtained from the interviews and FGDs were transcribed verbatim. FN read the transcripts to take off any sensitive information, reviewed the audio recordings against the original transcripts, and corrected any observed differences before the coding. Then, both researchers read the transcripts to understand better what the participants were saying. Next, the transcripts were coded following the steps described by [37]. That is, both researchers read the transcripts and noted down initial codes. Exciting and relevant features in the transcripts were coded and collated. The collated codes were then collated into potential themes and gathered to each theme. The codes from FN and NN were compared, and disagreements were resolved by referring to the conceptual framework by Fadlallah et al. [25]. Upon comparing our codes with that on the framework [25], we found that the sub-themes were very familiar. Hence, we mimic the same framework to categorize the main themes into three levels (individual, community, and system). See figure 1 for the themes and sub-themes. FN extracted verbatim quotes from the manuscripts, NN examined and confirmed. A thematic map was drawn with analysis to refine specifics from each theme. These were then analyzed and used to relate to the research question.

## Findings And Discussion

In this section, we present the results. The first section presents a brief description of the BEPHA staff interviewed. This is followed by the themes and sub-themes that emerged after analyzing the interviews.

### Description of Respondents

As already indicated in table 1, we collected data from different levels of staff. The adherents were mainly elderly, retired men, and women, doing farming and small trading as a means of living. Most of them were women heading their families. Atim et al. [38] explained that households headed by women are more likely to be enrolled in MHI than households headed by men.

The staff members were mainly young adults who had no prior or professional experience with insurance schemes. Educational-wise, most of the staff had secondary education. Interestingly, all staff members were catholic. It should be noted that most of the operations at BEPHA are conducted manually, and the staff members lack basic computing skills. An overview of those interviewed is presented in table 3.

Table 3: Profile of staff interviewed (n=7)

<b>Profile of staff interviewed</b>	<b># of participants</b>
<b>Age group</b>	
20 - 25	3
26 - 30	2
36 - 40+	2
<b>Gender</b>	
Male	3
Female	4
<b>Number of years working in the present position</b>	
1 - 2 years	2
2 - 3 years	3
3 - 4 years	2
<b>Marital status</b>	
Single	7
Married	0
<b>Highest educational level</b>	
GCE O level	1
GCE A level	4
Professional certify.	1
Tertiary/ professional education	1
<b>Religious background</b>	
Catholic	7
Protestant	0

## **Presentation of the themes**

Here, we present the themes and sub-themes that emerged from the interviews. We found several factors; for easy presentation, they are grouped as individual, community, and system levels; and further divided as enablers and threats. We have added verbatim descriptions from respondents [36] to support our findings.

### ***Theme 1: Individual levels***

Factors that emerged as enablers were the reliability of the scheme, satisfaction with the services received, and trust in the insurer. In contrast, the amount paid for annual contributions and the package of services offered were threats. Most adherents explained that they joined BEPHA because they find the service more reliable, as an adherent explained:

*"...When I was first told about my illness, I asked myself where am I going to get money to cover my medical expenses? I gave out my farms to get money to pay for my medical expenses. Then a friend told me about BEPHA, I registered, and whenever I fell ill and went for a consultation, the BEPHA agent asked that I pay only 25% on consultation. After my consultation, I presented my BEPHA member card at the reception, and the Cashier just told me I should go; all is fine. Now I see BEPHA keep to their promise..."*

This quotation encapsulates the sentiment shared by a majority of members. The members explained that a co-payment of 25% is manageable as they could pay. Nsiah-Boateng et al. [39] reported that a high co-payment rate hinders individuals from joining MHI schemes and contributes to dropout. On the issue of reliability, another member explained his experiences by comparing the services of BEPHA with another scheme he was once a member as explained in the following statement:

*"I registered with Nico paid my contributions. Once I was sick and went to the hospital and presented my membership at the reception, I almost pass-out when the Receptionist told me the scheme had closed. But since I joined BEPHA, I have not had any problem. They have not given me any reason to doubt their services. In addition, we know their offices, and we can reach them on the phone".*

Furthermore, the adherents were asked to explain the general satisfaction at the health facilities and when interacting with BEPHA staff. The adherents expressed satisfaction with the services received regarding access to health providers or specialists, as they do not have to wait in long queues. Another added that BEPHA staff are always available to listen to concerns from the members. They send us reminder messages when membership is about to expire. BEPHA staff visit us when we get sick and are hospitalized. Another added that they are more relaxed because they can manage their health issues without being scared of where to get money to cover the medical expenses.

The adherents explained that they were very satisfied with the services of BEPHA. Studies from Ghana [40] and Tanzania [41] have shown that the lack of money to pay for medical expenses discourages presentation for antenatal and midwifery care and consequently contributes to continued high maternal and neonatal mortality. Studies from other African countries show that they rely on out-of-pocket payments when people lack health insurance. Out-of-pocket payment in the form of user fees paid directly to health providers may plunge individuals or families into perpetual impoverishment [11]. In LMIC, studies have shown that preventable diseases and illnesses remain critical threats to the income earning capacity of the world's rural poor. Therefore mitigating physical and financial barriers hindering access to quality health care, particularly among the marginalized and rural communities, will motivate enrollment in MHI schemes [5, 11].

Another factor that emerged is trust in the insurer. The respondents explained that BEPHA managers and staff are local community members. As one respondent explained,

*“These are people we see every day. We meet with them at the place of worship, at the market, everywhere, we know them. They are no strangers to us....”*

The adherents were further asked if they supported BEPHA because of their religious link. It was observed that BEPHA is a product of the Bamenda Ecclesiastical province, a branch of the Roman Catholic mission, and 50% of adherents were Roman Catholic members. The adherents banged the table and screamed *No! No! No! this is not the case*”, then one adherent did not hesitate to explain:

*“Yes, I am a Roman Catholic member, but religion does not matter when it comes to one’s health. My family and I have trust in BEPHA because their services are reliable. When you pay your annual contribution, you enjoy the services as agreed, no ups and downs.”*

Another adherent explained although, in the beginning, BEPHA was targeting predominantly roman catholic members, over the years, that has changed, and membership is open to anybody interested can abide by the terms and conditions of the scheme, and is willing to pay. The manager corroborated this explanation during the interview by reiterating that the scheme accepts everybody regardless of religious background. Basaza et al. [42] found that people's lack of knowledge and trust were significant barriers to scheme management.

Threats that emerged at this level were the amount paid for annual contribution and the service package offered. The Adherents explained that the amount paid for the annual contribution fee was high. At the time of data collection, the adherents had been informed that the annual contribution fee would be increased from francs CFA 5000 to CFA 5500 (i.e., equivalent to USD 9 to USD 10). The adherents were elderly, retired, and self-employed and were concerned that they would not afford the amount. For instance, during one of the FGDs, one of the respondents had this to say

*“We have witnessed what BEPHA has done to our families, and we all want to register and continue to be members. But poverty is making killing us, and we are afraid that if the premium of annual contributions is increased, we might not be able to continue because we cannot pay the amount....”*

Since MHI generally targets marginalized communities, the premiums charged are relatively low [11]. Previous studies have shown that the amount of money paid either as the annual contribution or premiums influences enrollment to MHI. MHI schemes with high premiums negatively influenced uptake and inequity among the poor and most vulnerable populations [21]. However, it was found that having a single method of payment for all members lowered enrollment, but when the amount is adjusted and paid as installments, it encourages enrollment [43]. In a review conducted by Okoroh et al. [44], schemes that collect premiums at intervals throughout the year encourage enrollment. In contrast, collecting the entire premium once per year makes enrollment less affordable for poorer households.

Another factor in this level was the package of service offered. The adherents reported that although they were satisfied with the services offered, they suggested that HIV/AIDS care should be included on the list of services. In this context, HIV/AIDS-related illnesses are expected within the community as many families have been directly or indirectly infected and affected by the disease. They suggested that adding HIV/AIDS-related services to the service package would attract uptake. According to the BEPHA manager, HIV/AIDS-related services are not included because the state has not provided a clear treatment guideline. Since HIV/AIDS treatments are offered haphazardly, assessing and reimbursing service providers would be challenging. However, studies have shown that when the services offered by MHI are tailored to members' needs, non-discriminatory [45], and cover outpatient services increases the scheme enrollment [46].

### ***Theme 2: Community Level***

At this level, factors identified as enablers were membership criteria and community involvement in decision-making. On the other hand, the threat was adverse selection.

Most MHIs have stringent membership criteria in Cameroon as they allow only families enrollment, except BEPHA, which accepts registration from individuals, families, groups, and school pupils. Studies from Rwanda and Ghana show that schemes that accept group membership was perceived by members as a severe barrier to scheme sustainability [38]. On involving the community in decision-making processes in the scheme, the women reported they were satisfied with their level of involvement in the scheme whereas, the men disagreed. This is because more women than men are employed at BEPHA. According to Kyomugisha et al. [45], enrollment increases when community members are decision-making. Conversely, low community participation decreases the value placed on the scheme; consequently, scheme membership.

Threats in this level were the lack of solidarity and adverse selection. The staff reported that people believe those who enroll in an MHI scheme have or are suffering from an illness; lack of solidarity. A study conducted in rural Benin example shows that saving money for a disease is seen as "wishing oneself disease" [47] p. 29. In such a community, the demand for health insurance risks being very low. Noubiap et al. [17] explained that when community members feel a sense of solidarity, they are more likely to join the scheme. On adverse selection, the staff interviewed explained that the main reason why most applicants' subscriptions are disqualified at registration is that they wait until they have been diagnosed with an illness before rushing to register or join the scheme. When prospective members use their health conditions as the fundamental motive for joining the MHI scheme, it is detrimental because they tend to withdraw immediately after their conditions are treated [48].

The staff reported that adverse selection [1] forces prospective members to abuse the scheme, such as falsifying the scheme's membership card. The staff reported that individuals who are not registered falsify the scheme's membership cards because they want to enjoy the services without paying for them. This was observed because the scheme processes are done manually. For example, BEPHA's membership card is paper-based. The staff explained their concerns because their processes are not yet computerized.

They added that these are common threats in the sector, particularly in Cameroon, and are the main reasons why many MHIs go bankrupt. The lack of computerized devices and digital skills in MHI schemes, particularly in LMICs, is acute [48]. Yawson et al. [49] explained that adverse selection could have severe consequences for smooth functioning, affecting the long-term sustainability of the MHI scheme. This is why Atinga et al. [50] recommend that mechanisms are needed to curtail the false documentation phenomenon. The staff explained some measures BEPHA has put into preventing fraudulent activities. These measures include;

- Implementation of ceiling period.
- Education and dissemination of information to members during the registration
- Created partnerships with healthcare facilities
- Developed guidelines and policies with their partners
- Recruited BEPHA agents at every partner health facility to assist members during consultation.

### **Theme 3: System-level**

The factors that emerged as enablers were the modality of reimbursement and access to the insurer, whereas lack of skilled technical staff and resources and lack of legal framework were threats.

At BEPHA, the co-payment rate is 25% upfront before the consultation. The members expressed satisfaction with the method, unlike schemes where members are asked to pay the total amount and are reimbursed later. The Adherents explained that with BEPHA, immediately after making the co-payment amount, the BEPHA agent takes care of the rest of the administrative activities; filling forms, collecting receipts, and submitting them to BEPHA offices while they (adherents) go and have their treatment. However, the adherents explained that while the agent's presence at the health facility is significantly helpful, the assessor added that assessing and evaluating receipts are still done manually, which could delay the process and, consequently, payments. According to the literature, MHI schemes use different payment methods to pay service providers; however, capitation payment is a potentially appealing method and contributes to the scheme's success [48]; however, delays in processing the claims negatively influenced service delivery [50].

Access to the insurer was found to increase enrollment, as explained in the following statements:

*"...we do not have any problem accessing BEPHA, their offices, and the staff. We meet the everywhere, at the market, and worship at the same church, so they are always there with us."*

And another Adherent added, *"the staff even visited the hospital when my daughter had an operation."*

The threats that emerged were the lack of skilled personnel and resources and a national policy for MHI. The lack of skilled personnel was evident from BEPHA's staff composition. It was observed that most

staff had neither professional nor academic experiences in managing MHI or management positions. It was also observed that staff working in the scheme had worked or known within the Roman Catholic network. According to findings from the scheme's management, only staff who had worked within the Roman Catholic network were either appointed or recruited to work in the scheme because it was easier to track their work experience and ethics. The manager added that they must ascertain the staff has a good work ethic and prove some trustworthiness before staff is appointed. These qualities are easier to ascertain if the staff is known within the Roman Catholic network than when recruited directly from the general public. Studies have shown that the administrative team is very crucial in the sustainability of an MHI scheme. The qualifications of the scheme managers and the establishment of a robust administrative team are critical to preventing "unintended external interferences" and facilitating smooth management and implementation of processes [26] in the scheme.

Another threat in this group was the lack of resources. It was observed that all BEPHA's processes are done manually, from registering members, creating membership cards, and submitting receipts for reimbursement. There are no computers and staff have no access to the internet. It is well known that manual activities are susceptible to errors and mistakes and are time-consuming. At the time of data collection, the scheme had started computerizing some activities; however, a concern raised by staff was a lack of basic digital skills. In this information age, basic digital skills are indispensable as they facilitate the smooth processing of activities and promote the scheme's sustainability [25].

The lack of a legal framework or policy for the MHI scheme is a significant setback to the sustainability of MHI in general and BEPHA in particular. It was observed that nine years since the creation of BEPHA, the premium collected from members could neither cover the medical expenses nor pay staff salaries. Furthermore, it was observed that the scheme could not increase the premium annually because the members would not afford it. As a result, the scheme is operating on a small budget. This threatens the scheme's financial viability and long-term sustainability [11]. One of the staff did not hide his sentiment:

*"I see the happiness and difference this scheme has brought to the life of people, but I go to work every day with a heavy heart because we might wake up one day with the announcement that we are closing up as others have done because we are unable to pay our bills... if the government does not come on board."*

This, the staff lamented, is due to the lack of MHI policy in Cameroon. A national policy with modalities to subsidize MHI schemes positively influences the uptake. In contrast, its absence negatively influences MHI sustainability [42].

[1] Is when people most likely to purchase health insurance are those most likely to use it.

## Discussion

This study investigated factors that influenced the uptake and utilization of MHI schemes among the rural and informal populations in Cameroon. The study's findings indicate that uptake and utilization of MHI schemes are influenced by many factors ranging from individual, community, and system. The findings also indicate that the factors were contextual and interrelated. For example, a key factor at the individual level was trust in the insurer. Our findings are consistent with those by [51]. Hall et al. [52] explained that since the purpose of MHI schemes is to provide specific health products and services to meet members' health needs, trust is crucial when deciding whether to enroll or not. Adebayo [53] added that there is integrity when MHI members trust the insurer. In Cameroon, the population has long lost confidence and trust in government services [14] because trust is a feature that does not exist within government institutions. As a result, the population has to contend with poor governance, which has increased poverty. However, faith-based organizations have proven trustworthy in providing and delivering health services. Over the years, they have provided reliable and affordable health services to Cameroonians, eventually building trust and confidence in delivering health services [17].

The threats at this level focused on the type of services provided by the scheme. Studies have pointed to the importance of the amount paid as an annual contribution and the type of services offered. There is a direct relationship between the amount paid as an annual contribution and enrolment to MHI [45]. MHI schemes with measures to exempt the poor and most vulnerable populations from paying annual contributions will increase enrollment to the scheme. Our findings concur with Adebayo et al. [49] regarding factors that negatively influence access to care.

The factors, community involvement in decision-making and membership criteria, were found as enablers at the community level. Chankova [54] explained that when the community is involved in decision-making in the scheme, they help tailor the services to meet the community's needs. The findings from this study revealed that more women than men are involved in BEPHA. The findings are consistent with those by Jutting [55] that women's frequent participation in community risk-sharing initiatives turns to be more attuned than men to the institutional features of MHI schemes. On membership criteria, this study found that BEPHA has many membership options, which will increase enrollment in the scheme. In contrast, adverse selection emerged as a threat. Being a severe threat to MHI schemes [53], this study's findings associated it with a lack of national policy.

At the system level, access to the insurer and modality of reimbursement emerged as enablers. While the three factors; encompasses no MHI policy, the lack of technical and managerial personnel, and the lack of resources that emerged as threats were associated with the lack of government support and, most notably, the lack of MHI policy in Cameroon. The findings from this study revealed that these factors (enablers) are essential to the scheme's sustainability. Having an agent to assist with administrative activities at the health facilities, an assessor to evaluate the receipts, and the payment method (capitation) positively influences service delivery and improves the quality of services, leading to the scheme's sustainability. The findings are consistent with Ron [43], who explained that capitation, the payment method used by BEHPA, potentially contributes to MHI's sustainability, and those of Adebayo [53], that access to the insurer increases people's willingness to join the scheme.

The findings from this study associated the threats at the system level with the lack of national policy on MHI. Studies from African countries show that the absence of a national policy lower uptake and utilization of MHI schemes [42]. The findings of this study concur with those other scholars (see [56, 57, 58], who explained that a national policy is a foundation; thus, its absence implies that MHI schemes operate in a legal vacuum. In addition, a national policy on MHI will stipulate the government's financial support to the scheme and establish an "umbrella organization" that can support the scheme design and training of personnel [59]. Furthermore, a national policy shall serve as a tool to safeguard against fraudulent and unscrupulous behaviors of members and managers of the schemes. It will help dismiss any doubts that the population might have, thereby protecting and regulating the sector against unscrupulous practices by the members or managers of MHI schemes [58].

## Limitation

The main limitation of our study is that only Adherents were interviewed. However, we argued that the number of and different categories of respondents interviewed and the different data sources enhanced the study's validity. The depth of the respondents' knowledge makes a strong argument for the results we present. In addition, we employed the following measures: interviews were recorded and transcribed, both authors did data analyses, and the themes identified were discussed and agreed upon before they were included in the article, verbatim quotations were included [60], these measures enhanced the trustworthiness of the study [36]. Nevertheless, we are not claiming that our results are definitive, but the underlying assumption in this paper is that the lack of trust by the people of Cameroon in the government health sector and the absence of a national policy on MHI have negative consequences on the uptake, utilization of members and hence, the sustainability of MHI schemes.

## Conclusion

This study found multiple interconnected factors; individual, community, and system factors that influenced uptake and utilization of MHI schemes. MHI schemes can expand coverage and increase access to healthcare services, especially among children, pregnant women, and the vulnerable in the community [6], and prevent the marginalized population from plunging into perpetual impoverishment [11]. The findings from this study revealed that MHI schemes could not perform to the optimum without a national policy. Though this study focused on the BEPHA scheme, the findings raised issues that have broader applicability in implementing MHI in the entire country.

## Abbreviations

BEPHA; Bamenda Ecclesiastical Province Health Assistance; CFA; Communauté financière d'Afrique; FGD; Focus Group Discussion; LMIC; Lower and Middle-Income Countries; MHI; Mutual Health Insurance; OOP; Out-of-pocket Payment; UHC; Universal Health Coverage; USD; United State Dollar; WHO; World Health Organization.

# Declarations

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## Authors' Contributions

FNA conceptualized the study. FNA and NN drafted and revised the manuscript. Both authors read and approved the final manuscript.

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None

## Availability of data and materials

The dataset used for the study is available and can be obtained from the corresponding author on reasonable request

## Ethical Approval and consent to participate:

Ethical clearance for this study was obtained from the Norwegian Center for Research Data (Reference #: 45883). Verbal authorization was sought from the Regional Delegate of Health and BEPHA management in the North-West region. All participants signed an individual consent form

## Consent for Publication

Not applicable

## Competing Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

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## Figures

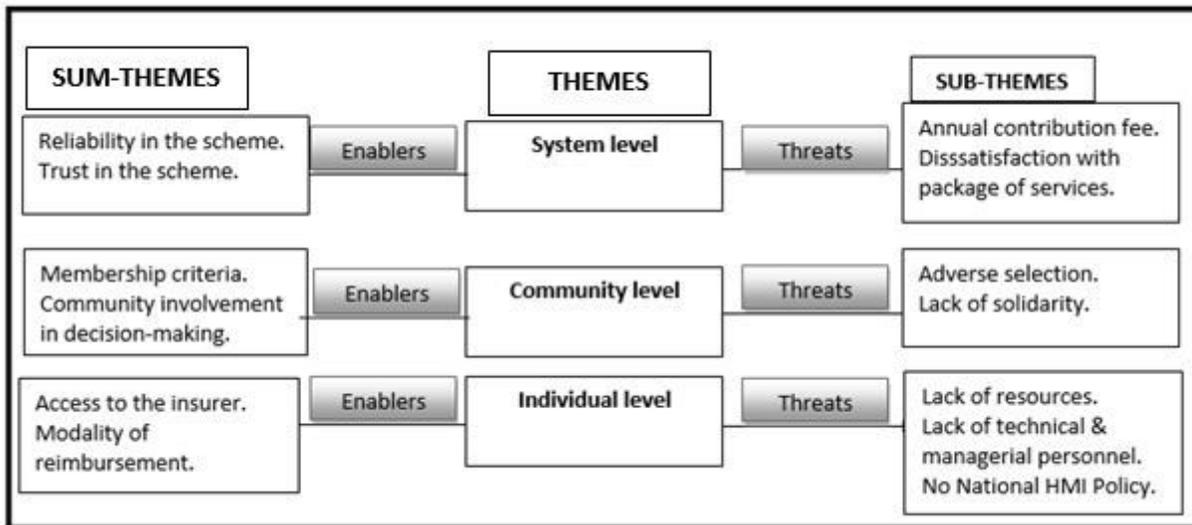


Figure 1

Theme and sub-themes identified