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Assessment of the Satisfaction of Patients Hospitalized and Those Who Recovered from COVID-19 in Guinea in 2021

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Abstract: It is recognized that patient satisfaction is an indicator of the quality of care. The objective of this work was to assess the satisfaction of hospitalized patients and those who recovered from COVID-19 in epidemiological treatment centers. A descriptive study for evaluation was carried out between December 03 and 18, 2020 in the health districts of Kaloum, Dixinn, Ratoma, Matam, Matoto, Coyah, Boké, and Kindia. Data collection was done by investigators through structured interviews using a validated questionnaire. A total of 472 people participated in the survey, including 118 in hospital and 354 cured; the sex ratio is 2.18. More than 50% of participants are satisfied with the hospitalization sites; cured people are more satisfied than hospitalized people 22% vs. 18%. Almost a quarter of the participants, 22% were frustrated at the level of sampling sites and the rendering of results. The delay in the sampling sites and the pain felt during the test are the main causes of the frustrations. The evaluation of the satisfaction of hospitalized and recovered patients helped to know the causes of the frustrations in a health emergency context during which there was a large influx of patients both in epidemiological treatment centers. However, further studies are required to complete this one to explore other areas of patient satisfaction better.

Keywords: COVID-19, Satisfaction, Patients, Hospitalized, Cured, Compliance and Behavior of Care Personnel

1. Introduction

COVID-19 is an emerging infectious disease caused by the SARS-CoV-2 coronavirus, which appeared in December 2019 in Wuhan, China, before spreading around the world [1].

SARS-CoV-2 quickly spread to 34 provinces and cities in China; the infection reached 144 countries/territories/areas on five continents (World Health Organization, 2020). In view of its magnitude, the epidemic represents a significant challenge for governments, individuals, and society [2].

The WHO officially declared on January 30, 2020 the

"COVID-19" a public health emergency of international concern (USPPI) [3].

As of 08/19/2020, the world had more than 22,164,232 confirmed cases, 781,520 deaths (3.5%) and 7.43 deaths per 100,000 inhabitants [4].

The African continent remains the least affected, with approximately 1,000,054 confirmed cases have resulted in 21,724 deaths as of August 7, 2020, i.e., a mortality rate of 2% [5].

Patient satisfaction is a valuable instrument to enhance the health care process as it helps collect information on perceived quality and, therefore, can be integrated into a program of assessment and improvement of quality. It allows the population to adhere to the health system; the better quality care, the better the services used and reflects user satisfaction.

At Kinshasa University Clinics, the satisfaction assessment showed that the patients did not appreciate the welcome and the administrative service [6].

The evaluation of medical care in Tunisia by Bougima A mentions that patients appreciated the competence, respect, and attention the medical staff gave them. The lowest scores were noted for medical doctor availability (54.6%) and patient discharge instructions (54.5%) [7].

In a study conducted on patient satisfaction at Jeddah hospital in 2019 by Bassel A and only 47% of patients said they were satisfied with the care, 1.6% very dissatisfied, 4.6% dissatisfied, 45.9% very satisfied [8].

In Spain, a study shows that patient satisfaction is linked to the number of hospital beds, hemodialysis equipment, the low rate of adverse drug reactions, and the expenses incurred positively influence the satisfaction of the wealthiest patients. That showed higher satisfaction levels than poor communities [9].

In France, according to the HAS, more than 80% of patients are generally satisfied with their care in hospitals [10].

In the United States of America (USA), a retrospective study between 2010 and 2014 found that younger, male, black African American patients with Medicaid insurance and patients with socioeconomic status in lower economic groups, were more likely to report dissatisfaction with hospital care [11].

The evaluation of medical care in Tunisia by Bougima A, mentions that patients appreciated the competence, respect and attention that the medical staff gave them. The lowest scores were noted for medical doctor availability (54.6%) and patient discharge instructions (54.5%) [12].

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In the United States of America (USA), a retrospective study between 2010 and 2014 found that younger, male, black / African American patients with Medicaid insurance, as well as patients with socio-economic status lower economic groups were more likely to report dissatisfaction with hospital care [12].

In Guinea, the first case of COVID-19 was notified on March 12, 2020. The country, through the National Health Security Agency (ANSS), carried out an analysis of the risks of importing the coronavirus. At the end of this analysis, a preparedness and response plan were drawn up including points relating to the coordination of response activities, surveillance, laboratory, logistics, care, communication., social mobilization and security [13].

Faced with the evolution of the pandemic, Guinea decreed emergency health measures ranging from March 26 to May 15, 2020, from May 16 to June 15, 2020 and June 15 to July 15, with an extension until August 15, 2020 [14].

Despite the respected of health emergency, by August 18, 2020, Guinea had 8,715 confirmed cases, 52 deaths or 0.60% case mortality rate.

By the majority of the population and the availability of screening tests extended to the entire population, there is an increase in the number of confirmed cases which reflects significant community transmission mainly in the city of Conakry which hosts 94.6% of confirmed cases.

In view of this phenomenon, a campaign to contain the most affected neighborhoods is organized called “Stop COVID in 60” days with the aim of taking care of asymptomatic and pauci symptomatic cases at home.

Significant challenges are observed despite the experience acquired by the country during the Ebola epidemic (2014-2016) regarding the management of COVID-19 patients.

This situation motivated the choice of the topic relating to the evaluation of the satisfaction of patients hospitalized and recovered from COVID-19. No previous study on this subject has been carried out in Guinea, hence the interest of conducting this study.

2. Materials and Methods

This study was conducted in the five (5) health districts of the capital Conakry and four (4) other health districts in the interior of the country. It is a descriptive study with an evaluative purpose that covered the period from December 3 to 18, 2020.

A pre-tested data collection form and semi-structured interviews were used for data collection. We used the Kobo-collect software through experienced interviewers to collect the data in the field. The COVID-19 database of the ANSS (National Agency for the health security was used for data collection and this allowed the selection of participants.

A total of 472 patients, of which 325 cured and 147 undergoing treatment with COVID-19 in the epidemiological treatment centers (CTEPI), participated in this study.

The data were exported into EXCEL software for cleaning. These cleaned data were exported to SPSS version 22.0 for analysis.

The central tendency parameters namely mean, median,

mode and standard deviation were used. Two types of analysis were done namely a descriptive analysis of the is performed and an in-depth analysis to relate cause and effect. We used Person's Chi-square test to investigate whether there is an association between satisfaction and categorical variables.

3. Results

Table 1. *Sociodemographic characteristics of the participants.*

Variables	Male N=235	%	Female N=147	%	Total N=472	%
Age groups						
<30 years	62	19	48	2,6	110	23,3
30-39 years	99	30,4	43	29,2	142	30
40-49 years	77	21,8	24	16,3	101	21,3
50-59 years	49	15	17	11,5	66	13,9
60 years and over	15	4,6	38	25,8	53	11,2
Marital status						
Singles	79	24,3	40	27,2	119	25,2
Married	241	74,1	95	64,2	336	71,1
Divorced	3	0,9	3	2	6	1,2
Widowers / Widows	2	0,6	9	6,1	11	2,3
Educational level						
Not schooled	35	10,7	15	10,2	50	10,5
Primary	14	4,3	9	6,1	23	4,8
Secondary	41	12,6	24	16,3	65	13,7
Vocational School	23	7	29	19,7	52	11
Graduates	159	48,9	57	38,7	216	45,7
Post-university	53	16	13	8,8	66	13,9
Profile of participants						
Healed	240	73,8	114	77,5	354	75
Hospitalized	82	25,2	33	22,2	115	24,3
Characteristics of the CTEPI environment						
Types of rooms					Number of staff	Percentage
Hospitalization room						
Patient cabin					67	14,02
Two patient room					84	17,8
Three patient room					62	13,01
Four patient room					65	13,8
Room for more than four patients					194	41,1
Accès à l'eau courante						
Yes					461	97,77
No					13	2,75
Types of toilets						
Yes					424	89,9
No					48	10,2

a. Sociodemographic characteristics of the study population.

A total of 472 participants including 354 (75%) cured and 147 (23.3%) hospitalized, 325 men (68.8), 147 women (31%) for a sex ratio of 2.18. The average age of participants is 47 years, a minimum of 18 years and maximum of 76 years, the age group of 30-39 years was the most represented in this study.

They were predominantly married 71%, and more university graduates 45.75%.

b. Characteristics of the CTEPI environment

Most participants were hospitalized in wards with more than four patients in the same room (41%) only 14% of patients were in individual cabins.

Regarding the toilets, almost all patients appreciated them by saying that they are clean 89.9%

Table 2. *Distribution of patients according to satisfaction.*

Variables	Cured N=354	Hospitalized N=115	Total N=472
Reception frustration and sampling	n%	n%	n%
Yes	79 (22,3)	15 (13)	94 (19,9)
No	273 (77,1)	100 (87)	376 (79,7)
DK	2 (0)	0 (0)	2 (0)
Result rendering satisfaction			
Yes	260 (73,4)	91 (79,1)	354 (75)
No	88 (24,9)	23 (20)	111 (23,5)
Reception and hospitalization frustration			

Variables	Cured N=354	Hospitalized N=115	Total N=472
Yes	88 (22,9)	21 (18,3)	103 (21,8)
No	271 (76,6)	94 (81,7)	367 (77,8)
Level_satisfaction_hospitalization			
Unsatisfied	9 (2,5)	6 (5,2)	15 (3,2)
Not very satisfied	23 (6,5)	24 (20,9)	47 (10)
Satisfied	196 (55,4)	6153,4)	259 (54,9)
Very satisfied	126 (35,6)	24 (20,9)	151 (32)
Response according of attitude of health personnel			
Response to patient solicitation			
Yes	324 (91,5)	100 (87)	426 (90,3)
No	28 (7,9)	12 (10,4)	41 (8,7)
Clear explanations from medical staff			
Yes	335 (94,6)	114 (99,1)	452 (95,8)
No	18 (5,1)	0 (0,0)	18 (3,8)
Kind words from the medical staff			
Yes	342 (96,8)	113 (98,8)	458 (97)
No	28 (7,9)	12 (10,4)	41 (8,7)
Psycho-social support			
Yes	250 (70,6)	89 (77,4)	339 (71,8)
No	12 (3,4)	1 (0,9)	13 (2,8)

c. Distribution of participants according to satisfaction at the sampling sites

Less than a quarter of participants among the cured (22.3%) were frustrated at the sampling sites and reception, on the other hand, only 15% of the hospitalized say they were frustrated. A quarter of those who were cured (24.9%) and 20% of those hospitalized were not satisfied with the way the results were delivered to them.

During the reception and hospitalization 22.9% of cured 18.3% of hospitalized say they were not frustrated, on the other hand according to the level of satisfaction more than half of the participants 50.9% declare that they are satisfied in all.

d. Distribution of participants according to the attitude of health personnel

Almost all the participants 90% said that the medical staff responded to their request, 95.5% of the participants received a clear explanation from the staff and 71% received psycho-social support from the medical staff.

The reasons for the frustrations of the participants during the treatment

Of the total number of participants who expressed reasons for their frustration, 39% mentioned the long wait at the collection sites. Lack of confidentiality on the part of medical personnel, favoritism, lack of organization and delay in contacting a health worker at the IPTCs were also reported during patient management at the epidemiological treatment centers. The clear explanations and encouragement by the medical staff were the main reasons for the participants' satisfaction.

Table 3. *Analyze Bivariate (Pearson Chi-Square Test).*

Waiting time at sampling sites					
Satisfaction	1 hour	Over 1 hour	Total	Chi-square	P value
Yes	40	54	94	78,25 ddl =8	≤ *0,000*
No	301	75	376		
Total	341	129	472		
Awareness of sampling sites					
Satisfaction	sensitized	Not sensitized		Chi-square	
No	63	47	354	16,33 ddl =4	≤ *0,003*
Yes	140	214	110		
Total	204	267	471		
Mode of reception of results and satisfaction					
Satisfaction	Call	Other			
Yes	254	100	354	13,44 ddl=4	≤ 0,009
No	66	50	116		
Total	320	150	470		
Waiting time for the 1st dose of medication					
Satisfaction	Soon from the hospitalization	1 hour after hospitalization			
Yes	48	55	103	33,5 ddl=8	≤ 0,000
No	265	104	369		
Total	313	207	472		
SEX					
Satisfaction	Female	Male			
Yes	144	313	457	2,3 ddl=3	≤ 0,51
No	3	12	15		

e. Bivariate Analysis (Person Chi-Square Independence Test)

Si Chi-square> 3.84: a statistically significant link between satisfaction and associated variables, and there is at least a 5 in 100 chance that the distribution results from chance, i.e., alpha ≥ 0.05 for a DOF = 1, DOF = (number of row-1) * number of columns-1) in a contingency table.

The waiting time put at the sampling sites before being sampled and the satisfaction gives a Chi-square = 78.25> to 3.84, p ≤ 0.00; this shows that the satisfaction was linked to the time taken. Short wait at COVID-19 collection centers.

Awareness in the sampling sites was a health satisfaction factor Chi-square = 16.33 p≤0.003.

Regarding the link between the mode of reception of laboratory results and satisfaction Chi-square = 13.44, p ≤ 0.009, we can say that receiving results by phone call made participants more satisfied than other communication channels.

Patients who received their first dose of medication more than an hour after hospitalization were less satisfied than those who received it immediately upon admission, Chi-Square = 33.5 greater than 3.84 p ≤ 0.00.

4. Discussion

Patients' satisfaction in the hospital is essential in assessing the quality of care provided to them.

The objective of this work was to assess the satisfaction of patients cured and hospitalized from COVID-19 in iPTCs. 22% of participants experienced frustration at the reception; this result is different from that found in Kinshasa by Yamba Yamba M. in 2018, which was 11% [6].

This could be explained by the fact that our study is carried out in the context of an epidemic where many people request special care. Almost all of the participants affirmed a good attitude of health workers during their hospitalization; our observations are in line with a previous study carried out on patient satisfaction with BOUGMIZA I. in the service of Sousse in Tunisia [10].

The frustrations of patients are due to the prolonged delay observed before the start of treatment caused by the plethora of patients and the lack of places in treatment centers, and our observations are different from that reported in the USA by Gerbutavicius R who reported that patient frustration was observed in low-income situations [8].

This would be justified because of the different contexts of the studies; our study was carried out in a psychotic social situation of catching the disease.

More than half of our participants say that they are satisfied during their hospitalization (54.9%); our observations are close to a Saudi study conducted by Chen Q. A which reports 49.9% satisfaction [12] but below more than 80% in developed countries, including France [10].

A plausible explanation for the differences.

The growing interest in this approach to patient satisfaction in an epidemic cannot be transposed into the context of assessing satisfaction in routine care.

5. Conclusion

Measuring the satisfaction of hospitalized and discharged patients who recovered from COVID-19 allowed us to measure the degrees of frustration and the factors involved. At the sampling sites, 22% of the cured and 18.3% of the hospitalized were frustrated with the way they were taken care of; on the other hand, concerning how the results were given, 24.9% of the cured and 22.9% of the patients. Hospitalized were frustrated. More than 50% of participants are generally satisfied with the inpatient collection sites.

The delay experienced by participants at the collection sites, the pain felt during the collection, the lack of organization of health workers, favoritism, and the lack of hygiene on the premises are the main reasons for the frustration.

The Pearson, Chi-Square independence test, highlights the association between dissatisfaction and prolonged waiting in the sampling sites, the delay in taking the first dose of the drug, the delay before being in contact with a health worker at the CTEPI, how to receive the results of laboratory tests and awareness.

On the other hand, satisfaction was not linked to the gender and educational level of the participants. The lack of articles in the literature on patient satisfaction with COVID-19 remains a limitation of our study.

Taking into account the factors that led to frustration could improve the management of future epidemics in Guinea.

References

[1] Asif M, Jameel A, Sahito N, Hwang J, Hussain A, Manzoor F. Can Leadership Enhance Patient Satisfaction? Assessing the Role of Administrative and Medical Quality. Int J Environ Res Public Health. Sept 2019; 16 (17): 3212.

[2] ESC Guidance for the Diagnosis and Management of CV Disease during the COVID-19 Pandemic [Internet]. [cité 11 juillet 2021]. Disponible sur: https://www.escardio.org/Education/COVID-19-and-Cardiology/ESC-COVID-19-Guidance

[3] Guo Y-R, Cao Q-D, Hong Z-S, Tan Y-Y, Chen S-D, Jin H-J, et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak – an update on the status. Mil Med Res. 13 mars 2020; 7: 11.

[4] WHO Coronavirus (COVID-19) Dashboard | WHO Coronavirus (COVID-19) Dashboard with Vaccination Data [Internet]. [cité 11 juill 2021]. Disponible sur: https://COVID19.who.int/

[5] Situation de la pandémie de COVID-19 - N° 12 - 31... - MesVaccins.net [Internet]. [Cité 11 juill 2021]. Disponible sur: https://www.mesvaccins.net/web/news/16878-situation-de-la-pandemie-de-COVID-19-n-12-31-decembre-2020-partie-3

[6] Marc K. Yamba Yamba, Désiré K. Mashinda, Jean-Marie N. Kayembe, Marie A. Onyamboko, Jean K. Nyandwe: Assessment of the quality of care at the Kinshasa University Hospital: perception of attending patients [Internet]. Annales africaines de médecine. 2018 [cité 11 juillet 2021]. Avalable from: https://anafrimed.net/evaluation-de-la-qualite-des-soins-aux-cliniques-evaluation-universitaires-de-kinshasa-etude-de-satisfaction-des-patients-hospitalises-assessment-of-the-quality-of-care-at-the-kinshasa-university-ho/

[7] Bougmiza I, Ghardallou ME, Zedini C, Lahouimel H, Nabli-Ajmi T, Gataa R, et al. Pan African Medical Journal. 18 Avril 2011; 8: 44 Assessment of patients' satisfaction in obstetrics and gynecology ward in Sousse, Tunisia.

[8] Gerbutavicius R, Brandlhuber U, Glück S, Kortüm GF, Kortüm I, Navarrete Orozco R, et al. Evaluation of patient satisfaction with an ophthalmology video consultation during the COVID-19 pandemic. Ophthalmologe. 10 déc 2020; 1-7.

[9] Coronavirus (COVID-19) [Internet]. [Cité 11 juillet 2021]. disponible https://www.santepubliquefrance.fr/dossiers/coronavirus-COVID-19

[10] Valls Martínez M del C, Ramírez-Orellana A. Patient Satisfaction in the Spanish National Health Service: Partial Least Squares Structural Equation Modelling. Int J Environ Res Public Health. déc 2019; 16 (24): 4886.

[11] Chen Q, Beal EW, Okunrintemi V, Cerier E, Paredes A, Sun S, et al. The Association Between Patient Satisfaction and Patient-Reported Health Outcomes. J Patient Exp. sept 2019; 6 (3): 201-9.

[12] Agence Nationale de Sécurité Sanitaire (@anss_guinee) / Twitter [Internet]. Twitter. [cité 11 juill 2021]. Disponible sur: https://twitter.com/anss_guinee

[13] Stop COVID-19 : c'est parti pour 2 mois de croisade contre le virus | UNICEF [Internet]. [Cité 11 juillet 2021]. Disponible sur: https://www.unicef.org/guinea/recits/stop-COVID-19-cest-parti-pour-2-mois-de-croisade-contre-le-virus

[14] Infection à coronavirus [Internet]. [Cité 11 juillet 2021]. Disponible sur: https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-et-infections-respiratoires/infection-a-coronavirus

[15] Stop COVID-19 in 60 days, National Agency in security health, Conakry, Guinea, 2020.