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ASSESSMENT OF EXPERIENCE AND SATISFACTION OF ENROLLEES ON EDO STATE HEALTH INSURANCE SCHEME

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ABSTRACT

Introduction: In order to ensure the success of the national health insurance plan in Nigeria, efforts are being made to attain universal health coverage. It is equally crucial to guarantee enrollee satisfaction with the provision of health services under the program. Similar to this, knowing how satisfied patients are with the program's medical care can help identify any gaps and serve as evidence that the program need improvement. **Objective:** Therefore, the experiences and levels of satisfaction of Edo State Health Insurance Scheme enrollees were assessed in this study. **Methods:** The design used in this study was the survey research design; descriptive statistics which involves the use of frequency and percentage was used, and for the association between variables; Pearson's chi-square was used and the strength of association was determined using Phi and Cramer's V. **Result**: The result of the study revealed that majority of enrollees ranked their experience satisfactory 45.5%, 33.5% indicated that the aspect of the scheme that they were most satisfied with as proximity of the facility to home/work, 66.2% of the enrollees had high expectation of the scheme and after utilization of the scheme 35.8% of the enrollees were impressed. However, some of the enrollees we unsatisfied with the prolonged waiting time at facilities 15.8%, lack of adequate communication by the desk officers at the facilities 15.8% and the poor attitude of the health workers at the facility 37%. Additionally, it was observed that there was an association between satisfaction of enrollees and the examined sociodemographic factors (age and educational level), and majority of the enrollees recommended a more robust package of health services 37.9%, and then making the benefit packages readily available to the enrollees 32.1%. **Conclusion**: Therefore, this study was important because it was necessary to evaluate the experience and satisfaction of enrolees with health scheme in an effort to address some challenges in effective utilization of the health scheme.

KEYWORDS: Satisfaction of enrollees on health scheme, Edo State Health Insurance Scheme, National Health Insurance Scheme, and Social health insurance scheme in Nigeria.

INTRODUCTION

Globally, policymakers are working nonstop to improve access to high-quality, affordable healthcare with a particular focus on the health system. Social health insurance (SHI) has been a key component of the numerous health care finance strategies used globally in attaining this. The SHI offers a platform for raising money to provide health care services for the populace, reduce poverty that might be brought on by the expense of care, and so improve universal health coverage (UHC).[1-3] According to published research, treatment outcomes are greatly influenced by how satisfied patients are with the delivery of health services in areas with inexpensive access to such treatments.[3-4]

Additionally, inadequate access to healthcare and the high cost of healthcare continue to be significant sources of hardship for households around the world. Nearly 100 million people are being forced into extreme poverty due to medical costs, and over 930 million individuals spend 10% or more of their household income on healthcare services, according to the study of Nwanaji-Enwerem et al.[5] The WHO 2030 Sustainable Development Goals include universal health coverage (UHC) as a result of the enormous burden associated with healthcare costs (SDGs). In order to decrease direct payments and user fees for health services, the WHO advised member states to implement either mandatory health insurance, more equal tax systems, or a mix of both.[6] A large number of

African countries started implementing these reforms around the end of the 20th century. Some countries developed national health insurance programs (NHIS) supported by insurance premiums and taxes. Some people chose not to charge for certain disadvantaged populations or priority health services.[7,5] Nigeria is one of the nations with the highest out-of-pocket medical expenses and the lowest health indices worldwide, according to Ahmed and Aliyu.[8] In Nigeria, out-of-pocket medical costs are a significant portion of health spending, which does not support fair access to high-quality healthcare, necessitating the need for financial risk management during illness.[9] One such policy, the National Health Insurance Scheme (NHIS), aims to radically reduce the high reliance on out-of-pocket (OOP) payments in the form of user fees and co-payments, which frequently call into question the core principles of justice within healthcare systems.[8,5]

In Nigeria, efforts are being made to achieve UHC, and it is equally important to guarantee enrollee satisfaction with the provision of health services under the NHIS in order to assure the program's success. Similar to this, understanding how satisfied patients are with the program's health treatment can assist discover any gaps and provide proof that the program needs to be strengthened.[3] As a result, the Edo State Health Insurance Scheme enrollees' perceptions, experiences, and levels of satisfaction were evaluated in this study. Patient satisfaction with services assesses the degree of contentment with services obtained in a health system and serves as a proxy for the quality of medical care.[10] According to studies, satisfaction is linked to the use of healthcare interventions, their follow-up, and adherence to recommended treatment plans.[11-12] The tendency of care recipients to spread knowledge and encourage health intervention among potential beneficiaries may also be increased by their satisfaction with their care.[13] Thus, satisfaction could predict to some extent the sustainability of a health care program after implementation.[14]

Studies have mostly demonstrated that frequent monitoring and assessment are essential activities that are carried out to assure the attainment of the initial reform objectives when countries embark on significant reforms of their health systems.[15-16] However, new people-oriented programs like the NHIS in Nigeria have demonstrated to encounter complaints and objections due to a lack of understanding or simple ignorance, which may have an impact on its uptake among the population.[15-17] As a result, the NHIS's widespread acceptance, which is dependent on participants' knowledge of the program and satisfaction with the services they receive, may account for a sizeable portion of its success.[15] The adoption of NHIS services and enrolee satisfaction with the services provided have also faced a number of impediments and challenges. These barriers include cultural norms, bad facility conditions, low service quality, poor program execution, weak social infrastructure, traditional and religious beliefs, insufficient money, inadequate legislation (weak system), and poor facility environments.[18-19] This study was important because it was necessary to evaluate the experience and satisfaction of enrolees with the scheme in an effort to address these difficulties.

MATERIAL AND METHODS

Preliminary study of the perception, experience and satisfaction of enrolees on the Edo State Health Insurance Scheme.

Sampling Strategy

A list of all health care facilities within the study area; was obtained from the Edo State Ministry of Health. Next, a list of all Edo State Health Insurance Scheme (EDOHIS) accredited facilities was obtained from the Edo State Health Insurance Scheme in Benin. As, for the choice of enrolees, sixty-four ministries, departments and agencies (MDAs) were selected. The selected facilities were visited and the number of enrolees in each of the selected health facilities was verified. Proportionate allocation of the estimated sample size (1500) was done based on the number of enrolees across the selected EDOHIS accredited facilities. All selected healthcare facilities were secondary level facilities (public, private non-faith-based, and private faith-based). Data collection spanned 2 months.

Participants' Selection

A list of EDOHIS enrolees waiting to receive care in the outpatient section of a selected health facility was obtained from the medical records department of the facility. Eligible individuals were the principal enrolees or spouses (excluding dependents under the age of 18 years) and had enrolled in the facility for at least 1 year before the commencement of the study. This was to increase the possibility that study participants had an appreciable level of interaction with the health system under the scheme that will enable appropriate responses from them. Among this population, enrolees who began using the selected facilities before the commencement of the health insurance scheme were excluded from the study as well as enrolees who were health care workers in the selected facilities. The total number of eligible individuals present in the clinic was used to generate a sampling frame. A sampling interval was determined, and systematic random sampling was used to select eligible participants. Systematic sampling was chosen because it eliminates the phenomenon of clustered selection and has a low probability of data contamination. The disadvantage of using a systematic sampling technique is noted and is considered a study limitation. The hospital card numbers of the enrolees who were used as participants were documented and kept safe.

Research Instrument

For this research work, the research instrument adopted was a formal standardized questionnaire. A total of 1500

questionnaires were distributed to enrolees in selected EDOHIS accredited facilities in Edo state. The questionnaire comprised of two main categories:

- Socio-demographic characteristics, including the following: Gender, Marital Status, Grade level, years in service, educational and household size.
- Perception, experience and satisfaction

Data Analysis Techniques

In the analysis of data collected; the statistical tool used was also Statistical Package for Social Sciences, version 22 for windows. Responses were categorized into satisfactory ranked 1 to 3 (very satisfactory, satisfactory and fair) and unsatisfactory ranked 4 to 6 (mildly satisfactory, unsatisfactory and extremely unsatisfactory) and then compared using chi-square and presented as counts and percentages. Based on the level of significance; Asymptotic significance (2-sided) was used, for the association between variables; Pearson's chi-square was used, for symmetric measurement on strength of association; Phi and Cramer's V was used.

Like most statistics test, to use the Chi-Square test successfully, certain assumptions must be met. They are:

- No cell should have expected value (count) less than 0.[20]
- No more than 20% of the cells have expected values (counts) less than 5.[20-21]
- The sample size is sufficiently large. The application of the Chi-square test to a smaller sample could lead to type II error (i.e. accepting the null hypothesis when it is false). There is no expected cut-off for the sample size; however, the minimum sample size varies from 20 to 50.[22]
- The variables under consideration must be mutually exclusive. In other, words no item shall be counted twice.[22]
- Phi and Cramer's V Interpretation; >0.25 Very strong, >0.15 Strong, >0.10 Moderate, >0.05 Weak >0 No or very weak.[23]

The present study's statistical test met all the stated assumptions.

Ethical consideration

Voluntary participation

Respondents were informed of the purpose of the study. They were informed that their participation in the study was voluntary and not paid for. They were also informed that the information provided was strictly for research purposes, and were requested to kindly provide honest responses to ensure the credibility of the study.

Anonymity and confidentiality

The respondents were informed that their identity was confidential and as such their detail of names and picture were not collected.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

RESULT

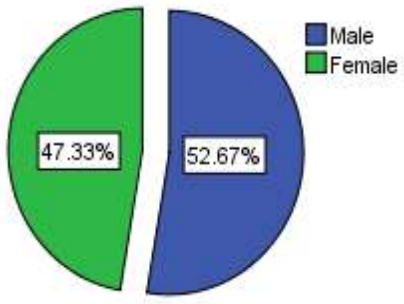

Fig 1a: Gender.

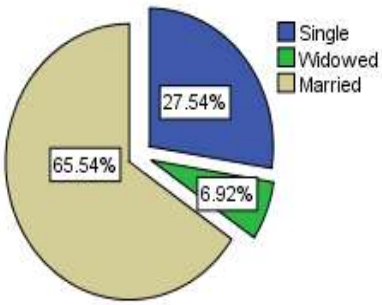

Fig 1b: Marital Status.

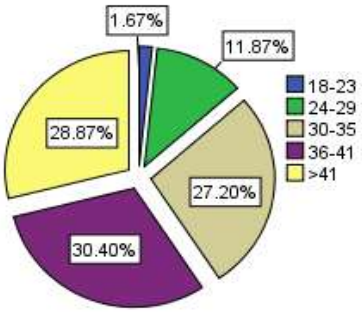

Fig 1c: Age.

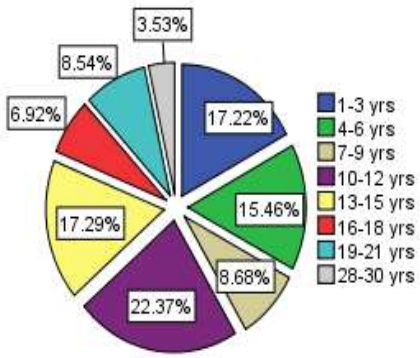

Fig 1d: Years in service

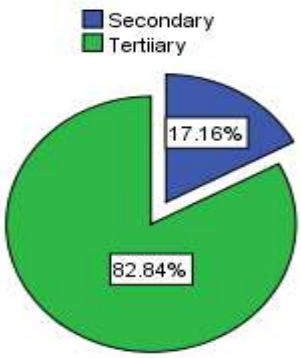

Fig 1e: Educational Status

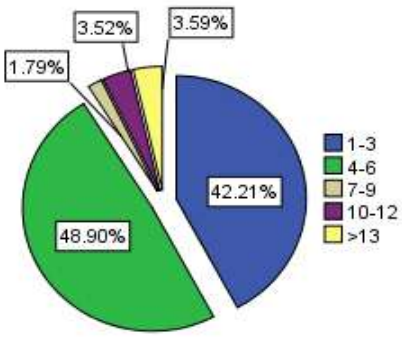

Fig 1f: Household Size

Figure1: Showing Socio-demographic information of the participants.

Six variables representing socio-demographic information of the participants were examined, and the result revealed the following from a study population of one thousand five hundred participants; as per gender, it was observed that the majority of the participants were male (52.67%), the result on marital status shows that a greater proportion of the participants were married (65.54%) and the lesser number of the participants were widowed (6.92%), and for the variable age, it was observed the age bracket 36-41 were the dominant population with 30.40%, followed by >41 (28.87%), then 30-35 (27.20%) and the age 18-23 was found to be the least participating population. Years in service of the participants were also examined and the result revealed that a greater number of the participants (22.37%) had 10-12 years of service. As per the educational status, 82.84% of the participants obtained a tertiary education and finally, the result of the household size of the participants revealed that a greater proportion of the participants 48.90% and 42.21% had 4-6 persons and 1-3 persons respectively as the household size.

Table 1: Experience and satisfaction of enrolees on the Edo State Health Insurance Scheme.

Variables	Frequency	Percentage (%)
How would you rate your experience on the scheme so far	1475	98.3
Very Satisfactory	109	7.4
Satisfactory	670	45.4
Fair	353	23.9
Mildly Satisfactory	115	7.8
Unsatisfactory	127	8.6
Extremely Unsatisfactory	101	6.8
What aspects of the scheme are you most satisfied with?	1449	96.6
The attitude of health workers	380	26.2
Standard of facilities on the scheme	153	10.6
The robust package of services offered on the scheme	76	5.2
Prompt attention to enrolees at the facility	204	14.1
Quality of health care provided to enrolees on the scheme	25	1.7
Adequate communication through desk officer/HMO officers	126	8.7
The proximity of facilities to Home/work address	485	33.5
If you are unsatisfied with the scheme so far, what aspect of the scheme is the most unsatisfactory	1450	96.7
Prolonged waiting time at facilities	229	15.8
Lack of adequate communication by the desk officers at the facilities	229	15.8
Poor quality of services at the facilities	151	10.4
Poor attitude of health workers at the facility	537	37.0
Quality of drugs at the facility	102	7.0
Getting a referral on the scheme	50	3.4
Poor knowledge of the benefit package available on the health plan	152	10.5
Others		
Would you say your expectations of the scheme have been met?	1398	93.2
Yes	434	31.0
No	410	29.3
Not Sure	552	39.5
What were your expectations coming into the scheme	1423	94.9
High expectations	942	66.2
Indifferent	127	8.9
Low expectations	76	5.3
Moderate expectations	278	19.5
Compared to your expectations before enrolment how would you rate your feelings at this time?	1423	94.9
Disappointed	227	16.0
Impressed	506	35.8
Indifferent	177	12.4
Yet to make up your mind	510	35.8
What are your recommendations to improve the scheme?	1423	94.9
More robust package of health services	539	37.9
More frequent training of desk officers and HMO facilitators	201	14.1
On boarding more facilities on the scheme	226	15.9
Making the benefit packages available to the enrolees	457	32.1

Participants responses on experience and satisfaction with health care service provision of Edo State Health Insurance Scheme were collected and analyzed via a well-structured questionnaire and the result revealed the following; as per the question, how would you rate your experience with EDOHIS? it was clear that majority of enrollees ranked their experience satisfactory 45.5% and a few number of the enrollees reported their experience as unsatisfactory 8.6% and extremely unsatisfactory 6.8%. the as aspect of the scheme that the enrollees were most satisfied with was examined and the result revealed that a greater proportion of the enrollees reported proximity of facilities to Home/work address 33.5%, and then the robust package of services offered on the scheme 26.2%. Additionally, what aspect of the scheme were most unsatisfactory was also examined, and the it was observed that the enrollees were most unsatisfied with the poor attitude of the health workers at the facility 37%, then lack of adequate communication by the desk officers at the facilities 15.8%, and prolonged waiting time at facilities 15.8%. as the question, would you say your expectations of the scheme have been met? Majority of the enrollees were not sure 39.5% and lot others 29.3% reported that their expectation was not met by indicating "No". the expectation of the enrollees coming into the scheme was also examined, and the result revealed that a huge number of the enrollees reported that they had high expectation 66.2% and, a comparison of their expectation before and after enrolment revealed that 35.8% were undecided and 35.8% were impressed. Finally, the enrollees were asked to make recommendation to improve the scheme, and majority of the enrollees recommended a more robust package of health services 37.9%, and then making the benefit packages available to the enrollees 32.1%.

Table 2: Relationship between satisfaction of enrollees on EDOHIS and the variables age and educational level.

Age	How would you rate your experience of the scheme		Total (N)	Pearson Chi-Square	Assymp. Sig. (2-sided)	Phi	Assumption (not violated)
	Satisfactory	Unsatisfactory					
18-23	25		25	592.860	0.000	0.634	4 cells (13.3%) have expected count less than 5.
24-29	142	36	178				
30-35	306	102	408				
36-41	355	101	456				
>41	304	104	408				
Total (N)	1132	343	1475				
Educational Level							
Secondary	152	76	228	204.660	0.000	0.376	0 cells (.0%) have expected counts less than 5.
Tertiary	954	213	1167				
Total (N)	1106	289	1395				

A non-parametric test (Chi-square) was used to test the hypothesis of an association between satisfaction of enrollees on EDOHIS and the variables age and educational background (Table 2). Additionally, phi and Cramer V was then used to determine the strength of association, and $p<0.05$ was considered significant. In this light, the following hypothesis was tested.

Ho_1: There is no association between age and satisfaction of enrollees on EDOHIS

HA_1: There is an association between age and satisfaction of enrollees on EDOHIS

Ho_2: There is no association between educational level and satisfaction of enrollees on EDOHIS

HA_2: There is an association between educational level and satisfaction of enrollees on EDOHIS

Hypothesis 1: Pearson Chi-square value = 592.86, p-value = 0.00 < 0.05, Phi value = 0.634 > 0.25 Very strong. Since the p-value of 0.00 is less than the accepted significance level of 0.05 (P < 0.05), therefore, the null hypothesis (Ho) was rejected and the alternative hypothesis (HA) accepted. Hence, the data revealed that there is an association between age and satisfaction of enrollees on EDOHIS.

Hypothesis 2: Pearson Chi-square value = 204.66, p-value = 0.00 < 0.05, Phi value = 0.376 > 0.25 Very strong. Since the p-value of 0.00 is less than the accepted significance level of 0.05 (P < 0.05), therefore, the null hypothesis (Ho) was rejected and the alternative hypothesis (HA) accepted. Hence, the data revealed that there is an association between educational level and satisfaction of enrollees on EDOHIS.

DISCUSSION

Healthcare finance is essential to the development of a nation's health system and continues to be a crucial element in establishing universal health coverage (UHC). In recent years, many low and middle-income countries, including Nigeria, have prioritized equal access to high-quality healthcare as part of their efforts to achieve UHC.[24-25] It is crucial to ensure enrollee satisfaction with the delivery of health services under the NHIS in order to ensure the program's success as efforts are made in Nigeria to achieve UHC. Similar to this, knowing how

satisfied patients are with the program's medical care can help identify any shortcomings and serve as evidence that the program needs to be better.[3,26] As a result, the Edo State Health Insurance Scheme enrolees' experiences and levels of satisfaction were evaluated in this study. The first section of the study examined the socio-demographic information of the participants and the result revealed the following in respect to dominance; 52.67% were male, 65.54% married, 30.40% were in age between 36-41, 22.37% had 10-12 years in service, 82.84% obtained a tertiary education and finally, 48.90% had 4-6 persons as household size. In comparison to other studies conducted in Nigeria on satisfaction of enrollees on health care services within the National Health Insurance Scheme, the result on sociodemographic variables of this study was found to correspond to the study of Nwankwor et al.[15] on enrollees within the National Health Insurance Scheme in Enugu State, Southeast Nigeria, Adewole et al.[3] among National Health Insurance Scheme Enrollees in Ibadan, Southwest Nigeria, and Ewulum et al.[4] among enrollees of National Health Insurance Scheme in north-central Nigeria.

The second section of this study examined satisfaction of enrolees healthcare services within Edo State Health Insurance Scheme (EDOHIS). Patient satisfaction measures the level of contentment with services received in a health system and acts as a benchmark for the standard of medical care.[10] Studies have shown that the utilization of healthcare interventions, their follow-up, and adherence to suggested treatment plans are all associated with patient satisfaction.[10-11] Their experience with their care may also boost the propensity of care recipients to share information and promote health intervention among potential beneficiaries.[13] As a result, after a health care program is implemented, satisfaction may be used to forecast, to some extent, its durability.[14] Similarly, social health insurance scheme (SHIS) have the potential to successfully support a country move toward UHC by mobilizing additional domestic resources for health via premiums/contributions, implementing critical organizational change for better quality and efficiency of the health system, and providing better coverage through increased financial risk protection, particularly for the poor,[24] Nigeria's healthcare system is currently implementing SHIS.[26,24] In place to avert Nigerians from having to pay for healthcare out of pocket, the federal government of Nigeria has mandated that all states set up and maintain mandatory state health insurance programs. This is in accordance with the passage of the health insurance bill.[27-29] Some states in Nigeria have begun the process of establishing State Health Insurance Schemes to fill the coverage gap, and Edo State prides to be among the states that have established and implemented health insurance bill resulting to the establishment of the Edo State Health Insurance Scheme (EDOHIS). Several studies have evaluated users' satisfaction with public and private health care services in Nigeria.[30-32,10] However, no studies have evaluated enrollees satisfaction and its determinants in the context of Nigeria NHIS particularly EDOHIS and as such highlighting this study as the pioneer. Enrollees responses on the satisfaction with health care service provision of Edo State Health Insurance Scheme (EDOHIS) revealed that that majority of enrollees ranked their experience satisfactory 45.5%, 33.5% indicated that the aspect of the scheme that they were most satisfied with as proximity of the facility to home/work and then the robust package of services offered on the scheme 26.2%, 66.2% of the enrollees had high expectation of the scheme and after utilization of the scheme 35.8% of the enrollees were impressed. However, some of the the enrollees we unsatisfied with the prolonged waiting time at facilities 15.8%, lack of adequate communication by the desk officers at the facilities 15.8% and the poor attitude of the health workers at the facility 37%. Given this, efforts to enhance the effectiveness of the health insurance program and the results of treatment must take into account the key factors that affect patients' and enrollees' satisfaction.[3] However, factors such as waiting times, the availability of necessary medical equipment, the attitude of facility staff, the facility's physical surroundings, and other healthcare supplies frequently affect patients' and enrollees' experiences and satisfaction.[1] According to a recent study, significant improvements can be made to the NHIS and Nigeria's larger healthcare system by concentrating on specific NHIS domains like wait times, the attitude of healthcare workers at the facility, laboratory and pharmacy services, and the robust package of services offered on health schemes.[5] Lastly, the enrollees were asked to make recommendations to improve the scheme, and majority of the enrollees recommended a more robust package of health services 37.9%, and then making the benefit packages available to the enrollees 32.1%. these recommendations may be considered as improvement-oriented solutions that will be invaluable for translating what is presently tremendous potential to healthier lives for all Nigerian citizens.

The final section of the study examined the relationship between satisfaction of enrollees on Edo State health scheme and the variables age and educational level. As a result, there have been conflicting opinions regarding the relationship between some sociodemographic characteristics and enrollee satisfaction. The majority of research concluded that sociodemographic factors such as age, sex, marital status, and education levels have an impact on satisfaction, despite other studies claiming otherwise.[33-35] The finding of this study is in agreement with the popular believe, and as such the study observed an association between satisfaction of enrollees and the examined sociodemographic factors (age and educational level). Separate research carried out in developing and developed countries linked satisfaction with educational level to validate the relationship between educational level and satisfaction.[36-37] In separate investigations,

Victoor et al.[38] and Geberu et al.[39] confirmed that literacy level affects satisfaction. It is critical to note that at this point, children must be in good health in order to attend school and engage in other activities, and that employees must be in good health in order to work.[34] Therefore, this study was important because it was necessary to evaluate the experience and satisfaction of enrolees with health scheme in an effort to address some challenges in effective utilization of the health scheme.

CONCLUSION

Patient satisfaction with services measures the degree of satisfaction with services attained in a health system, serves as a representation of quality of medical care and could forecast to some extent the sustainability of a health care program after implementation. In this light of this, it was observed that majority of enrollees ranked their experience with EDOHIS satisfactory, indicated that the aspect of the scheme that they were most satisfied with was proximity of the facility to home/work. A vast proportion of the enrollees had high expectation of the scheme and after utilization of the scheme, a reduced number of the enrollees were impressed. Even so, some of the enrollees we unsatisfied with the prolonged waiting time at facilities, lack of adequate communication by the desk officers at the facilities and the poor attitude of the health workers at the facility. Additionally, it was observed that there was an association between satisfaction of enrollees and the examined sociodemographic factors (age and educational level), and majority of the enrollees recommended a more robust package of health services, and then making the benefit packages readily available to the enrollees. Therefore, this study was important because it was necessary to evaluate the experience and satisfaction of enrolees with health scheme in an effort to address some challenges in effective utilization of the health scheme.

Conflict of Interest

None.

Funds

None.

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