

Original Research Article

Evaluation of the Operative Programming at the CHU Gabriel TOURE of Bamako-Mali

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Abstract: In Mali, particularly in CHU Gabriel TOURE, organization of block activities is always problematic due to operative programming ignorance by staff of sector and other proximity, thus causing a blow to the good functioning of block. **Objectives:** Determine the knowledge level of staff intervening in block; to describe the existence of block operative charter functioning, know the existence of block operative components, Analyze the unrolling operative program. **Methodology:** We carried out a prospect, descriptive and transversal study to CHU Gabriel TOURE close to staff practicing to the operative blocks and other relation services; the sampling was probabilistic, based on systematic random technic. **Result:** Decisional proceedings and coordination in the block are ignored by the all respondent staff (100%). 50, 57% of respondent staff have witnessed the inobservance of hygiene rules concerning the patient, professionals, staffs in training, visitors, equipments, locals and environment. 75, 87% of respondents have testified a specify date and hour existence of programming meetings, but which are not surely respected according to 58, 63% of those same respondents. As far as 72, 44% have testified a fix hour existence to the bloc opening while.77, 01% have found regular hour inexistence to the startup of program. It also exists that a room is defined for each specialty working in the block say 65, 52% of respondent staff. 63, 22% of respondents affirmed that there is no own channel pour patient and material. Moreover it states that none of investigated staff does not know the responsible of block team coordination (100%). There are no established punishments at the block also supporting modalities of dysfunction and conflicts, respectively say 57, 48% and 70, 12% of respondent staff. 100% of respondents testified collegiality's absence in operative; programming meeting and that 51,72% of respondent staff judged that topics reading are not done during programming meeting 79,32% of respondents don't know operative; programming types at block, together with 57.03% of the respondents did not know the scheduling of the block and mostly the health technicians, the students and the other bodies, 75, 87% testified the absence of informed consent for the patients who are the subject Of a block operation except in pediatric. 54, 07% of respondents affirmed the lack of program spreading precisely to other services in relation with the block and 100% of respondents testified us the absence of completeness in the filling of operative programming agenda. Rooms openings in regularly way are done earlier around 07h30 and beginnings of incisions very lately after 08h00 at 100% in all observed programs. Out of 53 scheduled interventions, 11 were cancelled, either a rate of 20, 75%, due to lack of target blood, non-responding patient on the day of his intervention. Moreover, it also states that 04 of unscheduled interventions were received and realized in the program, a rate of 07, 54% practice which doesn't secure the safety at work. Room packing is observed in all programs, say, 69, 05% of respondent staff, but with regularity in its observance only in neurologic and traumatology surgery. We noticed that that all operated patients could benefit beds in care continued unities, a rate of 90, 48% in SSPI and 09, 52% in hospitalization. **Conclusion:** Operative programming is the base of the whole block organization without of what the block would be multiples dysfunction issue, disturbing block normal functioning and jeopardizing treatments' quality within it.

Keywords: block activities, probabilistic, Decisional proceedings, investigated staff, hospitalization.

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I. INTRODUCTION

Operating programming is the keystone of the entire organization of operating rooms; it punctuates the activity of the players in the operating theater (surgeons, anesthesiologists, IADE, IBODE), but also that of the surgical hospitalization services, resuscitation services, pharmacy, laboratories, radiology, stretcher carrying, etc [3]. The convergence of all the flows of patients to be operated on requires a list of patients to be operated on, their order of passage in the operating room. This is to specify, in an operating program [2]. In this management, Kharradja S., in 2004 distinguishes two types of disturbances: Uncertainties: Which are inaccuracies that affect physical measurements and errors that arise from the difference between the forecast estimate of a quantity and its actual value (duration of intervention, imprecise patient path) and contingencies: s discrete-type events that lead to modifications in the model itself (emergency arrival, degradation of the patient's condition) [2]. The analysis of the operation of operating theaters around the world highlights a constant: 30 to 40% of the resources allocated to operating theaters are not devoted to any activity in the hospital [4]. It is in this context that the reflection on the programming of surgical interventions must be situated. While many legal texts specify the conditions of this programming, how is it carried out in practice?. In 1997, the SNPHAR survey showed that only half of the establishments benefited from operational planning, with collegiality at in which PHARs participate in only 18% in university hospitals and 26% in non-university hospitals [4]. In Nice, an internal audit in 1998 showed that programming was carried out by a single manager in 50% of cases, that there was no block committee or council, and that internal regulations only existed in less than one in four blocks. In Marseille, the operating program varies by more than 31% compared to the provisional program [4]. In Africa, according to a study conducted in Tanzania from March 2009 to February 2010 on 3064 patients scheduled for surgical procedures; a total of 644 patients (21.0%) were canceled due to lack of harmonious organization in the theater [5]. In Mali, no

study has so far been carried out on operating programming, hence our motivation to do this work with the objectives of determining the knowledge of the personnel involved in the theater and other hospital services in relation with the operating room on the concept of operating programming, determining the existence of the Operating Charter, determining the existence of the components of the operating program and Analyzing the progress of the operating program.

II. METHODOLOGY

We conducted a prospective, descriptive and cross-sectional study ranging from October 19, 2020 to November 19, 2020 in the operating theaters of the surgical departments of the CHU Gabriel Touré, which was a central dispensary until 1956, then was erected into a hospital and baptized Gabriel Touré in honor of a Sudanese medical student who died in Dakar following an epidemic of plague. It became a university hospital in 2006. Each service has its block day and a daily staff day followed by daily visits to hospitalized patients and a program carried out every Thursday evening.

Processing, text entry, tables and data analysis were manual and computerized (EPI-INFO and World software)...The following steps were followed: verification and correction of data collection, data coding, data entry and analysis. 'data analysis. Sampling was probabilistic, based on the systematic random technique. All nursing staff working in operating theaters and other related services were included. To carry out this study, we received authorization from the management of the INFSS, CHU Gabriel TOURE, the collaboration of the staff of the CHU Gabriel TOURE and we took into account the anonymous and confidential nature (professional secrecy) of the agents concerned by the study.

III. RESULTS

During the study period, 87 personnel from CHU Gabriel Touré were interviewed.

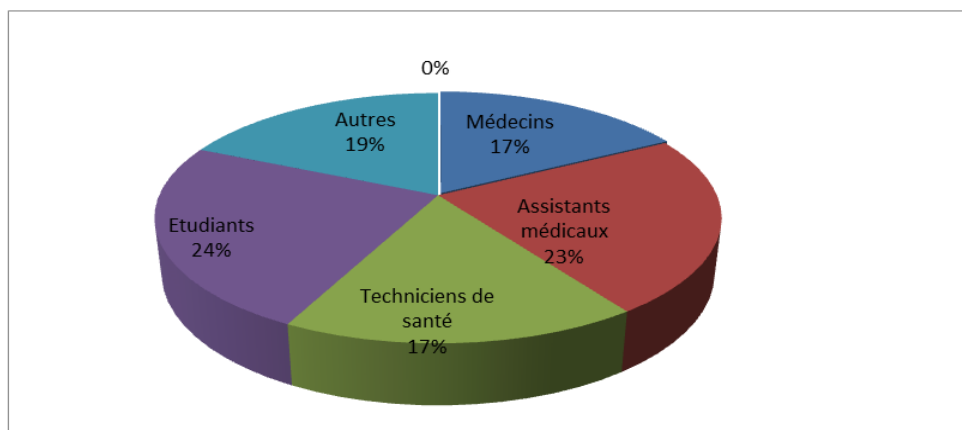


Figure 1: Respondent/corps distribution

Table I: Distribution/sex

SEX	EFFECTIVE	PERCENTAGE
Male	64	74
Féminine	23	26
TOTAL	87	100

sexe ratio : 2,84%.

Table II: Distribution according to knowledge, definition, importance of surgical programming

Corps	N	Programming knowledge	Programming Definition	Programming Importance
		Effective 87(100%) Yes No	Effective 87(100%) Good Bad	Effective 87(100%) Good Bad
Doctors	15	15(100%) 00	8(9,19%) 7(8,0%)	9(10,34%) 6(6,9%)
Medical assistants	20	19(21,8%)1(1,1%)	10(11,5%) 10(11,5%)	11(12,64%) 9(10,3%)
Health technicians	15	15(17,2%) 00	5(5,7%) 10(11,5%)	5(5,74%) 10(11,5%)
Students	21	21(24,1%) 00	9(10,3%) 12(13,8%)	6(6,89%) 15(17,2%)
Others	16	10(11,5%) 6(6,9%)	4(4,6%) 12(13,8%)	4(4,59%) 12(13,9%)
Total	87	80(91,9%) 7(8,0%)	36(41,3%) 51(58,6%)	35(40,2%) 52(59,7%)

91.95% of the personnel surveyed have knowledge of programming; 41.27% gave a good definition of the operational programming and 59.77% of the

Table III: Distribution/existence of drawbacks to surgical programming

Corps	N	Programming disadvantages	Programming Appréciation	Programming proposal
		Effective 87(100%) yes No	Effective 87(100%) Good bad	Effective 87(100%) Good bad
Doctors	15	9(10%) 6(7%)	6(6,49%) 9(10,34%)	9(10,34%) 6(6,89%)
Medical assistants	20	11(13%) 10(11,49)	10(11,49%)10(11,4%)	14(16,09%) 6(6,89%)
Health technicians	15	8(9%) 7(8%)	7(8,04%) 8(9 ;19%)	8(9,19%) 7(8,04%)
Students	21	12(14%) 9(10%)	12(13,19%) 9(10,34%)	17(19,54%) 4(5,59%)
Others	16	5(6%) 11(13%)	8(9,19%) 8(9,19%)	7(8,08%) 9(10,34%)
Total	87	45(51,72%)42(4%)	43(49,43%)44(50,5%)	43(49,43%)44(50,57%)

51.72% of the personnel surveyed find that operating programming has drawbacks such as a few listed below: the often limited number of scheduled interventions, the delay in treatment that can lead to a deterioration in the condition of a patient programmed, frequent postponements or cancellations against 48.28% who stipulate the opposite. At the end of the survey, 50.57% of people did not appreciate the quality of the programming made in the operating room against 49.43% said the opposite. At the end of the survey, 63.22% of people offered suggestions with a view to improving operating theater programming; namely the active participation of all the actors of the block, the respect of the principles of the programming, the increase in the number of operating rooms, the training of the staff of the block and others. 100% of the respondents do not know the decision-making bodies and coordination in an operating room. 75.87% of respondents testified to the existence of a specific date and time for the operating programming meeting.

According to 58.63% of the surveys, the date and time of the operational programming meeting are not always respected against 48.28% testifying to the contrary. 65.52% of the staff surveyed testified to the existence of a room of operation for all surgical specialties practicing in the operating room 72.41% of respondents attested to the existence of a regular opening time for the operating room. 77.01% of respondents testified to the non-existence of a fixed time for the start of the interventions of the operating program. 63.22% of the personnel surveyed think that there is no specific circuit for patient and equipment in the operating room while 36.78% say the opposite. 100% of the respondents do not know the person responsible for coordinating surgical interventions during the implementation of the operating program. 50.57% of respondents testified to the non-obedience of hygiene rules and protocols in the context of the fight against nosocomial infections, especially that of the operating site in the operating room.

Table IV: Distribution/existence of sanctions

CORPS	EFFECTIVE	YES	%	NO	%
Doctors	15	07	08,04	08	10,34
Médical Assistants	20	13	14,94	07	08,04
Health technicians	15	03	03,44	12	13,79

CORPS	EFFECTIVE	YES	%	NO	%
Studiants	21	07	08,04	14	16,09
Others	16	07	08,04	09	10,34
TOTAL	87	37	42,52	50	57,48

57.48% of the personnel surveyed declared that there are no sanctions specifically established in the operating theater in the event of a fault or breach of a rule. 12% of the respondents are not in favor of the existence of specific sanctions and management of conflicts, malfunctions in the operating room. 100% of respondents affirmed the absence of collegiality in the operating programming meeting. 51.72% of respondents felt that the reading of patient files is not done 79.32% of respondents do not know the different types of operating programming in an operating room. 57.03% of respondents do not know the scheduling of patients in the operating room. 75.87% of respondents testified that informed consent is not established for all patients before their interventions. 54.03% of respondents attested that the operating program is not diffused to all actors in the operating room and others in relation. urology carried out the greatest number of operations with a rate of 19.64% each. The lowest rate was recorded by neurosurgery with 07.14% and the average is 08 interventions per operating program. In 100% of the different operating programs carried out, the block was regularly opened at 7:30 a.m., but the first incisions were all made after 8:00 a.m. without regularity. Out of 53 interventions scheduled in the operating room, 11 of them were canceled or even postponed due to a lack of blood scheduled for transfusion and also due to non-responding patients on the day scheduled for the intervention; i.e. a rate of 20.75%. In addition, 04 unscheduled interventions were observed, i.e. a rate of 07.54% of scheduled interventions. SSPI and 09.52% in hospitalization.

IV. COMMENTS

Our study took place at the CHU Gabriel TOURE from October 19 to November 19, 2010. It should be noted that the 87 personnel surveyed from the operating room and other related services were all available and responded effectively to the questionnaire which was addressed to them during the investigation. Noting that the dysfunctions observed in the theater are the cause of delays, postponements or additions to the operating program and which are sources of insecurity and dissatisfaction [6-8].

1. Definition and importance: 91.95% of the personnel surveyed did not know the term “operating programming” among which 58.63% did not know the definition and 59.77% the importance of programming.

2. Appreciations and suggestions: The finding shows a poor appreciation in 50.57% of the staff surveyed and multiple suggestions expressed by 63.22%

3. Decision-making and coordination bodies in an operating room: The complexity of the operation requires a structure to plan, program and regulate these activities, in particular the head of the block, the coordinator, the council, the commission, the regulatory cell, the secretariat of the block [9, 10]. The survey revealed that the decision-making and coordination bodies in an operating theater are unknown to all the staff surveyed (100%).

4. Compliance with hygiene rules: Our survey revealed the non-compliance with the majority of these hygiene rules following the testimony of 50.57% of the staff surveyed.

5. Charter for operating the operating room: The organization and management of the operating rooms require the development of a charter comparable to a real text of law by the council responsible for doing so [11, 12] Through this survey, 75.87% were unaware of the existence of a precise date and time at the programming meeting. 63.22% of respondents affirmed that there is no circuit clean for patient and material. Moreover, it turns out that none of the staff surveyed knows the person responsible for coordinating the teams in the operating room (100%). The rules of hygiene are not respected in 50.57% and that in more than half of the cases there have never been established sanctions in the event of malfunctions and conflicts .

6. Collegiality: The study showed that there is no collegial programming because each department does its programming without the presence of anesthesiologists or nurses from the operating room, which is not recommended practice.

7. Reading files: In half of the meetings of the programming, there was no reading of the patient files which can lead to disturbances during the programming

8. Types of operative programming and patient scheduling: There are different approaches to constructing the operating program, namely open programming, programming by prior allocation of time slots and programming by prior allocation of time slots with adjustment [13]. Respectively 79.32% and 57.03% of respondents did not know the types of programming and scheduling criteria such as age, pathology, type and duration of intervention, available equipment.

9. Informed consent of patients: the study showed that a virtual absence of informed consent from patients because the country does not yet have laws The recommendations have drawn the attention of the

authorities for an upcoming development of a consent in Mali.

10. Dissemination of the operating program: 54.07% of respondents affirmed the lack of dissemination of the program precisely to other departments in relation to the operating room. This rate is really low. There is therefore a need to train and equip the secretariat for better dissemination of programs.

11. The operating program list; In 100% of cases there is a lack of completeness as to the information of these various elements mentioned above.

12. Carrying out interventions in the operating program: According to the survey carried out, out of 53 scheduled interventions, 11 were cancelled; i.e. a rate of 20.75%, for lack of blood provided, patient not responding on the day of his intervention. At the end of the survey, we found that all the patients were able to benefit from beds in the continuing care units, i.e. 90.48% in SSPI and 09.52% in hospitalization.

V. CONCLUSION

The issue of surgical programming remains a very delicate, relevant but also very complex subject. Despite the efforts made beforehand, much remains to be done to best boost the quality of fundamental programming to ensure patient safety and satisfaction. In order to guarantee the quality of care at the CHU Gabriel TOURE.

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