



Study of Stress among Patients in Outpatient Clinics at the University Hospital Center Hôpital du Mali in 2024

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Abstract

Stress is a state of worry or mental tension caused by a difficult situation. It is a natural human response that encourages us to meet challenges and face threats in our lives. The objective of this study was to examine stress among patients in the outpatient clinics of the University Hospital Center Hôpital du Mali. This was a cross-sectional study conducted from April 1 to June 30, 2024. 106 patients were collected from the Admissions Office of the Mali University Hospital, based on the observation of the onset of stress in patients. We included 106 patients who agreed to participate in the study. Men were more represented, with a sex ratio of 1.2. The mean age was 43.96 ± 13.49 years, with extremes of 18 and 76 years. Stress was high in 80% of patients. There was no correlation between patient age and their stress level, with $P = -0.216$. There is a correlation between satisfaction with the reception and stress level, with $P = 0.96$, which excludes 1. This study has demonstrated that there is no correlation between age and patient stress level, while there is a correlation between satisfaction with the reception and patient stress level. Therefore, it is necessary and imperative to increase the psychological preparation of patients in this department.

Subject Areas

Psychology

Keywords

Study, Stress, Patients, Consultations, Mali Hospital

1. Introduction/Background

Stress is a state of worry or mental tension caused by a difficult situation. It is a

natural human response that prompts us to meet the challenges and face the threats we face in our lives [1]. Everyone experiences stress to some extent, whether from routine pressures at work, school, family, or any other responsibilities. Stress can be triggered to varying degrees by sudden and unexpected changes, such as the onset of an illness, divorce, a job change, or a traumatic event [2].

This mental tension, which causes exhaustion, affects the organs and the immune system. The body then becomes a breeding ground for the development of certain disorders: metabolic syndrome, cardiovascular risks, anxiety disorders, depression, etc. Stress is increased as soon as the patient crosses the hospital gates, because of the discovery of an unknown world and the image that the Malian population generally has of those wearing white coats is their often inappropriate behavior [3].

According to some studies conducted in Europe, the frequency of stress in patients varies from 0.5% to 9% depending on the populations at risk [3]. In Africa, we have not had any usable statistics in the literature on this condition.

In Mali, there is also little scientific data on stress and the mental states of patients at university hospitals. However, the vocation of these user care structures is socio-sanitary, taking into account all the holistic components of the human person.

However, 84% of patients found that their care at the hospital was satisfactory and the main elements associated with good satisfaction were the quality of reception, the hygiene of the premises and the quality of food [3] [4]. Beyond this situation of acceptable satisfaction, a study on assaults at the Mali Hospital showed that more than 85.5% of assaults between 2021 and 2022 occurred during admissions, and most of these assaults (40.7%) were caused by poor reception and orientation [3].

Given the scale of this problem, we propose to conduct this study on patient stress in outpatient clinics at the University Hospital Center Hôpital du Mali and specifically analyze the correlation indices between the quality of reception and the level of stress among patients.

2. Materials and Methods

Study Type and Setting: This is a cross-sectional study from April 1 to June 30, 2024, which will be conducted in the Admissions Office department of the Mali Hospital in Bamako. This hospital, a third-tier hospital in Mali's healthcare system, was built in 2010 as a gift from the People's Republic of China to Mali.

471 Malian and Chinese professionals work closely together at the Mali Hospital. It has a capacity of 225 inpatient beds and 15 outpatient clinics.

The Admissions Office is the department that handles admissions, registration, and billing for all procedures at the Mali Hospital.

Study Population: During this study, 106 patients were collected upon discharge from the Mali Hospital.

Inclusion criteria: Our study included all patients admitted to the outpatient

clinic at the Mali Hospital.

Non-inclusion criteria: Patients who were not admitted to the outpatient clinic at the Hôpital du Mali Hospital and those who did not agree to participate in the study were not included in this study.

Sampling: We collected N = 106 patients during the study period.

Data collection and processing: Data were collected on individual forms developed for the purposes of the study. These forms were completed by trained staff. Social, demographic, and psychological parameters were analyzed for each patient. Data processing and entry were performed using SPSS software version 25.0.

Ethical consideration: During this study we will respect the principles of confidentiality of information by keeping the identities of the patients secret and taking into account their informed consent.

3. Results

This study was conducted from April 1st to June 30th, 2024. 106 patients were collected during outpatient consultations at the Admissions Office of the Hospital du Mali (See **Table 1**).

Table 1. Distribution of patients collected by sex.

Sex	Number (N)	Frequency %
Males	58	54.7%
Females	48	45.3%
Total	106	100%

Men had a higher incidence than women in our series, with a sex ratio of 1.2. We observed a mean age of 43.96 ± 13.49 years, with a range of 18 to 76 years (See **Table 2**).

Table 2. Distribution of patients collected according to their opinion on the reception.

Patients' opinions on reception	Number (N)	Frequency %
Very satisfied	50	47.1
Satisfied	52	49.1
Not satisfied	4	3.8
Total	106	100.0

We observed that 96.2% of the patients surveyed were satisfied with the hospital reception (See **Table 3**).

We found that over 80% of outpatients had very high levels of stress (See **Table 4**).

There is no correlation between patients' age and their stress level, with $P = -0.216$ (See **Table 5**).

Table 3. Distribution of patients surveyed according to their stress level.

Stress in patients	Number (N)	Frequency %
Very low stress level	5	4.7
Low stress level	16	15.1
High stress level	58	54.7
Very high stress level	27	25.5
Total	106	100.0

Table 4. Correlation between patient age and stress level.

Correlation		Patient's age	Stress level
Patient's age	Pearson correlation	1	-0.216*
	Sig. (bilateral)		0.026
	N	106	106
Stress level	Pearson correlation	-0.216*	1
	Sig. (bilateral)	0.026	
	N	106	106

Table 5. Correlation between stress level and satisfaction with reception.

Correlation between reception and stress level		Satisfaction with reception	Stress level
Satisfaction with reception	Pearson correlation	1	0.096
	Sig. (bilateral)		0.329
	N	106	106
Stress level	Pearson correlation	0.096	1
	Sig. (bilateral)	0.329	
	N	106	106

There is a correlation between satisfaction with reception and stress, with $P = 0.96$, which excludes 1.

4. Limitations of the Study

In this study, we did not analyze the factors that contribute to stress; therefore, our study population was not distributed over time, nor did we analyze the correlation between these factors and stress with the categories of reception staff.

5. Discussion

This cross-sectional and descriptive study was conducted from April 1 to June 30, 2024. 106 patients were collected at the outpatient clinic level at the Admissions Office of the Mali Hospital.

Men had more frequent visits than women in our series, with a sex ratio of 1.2. This study, comparable to that of [4], found that men make more visits than women. This situation is related to the responsibility that men have at the family level regarding the decision to go to the hospital [5].

The mean age was 43.96 ± 13.499 years, with extremes of 18 and 76 years. There is no correlation between the age of patients and their stress level with $P = -0.216$, these results are comparable to those of [6] who found that all men at all ages react in the same way to stressful factors. On the other hand, adults persist in stress than children because of their ability to interpret and analyze.

We observed that 96.2 of the patients surveyed were satisfied with the reception at the hospital, these results are comparable to those of Dembélé *et al.* [3] with 84% of patients were satisfied with the quality of their care at the Mali Hospital, according to the same author the quality of each stage of the patient's care determines their overall state of satisfaction. To this end, the quality of the reception is decisive for the patient's state of mind.

During this study, we observed that more than 80% of outpatients had very high stress levels. We observed that all patients were stressed; this stress affects the mind and body. Mild stress is not a bad thing, as it can help us carry out daily activities. But too much stress can lead to physical and mental health problems. Therefore, we must learn to manage stress to feel less overwhelmed and promote mental and physical well-being. Stress is therefore a physiological adaptive response of the body that allows us to react to our changing environment. The human body responds to a stressful context with a two- or three-phase reaction: alarm, resistance, and eventually exhaustion. According to [6] [7], humans adapt to their environment, mobilizing physiological and genetic assets.

There is a correlation between satisfaction with the reception and stress level, with $P = 0.96$, which excludes 1. Our results are comparable with those of [7]. The correlation is linked to the fact that a satisfied patient upon arrival at the hospital develops psychological assurance that allows them to develop internal calm and overcome fear in the face of the presumed dangerous unknown [3]. It is found that the psychological calming of the patient begins from the moment of admission to the hospital. If this admission welcome is warm, the entire care becomes easy and the patient will adhere to the care; otherwise, a state of stress or anxiety sets in, leading to reluctance.

We find that there is no correlation between the age of patients and their stress level. Stress is present in everyone when faced with new situations, but psychological calming allows for management according to the potential of each individual.

Fear, stress, and anxiety are the various spontaneous reactions of individuals to situations such as the hospital environment. These different reactions can be associated and/or occur in succession over time, and a good reception can help mitigate the progression of these reactions [8].

6. Conclusion

This study on stress among patients in outpatient clinics at the University Hospital

Center of Hôpital du Mali allowed us to understand that the majority of patients in outpatient clinics are stressed. We learned that there is no correlation between age and patient stress levels, while there is a correlation between satisfaction with the reception and patient stress levels. In our series, as well as in the literature, stress is present in everyone when faced with new situations. However, psychological calming allows for management based on each individual's potential as a patient, and this psychological calming begins upon admission to the hospital. Therefore, we recommend that the hospital management increase the psychological preparation of patients at all levels.

Conflicts of Interest

The author declares no conflicts of interest.

References

- [1] Bee, H. and Boyd, D. (2003) *Developmental Psychology: The Ages of Life*. 2nd Edition, de Boeck.
- [2] Célérier, M.C. (2004) Denial of the Body in Illness. *Champ Psychosomatique*, 87-104.
- [3] Dembélé, B., Sow, D.S., Attaher, O., Diallo, Y.L., Koné, A., Doumbia, N., Diarra, B. and Sidibe, A.T. (2019) Contribution of Therapeutic Education on the Psychological Level of Diabetic Patients in the Medical Department of the Mali Hospital. *Mali Medical*, **34**, 17-19.
- [4] Dalton, T.P., Shertzer, H.G. and Puga, A. (2002) Regulation of Gene Expression by Reactive Oxygen. *Annual Review of Pharmacology and Toxicology*, **39**, 67-101.
- [5] Favier, A. (2003) Oxidative Stress, *Chemical News—November-December*, Biochemical Mechanisms.
- [6] Domont, M. and Plancherel, B. (2001) *Stress and Adaptation in Childre*. University of Quebec Delta I Press.
- [7] Sanogo, B., Diarra, B., Sangho, H. and Ag Iknane, A. (2019) The Level of Satisfaction of Hospitalized Patients in the Koutiala Health District. *Mali Publique*, **IX**, 57-65.
- [8] Yoshikawa, T., Yamamoto, Y. and Naito, Y. (2000) *Free Radicals in Chemistry Biology and Medicine*. OICA International.