



Research Article

Knowledge and Perceptions of Universal Health Coverage Among Health Professionals of the South West Region of Cameroon

Connaissances et Perceptions de la Couverture Santé Universelle parmi les Professionnels de la Santé dans le Sud-Ouest du Cameroun

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Key words : universal health coverage; knowledge; perceptions, healthcare workers

Mots clés : couverture maladie universelle ; connaissance; perceptions, travailleurs de la santé

Article history

Submitted: 13 September 2024

Revisions requested: 6 October 2024

Accepted: 15 October 2024

Published: 26 October 2024



ABSTRACT

Introduction. To ensure the effectiveness of Universal Health Coverage (UHC) policies in Cameroon, every individual should have a strong knowledge of their health-care rights and the system that guarantees it. We aimed to determine the knowledge and perceptions of universal health coverage among health care professionals that graduated from Baptist School of Public Health (BSPH) South West Region, Cameroon. **Methodology.** A cross-sectional survey was developed with 12 questionnaires measuring knowledge and 8 questionnaires evaluating perception and distributed through google sheets via E-mail with a consecutive convenience sampling method to achieve the required calculated sample size from March–April of 2020. **Results.** There were 110 respondents. Over 95% agreed that UHC implies that all individuals and communities have access to the full range of quality health services. Over 91% agreed that UHC protects against high out-of-pocket expenditures through the extension of progressive pre-paid pooled funds, which reduce or eliminate the financial risk associated with health costs. On the Perceptions of UHC, 63% and 6% strongly agreed and strongly disagreed respectively that UHC is the best way to ensure access to good quality and affordable health care to all. Also, 60% and 5% Strongly agreed and strongly disagreed respectively that UHC includes the full spectrum of essential, quality health services, while 16% and 7% strongly agreed and strongly disagreed respectively that UHC means people contribute to the cost of their health care through health insurance. **Conclusion.** There is a high knowledge level and positive perceptions towards UHC but with low and incorrect knowledge and perceptions on the definition and concepts of UHC.

RÉSUMÉ

Introduction. Pour assurer l'efficacité des politiques de couverture sanitaire universelle (CSU) au Cameroun, chaque individu doit avoir une bonne connaissance de ses droits en matière de soins de santé et du système qui les garantit. Nous avons cherché à déterminer les connaissances et les perceptions de la couverture sanitaire universelle chez les professionnels de santé diplômés de l'Ecole Baptiste de Santé Publique (EBSP) de la région du Sud-Ouest, au Cameroun. **Méthodologie.** Une enquête transversale a été élaborée avec 12 questionnaires mesurant les connaissances et 8 questionnaires évaluant la perception et distribuée via google sheets par courrier électronique avec une méthode d'échantillonnage de commodité consécutive pour atteindre la taille d'échantillon calculée requise de mars à avril 2020. **Résultats.** 110 personnes ont répondu à l'enquête. Plus de 95 % des répondants sont d'accord pour dire que la CMU implique que tous les individus et toutes les communautés aient accès à une gamme complète de services de santé de qualité. Plus de 91 % des personnes interrogées estiment que la CMU protège contre les dépenses personnelles élevées grâce à l'extension des fonds communs prépayés progressifs, qui réduisent ou éliminent le risque financier associé aux coûts de la santé. En ce qui concerne la perception de la CMU, 63 % et 6 % des personnes interrogées sont respectivement tout à fait d'accord et tout à fait en désaccord avec l'affirmation selon laquelle la CMU est le meilleur moyen d'assurer l'accès de tous à des soins de santé de bonne qualité et abordables. En outre, 60 % et 5 % respectivement sont tout à fait d'accord et tout à fait en désaccord avec l'idée que la CSU inclut l'ensemble des services de santé essentiels et de qualité, tandis que 16 % et 7 % respectivement sont tout à fait d'accord et tout à fait en désaccord avec l'idée que la CSU signifie que les gens contribuent au coût de leurs soins de santé par le biais de l'assurance maladie. **Conclusion.** Le niveau de connaissance et les perceptions positives à l'égard de la CSU sont élevés, mais les connaissances et les perceptions sur la définition et les concepts de la CSU sont faibles et incorrectes.

HIGHLIGHTS

The aim of our study

Knowledge and perceptions of universal health coverage among health care professionals that graduated from Baptist School of Public Health (BSPH) South West Region, Cameroon

Key Results

1. Over 95% agreed that UHC implies that all individuals and communities have access to the full range of quality health services.
2. Over 91% agreed that UHC protects against high out-of-pocket expenditures through the extension of progressive pre-paid pooled funds, which reduce or eliminate the financial risk associated with health costs.
3. On the Perceptions of UHC, 63% and 6% strongly agreed and strongly disagreed respectively that UHC is the best way to ensure access to good quality and affordable health care to all.
4. Also, 60% and 5% Strongly agreed and strongly disagreed respectively that UHC includes the full spectrum of essential, quality health services, while 16% and 7% strongly agreed and strongly disagreed respectively that UHC means people contribute to the cost of their health care through health insurance.

Implications for future practices and policies

Positive perception is crucial for the scale up of UHC. Inclusion of UHC awareness and promotion messages in education programs and curricula for health professionals is recommended.

INTRODUCTION

In 2023 about 3.51% of Cameroon’s GDP is projected to be spent on health expenditure and medical services per capita is expected to be \$ 11 [1]. Despite the recommendation made in the Abuja Declaration in 2021 by African heads of state for countries to allocate 15% of their national budget to the health sector each year, Cameroon has never exceeded 7.07%[2]. In 2019, out of pocket health expenditure was about 72.5% in Cameroon signifying a high potential for catastrophic health expenditures among households [3]. The potential impact of out-of-pocket-payments in delaying or reducing access to appropriate care is quite significant in Cameroon, where approximately 37% of the population lives below the poverty line [4]. The effects of low healthcare expenditure are reflected in the inferior health outcomes compared to other middle income countries. In 2023 infant mortality rate in Cameroon was 54/1000 livebirths, which is actually over two times higher than the global level of 26 deaths/1000 livebirths [5]. The rate remains very high and the country is not on track towards achieving the Sustainable Development Goal (SDG) of 70 maternal deaths per 100000 live births by 2030 [6]. Universal Health Coverage (UHC) has emerged as a key reform for the health sector in order to provide access to quality and affordable health services for all [7]. UHC is aimed at ensuring that everyone has access to basic quality health care services irrespective of their socio-economic

status and geographical location[8]. Although the government of Cameroon has been developing strategies for the implementation of UHC, recent statistics show that Cameroon still has a low UHC-SCI of 46 (below the 66 norm), while other African countries such as Algeria, Morocco, and South Africa had high scores of 78, 70, and 69, respectively [9]. Some of the current policies being implemented include user fee elimination for malaria treatment among children under 5 years, consultation fees for people living with HIV (PLHIV), anti-retroviral therapy, TB medication and some lab tests [10]. In addition, Cameroon has also opted for a biometric registration system into the UHC scheme [11]. The success of implementing the UHC depends on health care workers’ understanding of the key principles involved in UHC [12]. There are four basic principles including universality, national solidarity, general responsibility of the state, and mandatory affiliation [13]. Health care workers are important channels for the dissemination of health information and play a key role in the implementation of health policies at the operational level so their perception an influence in their contribution to the effective implementation of UHC [14]. This means that the achievement of UHC targets will depend very much on the knowledge and perceptions of health professionals. To the best of our knowledge no study has been done on the knowledge and perceptions of UHC among healthcare workers in Cameroon. Therefore the aim of this study is to assess the knowledge and perceptions of UHC among healthcare workers who had graduated from Baptist School of Public Health, Mutengene (BSPH).

PATIENTS AND METHODS

Study Population and design

This study was conducted among 110 health professionals who had graduated from the BSPH. It was a cross-sectional study using a structured questionnaire conducted from March–April of 2020.

Sampling

A convenience sampling method was used where though the actual sample size was 92 every eligible member identified was interviewed. Sample Size Calculation

$$S = \frac{X^2 \cdot NP(1 - P)}{d^2(N - 1) + X^2P(1 - P)}$$

X=1.96 because the Confidence interval is 95%
 P is Population Portion (50% gives the max sample size, the min is 30%)
 d is degree of accuracy (usually 0.05, when X=1.96 at 95% CI)

N=Estimated Population, here is 120

Thus

$$S = \frac{1.96^2 \cdot (120)(0.5)(1 - 0.5)}{0.05^2(120 - 1) + (1.96)^2 \cdot 0.5(1 - 0.5)}$$

$$S = \frac{3.8416x60x0.5}{0.0025x119 + 3.8416x0.5x0.5}$$

$$S = \frac{115.248}{1.2579}$$

$$S = 92$$

Therefore, the actual sample size will be 92.

The data was collected electronically using a Google form where the questionnaire was uploaded online and the link shared with the respondents. The data was downloaded and exported into SPSS through Excel

Inclusion and exclusion criteria

The study included all graduates from the BSPH from 2017 who are currently serving in a health institution. Those excluded were graduates who are incapacitated in any way; ill health, mental health disorder and those not currently working in a health facility.

Ethical approval

Ethical clearance was obtained from the Cameroon Baptist Convention Health Services Institutional Review Board (CBCHS IRB).

RESULTS

There were 110 respondents of whom 57 (52%) were males. Respondents were of different age groups 67 (31%) between 25-40 years, 21 (19%) between 41-50 years, 18 (16%) between 51-60 years 3 (3%) between 61-70 years and 1 (0.9%) above 71 years. A total of 71 (64.5%) respondents were married and 39 (35.5%) were single.

Table 1. Knowledge of Health Professionals on Universal Health Coverage (UHC)

| Questions | Yes (%) | No (%) |
|---|---------------|-----------|
| UHC means that all people, individuals and communities have access to the full range of quality health services they need. | 105 (95.5) | 5(4.5) |
| The health systems for UHC are governed by service delivery, health financing and governance. | 106(96.4) | 4(3.6) |
| UHC means that all individuals and communities receive the health services they need without suffering financial hardship. | 93(84.5) | 17(15.5) |
| Essential health services encompass everything from health promotion to prevention, treatment, rehabilitation and palliative care throughout the course of a lifetime | 106(96.4) | 4(3.6) |
| UHC protects against high out-of-pocket expenditures through the extension of progressive pre-paid pooled funds, which reduce or eliminate the financial risk associated with sudden, unpredictable health costs. | 101(91.8) | 9(8.2) |
| The actions towards the implementation of UHC are Health care financing, service delivery and governance. | 106(96.4) | 4(3.6) |
| The UHC guiding principles for Cameroon include expanding service package to include more services, cover the entire population & reduce out of pocket payments. | 91(82.7) | 19(17.3) |
| Do you believe that Cameroon’s health system provides all of its population (nationals and residents) with effective and sufficient health services? | 7(6.4) | 103(93.6) |
| Do you believe that Cameroon’s health system protects all of its population (nationals and residents) from financial burdens due to medical expenses? | 8(7.3) | 102(92.7) |
| Do you believe that mandatory cooperative health insurance is a good method for achieving Universal Health Coverage in Cameroon(UHC)? | 78(70.9) | 32(29.1) |
| Do you believe providing free public healthcare is good method for achieving UHC? | 82(74.5) | 28(25.5) |
| Do you believe that people should get the choice between acquiring health insurance or paying out of pocket for medical services? | 91(82.7) | 19(17.3) |

Table 2. Perception of Health Professional on Universal Health Coverage (UHC)

| Statement | SA (%) | A (%) | N (%) | D(%) | SD (%) | Mean | SD | Decision |
|---|---------|---------|---------|---------|--------|------|-------|-----------------|
| UHC is everyone receiving free health care services | 20(18) | 21(19) | 13(12) | 45(41) | 11(10) | 2.95 | 1.319 | Low Perception |
| UHC means people contribute to the cost of their health care through health insurance | 18 (16) | 41 (37) | 23 (21) | 20 (18) | 8 (7) | 3.37 | 1.172 | Low Perception |
| UHC is not only for children and vulnerable groups. | 44 (40) | 47 (43) | 7 (6) | 8 (7) | 4 (4) | 4.08 | 1.042 | High Perception |
| Accessible health services means availability of health units in every community | 42(38) | 34 (31) | 8 (7) | 19 (17) | 7 (6) | 3.77 | 1.297 | Low Perception |
| UHC is the best way to ensure access to good quality and affordable health care to all | 69 (63) | 31 (28) | 4 (4) | 0 (0) | 6 (6) | 4.43 | 0.990 | High Perception |
| UHC includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care | 65 (59) | 38 (35) | 2 (2) | 0 (0) | 5 (5) | 4.44 | 0.914 | High Perception |
| UHC can reduce and or eliminate the financial risk associated with sudden, unpredictable health costs. | 51 (46) | 46 (42) | 9 (8) | 1 (0.9) | 3 (3) | 4.28 | 0.869 | High Perception |
| UHC’s benefits extend beyond just health and have wider, positive effects on society at large. | 54 (49) | 42 (38) | 9 (8) | 1 (0.9) | 4 (4) | 4.28 | 0.930 | High Perception |

Reliability is the measure of the internal Consistency of the construct in the study. A study is reliable if the Alpha value is >0.7 (Hair et al, 2013). Construct reliability was assessed using Cronbach’s Alpha (Table 1). This results revealed that perception of Health Professional scale with 5 items ($\alpha=0.726$) was found reliable. A total of 94 (86%) of respondents preferred to visit private facilities, 9 (8%) preferred others, 4 (4%) had no preference and 3 (3%) preferred the government (Figure 1, 2).

| Function | Frequency | Percent |
|--|-----------|---------|
| Administrator/Manager/Director | 5 | 4 |
| Nursing care practice | 11 | 10 |
| Nutrition counsellor | 7 | 6 |
| Other (specify): _____ | 32 | 29 |
| Pharmacy production assistant | 19 | 17 |
| PMEL officer | 9 | 8 |
| Public Health expert/Community health worker | 7 | 6 |
| Quality Assurance and Control officer. | 9 | 8 |
| Supervisor | 10 | 9 |
| Teacher | 1 | |
| Total | 110 | 100 |

Figure 1. Role of health professional in implementation of the UHC, function

| Highest Qualification | Frequency | Percent |
|-----------------------|-----------|---------|
| Bachelors | 23 | 20.9 |
| Certificate | 8 | 7.3 |
| Diploma | 73 | 66.4 |
| Master | 5 | 4.5 |
| PhD | 1 | .9 |
| Total | 110 | 100.0 |

Figure 2. Highest qualification of the participants

A total of 46 (42%) of respondents provide education often on UHC, 35 (32%) rarely give education, 18 (16%) give education very often and 11 (10%) do not give at all. A total of 59 (54%) respondents had sensitized between 1-100 people, 24 (22%) between 101-200, 11 (10%) >300,

2 (1.8%) between 201-300 and 14 had not sensitized anyone (Table 2).

DISCUSSION

Demographic Information

The high participation rate, 91.6% provides an assurance of the reliability and honest information that was received.

Knowledge of Health Professionals on Universal Health Coverage (UHC).

UHC means that all people, individuals and communities have access to the full range of quality health services they need, when and where they need them, without financial hardship [15]. Overall, from this study, knowledge on UHC was quite high as over 80% of the respondents exhibited some knowledge on the components in definition of UHC. This is consistent with other studies [16] where though most people (96.84%), had good knowledge on UHC only 33% had detailed knowledge on the objectives of National Health Insurance. Similarly, in the result of a Kenyan study, there was high awareness of health insurance schemes but limited knowledge on the functionality as well as full understanding of key concepts related to income and risk cross-subsidization[17]. About 7% accepted that Cameroon’s health system does not protect all of its population from financial burdens and that the health system does not provide all of its population with effective and sufficient health services. This is consistent with findings from other studies [18] where the UHC concept is of utmost importance considering the very high levels of out-of-pocket health expenditures and fragile health system. Though Cameroon has set up good targets to improve on UHC services, such targets are far from being implemented and evaluated because of the huge pool of informal workers and the high level of mistrust citizens. The concept of UHC in Cameroon remains more of a theoretical than practical phenomena [18].

The perceptions of health professionals on UHC

Though positive perceptions of UHC among health professional is crucial for UHCs implementation, the progress towards UHC is often perceives as a political process that entails many health policy reforms[11]. In this study majority of respondents had a high and positive perceptions indicating that UHC is not only for children and vulnerable groups. Participants also remarked that UHC can reduce and or eliminate the financial risk associated with sudden, unpredictable health costs. The benefits of UHC extend beyond just health like having a wider, positive effects on society at large. On the other hand, some of the respondents had a low and incorrect perception on the component definition of UHC saying that it is everyone receiving free health care services. Other responded that UHC means people contribute to the cost of their health care through health insurance and that accessible health services mean availability of health units in every community. This is in contrast to a WHO key facts where UHC occurs when both the general and most disadvantaged or vulnerable population have accessible and affordable essential health services when and where they need them, without financial hardship or out of

pocket payment[15]. However, a low level of knowledge on UHC policies and practices is reported even among the health professionals though with a generally positive perception and attitudes toward them [19]. The percentage of respondent preferring private health facilities from others was high with reasons related to reduced costs, accessible quality and proper care. *“I prefer mission hospital in Cameroon because they work with truth and fear God so adding prayers to the care you have God's backing”*. This means that improvement of customer service, involvement and education of health workers can contribute to the improvement of the UHC agenda [20].

The Impact of Education on the UHC

Education programs must be intentionally prepared and tailored towards promoting and communicating the significance of UHC so as to ensure the achievement of UHC targets [21]. This will significantly improve the knowledge and importance of UHC, thus contributing to the achievement of Sustainable Development Goals. At the start of the training programs at BSPH, little attention was attached to ensuring that the curricula capture the aspects of UHC in Cameroon. This has limited the approach and effective communication on the importance of UHC. The participants responded that their study has improved their knowledge on UHC as well as their skills in promoting health and prevention of diseases through continuous sensitization and empowering the community. One participant remarked, *“My knowledge about UHC has been broadened. Initially I thought health care was just about providing services to the people but it's far broader than that”*. This depicts the significance of knowledge in the implementation of the UHC. This is similar to another study where though health workforce challenges remain a critical bottleneck in achieving the goals of UHC, transforming health workers' education for Universal Health Coverage is critical[20]. The engagement of the field/ community or offices to influence UHC is mostly limited to the program content like palliative, logistics and supply chain. Strengthening the educational curriculum for health professional to include studies in public policy and advocacy can make a significant difference in the development and implementation of UHC in healthcare services [22]. This means that though the participant seem to be engaging their community or offices to influence UHC, they do not specifically focus on UHC as most of them who indicated health education provided general information designing data collection tools, proposing health project topics etc. In exploring the role of health professional in the implementation of the UHC, most, 52% responded that they provide education often and very often. But most of the information provided by close to 50% of the respondents was focused on Health Promotion, Disease Prevention on infectious and Non-Communication, Socio-economic empowerment, Child Safe Guarding and Gender equality, Advocacy for persons Living with Disability and the Vulnerable, Awareness of the Health insurance Scheme provided by the Government and other NGO, carry out proper stock management, Checking on themselves if they're are healthy for example "know your

numbers" campaign which encourages people to check their vital signs from time to time to know if they need health care assistance; Early consultation and treatment, Education on malaria and HIV prevention, counselling on dispensing medication to patients and the effects of roadside medicine, Encourage people to register to mutual health financing scheme, the importance of pregnant women visiting the Antenatal Clinics, Vaccination coverage, proper nutrition , safe drinking water, prevention of infectious diseases and Non-communicable Diseases etc, dangers of illicit medicine outlets and the need to only go to licensed healthcare pharmacies for their medication so to avoid the potential of harm from consumption of poor quality medicines, importance of belonging to a health scheme to reduce out of pocket spending and importance of government investing in the health of the citizens. This is consistent with other findings that health insurance has improved accessibility to healthcare, by considerably reducing the cost of care for beneficiaries[24]. The common challenges faced across countries in managing health workers' education to achieve UHC provide rich opportunities for joint learning. The role of health professionals is to contribute critical knowledge and learning that support the achievement of the goals towards UHC[20]. Although a total of 59 (54%) respondents had sensitized and provided much information to people on UHC, this information was not focused on UHC like encouraging people to screen for None communicable diseases, early consultation and treatment etc. Although much has been achieved in organizing the demand for health care, much still has to be done especially in organizing the supply of resources [23]. The acute shortage of qualified personnel is however a major problem facing the supply of health care in Cameroon. This is aggravated by geographic distributional inequalities of the national health workforce and the absence of basic infrastructure and equipment in health facilities [23]. Therefore, the training content for health professional should have components of UHC. Targeted and focused approach for promoting the inclusion of training packaged on and communicating UHC is likely to improve its credibility and effective application. This will consequently increase trained health care professionals, intersectoral collaboration between government authorities, civil society organizations like non-governmental organizations, community health workers, religious and cultural stakeholders) [18].

CONCLUSION

Knowledge of Health Professionals on UHC was quite high as over 80% of the respondent exhibited correct knowledge on the aspects of UHC. Majority of them had a high perception on UHC. However, the information provided to people as well as their perceptions were not focused on UHC. Though the participants engaged the field/ community or offices to influence UHC, this was not specifically focused on UHC. Similarly, of a total of

59 (54%) respondents that sensitized and provided much information to people on UHC, this information was not focused on UHC. Therefore, the training package and curriculum should include the aspect of UHC.

Conflicts of interest

None

List of abbreviations

BSPH :Baptist School of Public Health, Mutengene

SDG : Sustainable Development Goal

PLHIV: Persons living with Human immunodeficiency virus

UHC: Universal Health Coverage

CBCHS IRB: Cameroon Baptist Convention Health Services Institutional Review Board

WHO: World Health Organization

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