

Factors of Attendance at Health Services by Households in the City of Lubumbashi, in the Democratic Republic of Congo (Kisanga Health Zone: Case of GRH la Foi)

Bonaventure Kazembe Kibwe¹, André Ngombe Kaseba^{2*}, Eleuthère Muse Kikuswe²,
Didier Chuy Kalombola³, Gift Cilubula Mwelwa¹, Ghislain Ngongo Mashini²

¹Provincial Health Division of Haut-Katanga, Provincial Coordination of Leprosy and Tuberculosis, Lubumbashi, Democratic Republic of Congo

²School of Public Health, University of Lubumbashi, Lubumbashi, Democratic Republic of Congo

³Medical Technical Institute Lubumbashi, Lubumbashi, Democratic Republic of Congo

Email: *andrekaseba86@gmail.com

How to cite this paper: Kazembe, K. B., Ngombe, K. A., Muse, K. E., Chuy, K. D., Cilubula, M. G., & Ngongo, M. G. (2025). Factors of Attendance at Health Services by Households in the City of Lubumbashi, in the Democratic Republic of Congo (Kisanga Health Zone: Case of GRH la Foi). *Voice of the Publisher*, 11, 4-16.

<https://doi.org/10.4236/vp.2025.111002>

Received: August 9, 2023

Accepted: January 24, 2025

Published: January 27, 2025

Copyright © 2025 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Introduction: Patient attendance at health services constitutes a public health problem; in the Democratic Republic of Congo, two-thirds of patients do not use the formal health system to obtain care. This study aimed to determine the factors that influence attendance at health services at the Foi General Reference Hospital in the Kisanga Health Zone. **Methods:** We conducted a cross-sectional descriptive study based on data from a survey of 422 heads of households. Those participants who consented to participate in the study were interviewed using a previously established questionnaire supported by the interview. For data analysis and processing, we used Microsoft Excel 2010 and Epi-info v. 7.2.2.6 software. **Results:** We found that 100% (n = 422) of our respondents had knowledge about the General Reference Hospital la Foi and 94% (n = 405) of them had already visited it. The low use of health services was associated with the following factors: The high cost of care (69.4%), the low daily income (91.2%), and the majority of respondents attended the GRH la Foi only once (45.4%). The quality of care (47.7%), reception (19.8%), cleanliness (12.3%), and proximity (9.1%) are associated with household attendance at the GRH la Foi. **Conclusion:** The quality of care at GRH la Foi is a major reason for attendance and the high cost of care is a major factor associated with the low utilization of GRH la Foi. This hospital should therefore improve the pricing of the care they offer to the population.

Keywords

Factors, Attendance, Services, Hospital, Households

1. Introduction

For more than two decades, the utilization of health services has been negatively affected in some regions of the world. According to World Health Organization, the utilization rate of health facilities in most Asian and African cities is relatively low and this constitutes a public health problem worldwide (Chenge, 2011).

In 2009, the International Development Association (IDA), one of the main donors of development aid, financing projects, particularly those supporting health, in the 79 poorest countries on the planet (including 39 African countries), found that the rate of use of health services had almost doubled, going from 20% in 2005 to 39% in 2009 (Mashini, 2010). In these countries, the rate of use of health services had never exceeded 50% until 2009. The evaluative studies of health programs in sub-Saharan Africa carried out in 2009 showed that in this region, the low access and use of health structures are formidable; 70% of cases of diseases in rural areas and 50% in urban areas are treated at home (Foutain & Courte Joie, 2006).

According to WHO-Afro, the rate of use of health services in the DRC is 38%, and the average bed occupancy rate is 34.9%. In terms of infrastructure and service provision, accessibility to a health service remains very low with only 26% of the population within 5 kilometers of a health facility (Chenge, 2011).

In 2010, studies on the health care system in sub-Saharan Africa revealed that the attendance rate of health districts is very low, 0.24/year in Mali, 0.34 in Burkina Faso, and 0.30 in Benin even if the infrastructure is present (Tulinabo, 2006). The Democratic Republic of Congo (DRC) is not spared from this scourge because a study carried out in 2004 by the National Institute of Statistics showed that 70% of its population had no or very little access to health care and 37% of whom had no form of health care (Mulenga et al., 2013). The disengagement of the State since 1982 has drastically increased the cost of care, leaving health services out of reach of the poorest populations. Demands for additional payments are common, and insolvent patients are often forcibly kept in hospitals until they pay for the care they receive (Munyamahoro & Ntaganira, 2012).

In the report of the Diocesan Service of Medical Works (BDOM) of February 10, 2011 of Bukavu and Kinshasa, the rate of use of curative drugs in their health facilities is respectively 49% and 24% in 2010 (Gomes do Espirito Santo et al., 1998). In certain provinces, notably Katanga, for all cities, the average rate of use is 0.37 new cases/inhabitant/year. The factors highlighted are the quality of services and precarious financial accessibility (Carbucia et al., 2003).

Two-thirds of patients in the Democratic Republic of Congo (DRC) do not use the formal health system to obtain care, either because services are not available

or are of poor quality when they exist, or because they do not have the financial means to access them (ESP/UNIKIN, 2003). The report on the State of Health and Poverty in the DRC carried out by the World Bank (WB) in 2005 showed that 82% of households are not satisfied with their health care. This largely justifies the low rate of use of the health services offered which is on average 0.15% consultation per inhabitant per year. This corresponds to less than one consultation per person every 6 years (MSP/DRC, 2007).

In the province of North Kivu, a socio-economic and health care accessibility survey conducted in March 2005, observed that the average number of people per household was 6.1 and that more than half of the population had agriculture and/or livestock as their main source of income. The population lived below the poverty line with an average daily income per person of \$0.33. Health was the population's priority problem, and households often resorted to health centers (42%) and pharmacies (28%) in the event of illness. The average number of illness episodes per person per year was 2.4, of which 12% of the sick received no treatment, among whom 37% did not receive it due to lack of money. Households spent 16% of their income on health. The overall average cost was \$4.27 per illness episode, including all expenses in the PNDS, write in 2020.

The study conducted in the Karisimbi Health Zone in Goma in the province of North Kivu in 2006 on the determinants of the low use of curative activities, highlighted several factors, including the cost of care, income and geographical distance (NOVOIB & IPS/North Kivu, 2005).

In terms of infrastructure and service provision, accessibility to a health service remains very low with only 26% of the population located less than 5 kilometers from a health facility (Chenge, 2011). The underuse of health facilities is partly explained by low geographical accessibility of the population to care (MSP/DRC, 2007). In 2007, the first-level health services in the city of Likasi (Katanga) received a total of 137,417 people for consultation, representing an overall use of 0.40 new cases per inhabitant per year (SNIS, 2012).

Access to quality primary health care remains inadequate in most provinces of the DRC, due to the weakness of health coverage and payment practices, which are not based on the principles of universal health coverage. This has, as a corollary, led to the under-use of health care services. Considering the consultations carried out in intermediate structures and in hospitals in the city of Lubumbashi as first contact consultations during the year 2006, for all health care structures, 561,831 new curative consultations were recorded among the population of 1.5 million. The overall rate of use of curative services for the 3 levels of structures combined is therefore 0.37 NC/inhabitant/year (561,831/1,500,000) (ESP/UNIKIN, 2003). In 2011, the annual national health information system report of the Ministry of Health of the province of Katanga showed the rate of use of the curative service at 30 and 32% that of the health district of Haut-Katanga (Florence, 2000).

According to a study conducted by the School of Public Health at the University of Kinshasa in 2003, among family members who fell ill, 30% went to a public or

professional health center, 40% practiced self-medication, 21% received no treatment and 9% consulted a traditional healer, this corresponds to approximately 70% of patients who did not access modern health services (Clothilde, 2012). There appears to be low attendance and underuse of health services at all levels. This study aims to contribute to improving attendance at second-level health services, in particular the GRH la Foi, in the Kisanga Health Zone in 2022. The latest knowledge on attendance at health facilities in the city of Lubumbashi is more than ten years old. It is useful to update them; it is in this context that this study is conducted.

2. Methods

This is a cross-sectional descriptive study that was carried out using a questionnaire submitted to heads of households living in the Annexe Commune in the Kisanga Health Zone. The population concerned by our study consists of all households in the Health Areas of the Kisanga Health Zone (422 inhabitants) who have knowledge of the Foi hospital. For our study, we used non-probability sampling. Here we interviewed all heads of households who have knowledge of the Foi hospital and who have visited it at least once. The Foi General Reference Hospital supports the entire population of the Kisanga Health Zone, which currently has 377,643 inhabitants. We considered 50% as the prevalence of the population using health services in this Health Zone (Clothilde, 2012), because the Management Team did not show the actual proportion using health services. However, a sample of 422 households was drawn according to the following formula:

$$n = \frac{z^2 \times p(1-p)}{e^2}$$

n : Sample

p : Proportion of the population that does not use health services estimated at 0.5

q : The proportion of the population that uses the hospital is estimated at 0.5

Z = 95% confidence level (1.96) or risk of error (5%)

d = Desired accuracy of 5%

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384$$

To avoid non-response issues, we took 10% of the calculated sample to avoid sampling bias; 10% of 384 = 38.4. Hence 384 + 38.4 = 422 households.

For data collection, we conducted interviews with the heads of households, the only ones able to hold the information sought. However, the latter were assisted by their spouses if necessary. For data analysis, we used the Epi-Info software version 7.2.6. And we did the univariate analyses (Frequency analysis); these analyses consisted of determining the frequencies (Absolute and relative) of the qualitative and quantitative variables. The results were presented in the form of tables and graphs (Pie chart, histogram). The data were collected anonymously, with respect

for participation after free and informed consent and the information was confidential.

3. Results

3.1. Characteristics Specific to Providers

Distribution of respondents by gender (**Figure 1**)

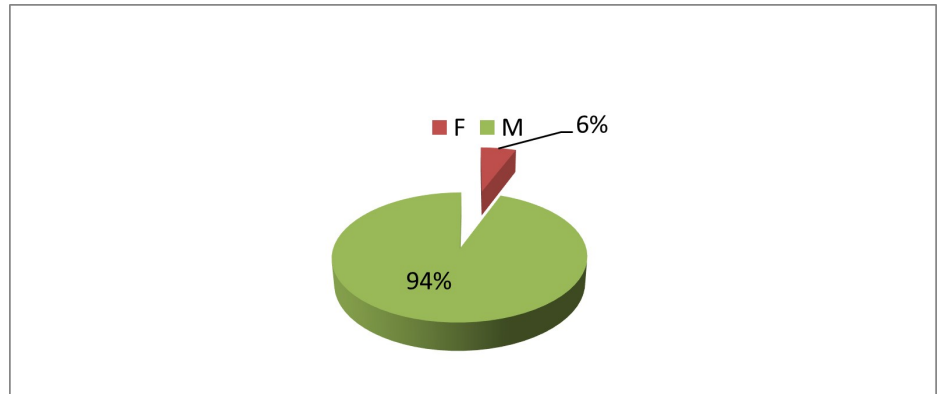


Figure 1. Distribution of respondents by gender.

It is clear from the figure above that 398 or 94% of the respondents are male compared to 24 or 6% of the respondents who are female.

Table 1. Demographic profile and health knowledge indicators among households: Frequency and distribution.

Variables	Frequency	%
Knowledge of GRH la Foi		
Yes	422	100
Hospital attendance		
Yes	405	96
No	17	4
Age of Head of Household		
≤25	29	6.9
[26 - 30]	65	15.4
[31 - 44]	206	48.8
≥45	122	28.9
≤25	29	6.9
Household size		
≤5	191	45.3
6 - 10	214	50.7
Daily Household income		
≤10,000	385	91.2
≥10,000	37	8.8

From the point of view of knowledge of the GRH la Foi, the data analysis shows that all the respondents interviewed know the GRH la Foi with 422 or 100%. As for the Hospital Attendance, **Table 1** shows a predominance of respondents having attended the GRH la Foi with 405 or 96% against 17 or 4% of respondents who have not used the GRH la Foi. In relation to the Age of the head of household, we note a majority of respondents whose age range varies between 31 - 44 years with 206 or 48.8%, the average age is 38.6 years and its standard deviation is 10.03. As for the Household size data analysis shows a predominance of respondents with dependents of 6 - 10 people with a frequency of 214 or 50.7%. Looking at household income, the majority of them had attended the service with a daily income of less than 10,000 FC with a frequency of 385 or 91.2% against 37 or 8.8% of respondents whose daily income was greater than 10,000 FC.

Table 2. Educational attainment, geographic origin, and satisfaction levels among respondents: frequency and distribution.

Variables	Frequency (n = 422)	%
Level of education		
None	4	1
Primary	35	8.3
Diploma	269	63.7
University	114	27
Origin		
Appendix	388	91.9
Katuba	34	8.1
Satisfaction measurement		
Quite satisfied	16	4
Moderately satisfied	12	3
Satisfied	274	67.6
Not at all satisfied	33	8.1
RECO home visit		
Yes	92	21.8
No	330	78.2

Regarding the level of education, **Table 2** reveals that the majority of respondents are secondary school graduates with 269 or 63.7% followed by university respondents with 114 or 27% and finally primary school respondents with 35 or 8.3%, illiterates represent a number of 4 or 1%. In terms of Origin, this table shows a higher frequency of respondents living in the Annexe commune with 379 or 91.9% against 34 or 8.1% of respondents from the Katuba commune. With regard to satisfaction measures, the analysis of the data reveals that the majority of

respondents are satisfied with the care provided at the GRH la Foi with 274 or 67.6% against 33 or 8.1 of the respondents who are not at all satisfied. In relation to the visit to the Community Relay, the table informs us that out of all the respondents 330 or 78.2% declared not having received a RECO at their home.

Table 3. Factors influencing attendance and challenges faced at GRH la Foi: Frequency distribution.

Variables	Frequency (n = 422)	%
Factors influencing attendance at GRH la Foi		
Quality of care	193	47.7
Welcome	80	19.8
Proximity	37	9.1
Doctors on call	5	1.2
Cleanliness	50	12.3
Follow up	25	6.2
Others	15	3.7
Difficulties encountered by respondents to the GRH la Foi		
Worsening cases	4	0.9
Heat	10	2.5
High cost	281	69.4
Death	16	4
Late invoice	11	2.7
Insufficient materials	14	3.5
Lack of water	16	4
No tracking	34	8.4
Small rooms	4	0.9
RAS	15	3.7

Regarding the advantage of attending the GRH la Foi, we note that the majority of respondents stated that they received quality care with 193 or 47.7% followed by those who stated that they were well received (welcome) with 80 or 19.8%, for some the proximity with 37 or 9.1% and for others the permanence of doctors with 5 or 1.2%. As for the difficulties encountered by respondents at the GRH la Foi, the analysis of the data shows the predominance of respondents who stated that the high cost is the main difficulty at the GRH la Foi with 281 or 69.4%, 16 or 4% of respondents who cited death and the lack of water at the hospital. (Table 3)

In relation to the primary care structure, the figure above shows a predominance of respondents who visited the pharmacy as a primary care structure with 110 or 26.1%, followed by 88 respondents or 20.8% of respondents who used the

health center, 47 respondents or 11.1% used self-medication, and 37 respondents or 8.8% used traditional care. (Figure 2)

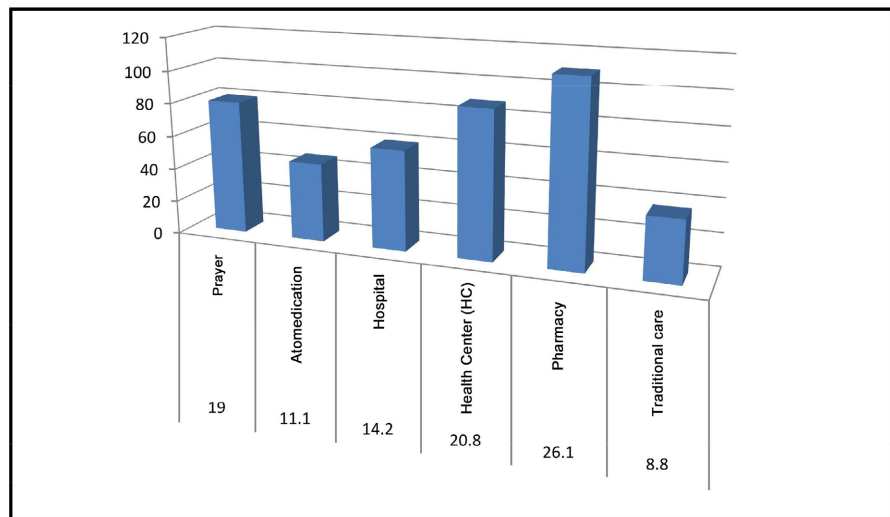


Figure 2. Distribution of respondents according to first recourse before la Foi.

3.2. Characteristics Specific to GRH la Foi Providers

Table 4. Provider demographics, patient attendance barriers, and social status assessment at GRH la Foi.

Variable	Effective	%
Age of providers		
25 - 30	8	26.7
31 - 44	14	47.6
≥45	8	26.7
Origin of respondents according to service providers		
AS	8	26.7
AS, HAS, HZ	18	60
HAS	4	13.3
Factors hindering patients' attendance at GRH la Foi		
Distance from the Hospital	2	6.6
Low technical platform	5	16.7
Low level of education	5	16.7
Low income	10	33.3
High cost	8	26.7
Social status of GRH consultant according to service providers		
Average Status	13	43.3
Poor	17	56.7

The data analysis shows a predominance of female gender with 17 or 56.67% among the providers of the GRH la Foi. In relation to the origin of the respondents, the analysis shows that the majority of providers surveyed state that patients who consult the Hôpital la Foi come from AS, HAS, and HZ with 18 or 60%. As for the factors hindering the attendance of the GRH la Foi by patients, out of all the providers interviewed, 10 or 33.3% reported low household income as factors hindering the attendance of the hospital la Foi, high cost comes second with 8 or 26.7% and finally distance with 2 or 6.6%. According to the providers' own statements on the Social Status consulting the GRH, 17 or 56.7% reported poverty as the social status at the household level of respondents who attended the Hospital la Foi. (Table 4)

4. Discussion

The use of basic health services is one of the key factors promoting better health of populations. However, if the quality of health services is one of the explanations for the level of use, this study tried to show also the importance of a set of other factors that should be taken into account to improve the attendance of health services in the city of Lubumbashi in general and the Annexe commune in particular.

The data from this study will therefore be able to help policy makers, health decision makers, non-governmental organizations and the community in improving the rational use of health services.

4.1. Household-Specific Characteristics

Our study is based on the improvement of the attendance of second-level health services, in particular the GRH la Foi, in the Kisanga Health Zone. After analyzing our results, we found that 100% of our respondents had knowledge of the General Reference Hospital la Foi and 96% (405/422) of them had already attended it. These results differ from those carried out in Rwanda by Magne C. (Izandengera, 2011). The latter found in his study carried out on the factors hindering the good attendance of health structures 81.5% had knowledge of health services and 31.5% of them had used them. The difference in these results depends on the study environment.

Regarding the gender of the household head, 94% of households are headed by men and the rest, 6% by women (Figure 1). Our results are close to those found by Mushagalusha, who found in his study that 89% of households were headed by men and 11% by women in the Kadutu health zone (World Bank, 2009). This situation is far superior to that found in the DRC by Cilundika M. et al., in the Pweto health zone (Grenier, 2009). The latter found that 64.4% of households were headed by men and 35.6% by women. Also, Gomes do Espirito Santion the city of Cotonou in Benin, where the households surveyed were characterized by the relative balance between the numbers of men and women with 48.5% and 51.5% respectively. According to the final MICS-DRC report, in 72% of cases, households are headed by men (World Bank, 2009). All things being said, age is

always a determining factor. In this study, we did not fail to capture information on the age of our respondents, the majority of respondents are in the age group of 31 - 44 years or 48.8% and respondents aged over 45 years or 28.9% had attended the GRH less often (**Table 2**). Compared to the results of Magne C., 25% of respondents whose age group was 51 to 60 years had attended the hospital and 92.22% of those aged over 61 years had not attended the hospital (*Izandengera, 2011*).

Considering the number of people in households (**Table 2**), we found that the proportion of low use was higher in households with more than 6 people (50.7%) than in those with less than 6 people 45.3%. This difference in the proportions of low use is a function of the number of people in households (≥ 6) and low income at household level $\leq 10,000$ fc (91.2%). These results are similar to those found in the Karisimbi health zone where 37.8% of households had less than 6 people and 67.9% of those with more than 6 people (*Fall et al., 2005*). Also, the study of Mulenga et al. showed that the proportion of low use was associated with the number of people in households, with 54.8% of households with more than 7 people and 46.8% of those with less than 7 people (*Grenier, 2009*).

Compared to household income (**Table 2**), 8.8% of our respondents had a daily income of more than 10,000 FC against 91.2% of those who had a daily income of less than 10,000 FC and 69.4% of them claimed a high cost of care at the GRH and 45.4% had attended it only once. These results are close to those of Magne C., which stipulates that 89.93% of respondents had a daily income of less than 7.50 FCFA and 72.9% of them had not attended the hospital and 10.07% of respondents who had attended the hospital, had a daily income of more than 7.50 FCFA (*Serge, 2017*). Also Bushala P., in his study, found 54.6% of respondents with a monthly income of less than \$50 and were unable to access primary health care.

Regarding hospital attendance (**Table 2**), 96% of respondents had attended the GRH on Foi and 4% of respondents had not attended it on the pretext that they belonged to a mutual health insurance company. These results are far from those of Munyamahoro M., who found that 10.2% had not attended modern health services and 89.8% had used modern care structures and 12.9% of them had had a mutual health insurance company (*Olafsdottir et al., 2011*). Very far from the results found by Magne C., the latter found 84.3% of residents belonging to a mutual health insurance company and 23.4% not being mutualists. This low proportion is a function of the lack of information among residents on the importance of the mutual health insurance company (*Izandengera, 2011*).

As for the level of education (Table no 3), we found 8.3% of household heads who had a primary level of education, 63.7% at the secondary level, 27% at the university level and illiterate with 1%. These results differ from those found by Magne C., which found 9.37% of secondary level, 46.88% of primary level, 43.75% illiterate and no respondents at university level (*Izandengera, 2011*). This difference is due to the fact that our study was conducted in an urban-rural environment while that of Magne C., in a rural environment where education is relatively low.

Regarding the degree of satisfaction (**Table 3**) of work, 30% of providers were not satisfied with their work, citing poor motivation as the reason and said they would not continue working, and 70% of providers are satisfied and said they would continue working. Our results are consistent with those of Grenier R., in his study entitled “optimizing the impact of the evaluation of the quality of care”, motivation was the main factor most cited by staff (Fall et al., 2005).

Regarding the home visit by a community relay (RECO), we found that the majority of our respondents had not been visited by a RECO, i.e. 78.2% compared to 21.8% of respondents who reported having received a home visit from a RECO (**Table 3**). The same is true for the results found in the Karisimbi health zone where 51.6% of households that had not used health services reported not having benefited from a visit from a RECO and 46.1% of those who had attended them reported having benefited from a visit from a RECO (Fall et al., 2005). Regarding the factors that positively influence attendance at the GRH la Foi (**Table 4**), we note the predominance of the quality of care with 63.3% followed by the permanence of doctors with 20% and reception with 16.7%. Our results are different from those found by Kazadi S, who found 60% of Sendwe hospital staff and 46.67% of GRH Kenya were not satisfied with the quality of care provided to beneficiaries. For Monterlo, in his study, 68% of healthcare staff were dissatisfied with the quality of care provided. This gap could be explained by the technical environment and extrinsic motivation hindering the quality of care in state hospitals.

Compared to the factors negatively influencing the attendance of the GRH la Foi (**Table 4**), 69.4% of respondents had claimed a high cost of care at the GRH la Foi, 8.4% had claimed a lack of follow-up. The low attendance of the GRH la Foi is associated with the high cost of health care. There is a coincidence with the studies of Chenge (ESP/UNIKIN, 2003) in Lubumbashi and Mashini (SNIS, 2012) in Likasi, which had shown that the price of an act is less high in rural areas than in urban areas.

Regarding the primary health facility before the GRH la Foi (**Figure 2**), 26.1% reported having consulted the pharmacy, 20.8% a health center, 19% prayer, 11.1% self-medication, and 8.8% resorted to traditional care. These results are similar to those of Chenge F, who found in a study carried out in the city of Lubumbashi, those who practiced self-medication (7.7%), those who resorted to the first-line care structure (23.1%), some to the hospital (11.9%), the initial recourse to traditional medicine was less than 5% (ESP/UNIKIN, 2003).

4.2. Characteristics Specific to Service Providers

It emerges in (**Table 1**), a predominance of the age group of 31 to 44 or 47.6% followed by the age group of 25 to 30 and over 45 years or 26.7% respectively. This representativeness of slightly older nurses as indicated in **Table 2**, is beneficial for good patient care because experience in the exercise of any profession is a determining factor in the quality of performance. This is consistent with what Florence N. states (Mukalenge & Luboya, 2006). Regarding the factors that positively

influence attendance at the GRH la Foi (**Table 1**), we note the predominance of the quality of care with 63.3 % followed by the permanence of doctors with 20% and reception with 16.7%. Our results are different from those found by Kazadi S, who found 60 % of Sendwe hospital staff and 46.67 % of GRH Kenya were not satisfied with the quality of care provided to beneficiaries. For Monterlo, in his study, 68% of healthcare staff were dissatisfied with the quality of care provided. This gap could be explained by the technical environment and extrinsic motivation hindering the quality of care in state hospitals.

5. Conclusion

This study focused on Factors of attendance at health services in the Kisanga Health Zone (HZ), case of the General Reference Hospital (GRH) la Foi. We conducted a cross-sectional descriptive study based on data from a survey of 422 heads of households during a study period from December 2018 to September 2019. Participants who consented to participate in the study were interviewed using a previously established questionnaire and supported by the interview.

After data analysis, we found that 100% of our respondents had knowledge about the general reference hospital la Foi, and 96% (n = 405/422) of them had already attended it. The quality of care, the reception, the cleanliness of the hospital and the proximity are the main reasons for attending health services at the GRH la Foi. This study also showed that the high cost of care, low household income, and household size are factors associated with low attendance at the GRH la Foi.

Author's Contributions

Study design and tools: BKK, EMK analysis and interpretation: ANK, DCK, GCM, GNM manuscript: all. All authors read.

Conflicts of Interest

The authors declare that they have no competing interests.

References

- Carbucia, C. G. L. R., Bonnery, A. M., Marande, D., & Michot, P. (2003). *Risk Prevention in the Care Unit*. Masson.
- Chenge, M. (2011). *Organizing a Health Care System in an Urban Environment. Need to Adapt the District Model. Example of the City of Lubumbashi in DR Congo*. UNILU/SAPU.
- Clothilde, M. (2012). 2011-2012, "Study of Factors Hindering Good Attendance at Health Facilities in Rural Areas, Case of CMA of Kasongo Bafoussam III".
- ESP/UNIKIN (2003). *CAP Household Survey on the Health Situation of Health Zones Supported by the World Bank through BCECO within the Framework of the PMURR, Final Report*. Democratic Republic of Congo.
- Fall, I. S., Seck, I., Wone, I., Ba-Fall, K. M., Faye, A., Ndiaye, P., & Tal-Dia, A. (2005). Monitoring and Evaluation of Health Programs in Sub-Saharan Africa. *Medecine Tropicale*,

65, 184-188.

- Florence, N. (2000). *Resuscitation Management Evaluation, Organization and Ethics*. Elsevier.
- Foutain, D., & Courte Joie, J. (2006). *How to Build Health*. Google Scholar.
- Gomes do Espirito Santo, E., Floury, B., & Cissé, M. (1998). Determinants of the Use of Health Care in the City of Cotonou. *Bulletin of the World Health Organization*, 2, 195-201.
- Grenier, R. (2009). *Optimizing the Impact of the Evaluation of the Quality of Nursing Care*. 10.
- Izandengera, A. (2011). *Determining Factors for the Low Use of Curative Care Services in the Karisimbi Health Zone*. ISTM/GOMA.
- Mashini, N. (2010). *How to Organize First-Level Health Services in Urban Areas for Their Optimal Use by the Population. Experience of the City of Likasi*. University of Lubumbashi.
- MSP/DRC (2007). *Health Data Directory*.
- Mukalenge, & Luboya, N. (2006). *Analysis of Operational Activities of Healthcare Structures*. DRC.
- Mulenga, C. et al. (2013). *Factors Determining Low Use by the Curative Service Household in the Pweto Health Zone, Katanga Province, DR Congo*.
- Munyamahoro, M., & Ntaganira, J. (2012). Determinants of the Use of Health Services by Households in the Rubavu District in Rwanda. *Medical Journal/Rwandan Medical Journal*, 69, 12-17
- NOVOIB, & IPS/North Kivu (2005). *Socio-Economic and Access to Care Survey in North Kivu Province*. Conducted by CIF-Santé. Google Scholar.
- Olafsdottir, A. E., Reidpath, D. D., Pokhrel, S. et al. (2011). Health Systems Performance in Sub-Saharan Africa: Governance, Outcome and Equity. *BMC Public Health*, 11, Article No. 237. <https://doi.org/10.1186/1471-2458-11-237>
- Serge, C. K. (2017). *Organization of Nursing Work in Nursing Services*. ISTM/Lubumbashi/EASI.
- SNIS (2012). *System Report. Report of the National Health Information System of Lubumbashi, KATANGA*.
- Tulinabo, B. (2006). *Determinants of the Underuse of Curative Activities in Integrated Primary Health Care Structures in the Karisimbi HS*. ULPGL.
- World Bank (2009). *February 2011, Health Care Service Utilization in Poor Countries*.