

Transfusion Safety and the Communication Challenge of the Blood Supply at the Military Hospital of Yaoundé

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Summary

Background: Cameroon faces security challenges that significantly impact the demand for blood and blood products in its care facilities, including military ones. The blood bank of the Military Hospital Region I Yaounde (MHRI) because of its human, material and managerial potential, and its situation provided the framework for analysing the communicational issues of the blood supply.

Methods: A descriptive qualitative-quantitative situational analysis of the military hospital's blood bank communication system, and its deployment in 2017 has been carried out. The 2014 Who Global Database on Blood Safety (OMS) collection and analysis tool used the bank's staff and routine documents.

Results: The bank registered 1101 candidates in the [18-27] bracket. There was no communication programme geared towards defence institutions, schools and university faculties. The staff's action, restricted but of good quality, was supported by financial and technical partners.

Conclusion: There are significant mobilization potentials at MHRI, and the value of setting up and supporting communication strategies to unite these dynamics for an efficient blood supply is needed.

Keywords: blood; communication; supply; MHRI

Introduction

Blood is a valuable resource for the management of chronic diseases, complications related to various ailments and various traumas in times of peace and war [1]. Blood transfusion activities are an integral part of Cameroon's health sector strategy, health promotion (HCP), and should form its backbone through its communication strategies [2, 3]. As much as communication must interconnect the axes of the SSS without alienating the fundamentals of the ST, the message delivered in a blood bank each time, must be adjusted in order to be accessible to the target concerned. In order to optimize supply at HMRI in view of the ever-increasing wave of requests and as bi-en-emergency as routine, the use of all channels of expression to ensure a regular flow of donors, and safe, clinically effective and efficient blood transfusion practice is a prerequisite. This study aimed to assess the communication system set up at the HMRI blood bank and its deployment.

Methodology

A mixed situational analysis (qualitativeitative) for descriptive purposes of the blood bank's communication system and its deployment from January to December 2017, was conducted from January to June 2018, with any stakeholder in the transfusion chain who had agreed to participate in the study, as well as the review of their related working documents. Data collection was conducted using two modified questionnaires, based on the WHO blood safety model *GDBS 2,014* [4]. These questionnaires have been adapted to be applicable to the realities of the resource-limited study framework.

Data was analyzed using SPSS software version 18.0. To this end, three key groups were identified and dissected: grant candidates (CD), bank staff (PB) and financial and technical partners (PFT). Determining the association between the variables required the Chi2 test, the $P \leq 0.05$ signification level.

Results

HMRI registered 1888 applicants, including 1101 aged [18-27] years, and 20% women. The transfer of PSLs was subject to a bond during emergency withdrawals and the product served immediately. The implementation of the TS policy guidelines as well as the management of donation candidates by the bank's staff was effective, the amplification and reinforcement of messages and good practices much less. For this purpose, information on the activity to the actors was relatively available. There was no communication plan on the activities of the blood bank, nor was there a communication plan directed to the various establishments and the surrounding communities, universities and large schools (see Table 1).

Disposal of PSL			
Process	Blood product	Terms	Delay
Routine	Sang total CGR PFC	02 donors +20.000Fcfa 02 donors +20.000Fcfa	30-45minutes
Urgency	---//---	20.000Fcfa ---//--- +10.000	Immediate
Routine health information circuit			
Beneficiary	Ownership of Information	Characteristic	
PNTS/ MINSANTE	√	Number and type of PSL	
MINDEF	And	PEC MINDEF, gratuits	
Other STCs	√	State of stocks, management of referred requests, rare groups	
AODS	√	Organization of campaigns, mobilization, awareness	

Banking staff	And	PSL donations, pocket transfer price, terms and conditions
Donors	√	ITT information, guidance and JEP, modalities
Bank targets	X	Information, mobilization, awareness
Blood Bank Management Software	X	Manual archiving

√= yes; X= no; E= elementary.

Table 1: Routine health information.

Discussion

Blood safety (TS) emphasizes that a blood supply of sufficient quality and quantity must benefit from a concrete and national policy aimed at implementing a donor service and a program of their awareness, recruitment and retention, safe blood collection, information, and education of the general population [5]. Like any therapy, blood transfusion requires regular evaluation of its indications, effectiveness and risks, but also its techniques for sharing and promoting a culture of information.

All laboratory staff in general must be able to refer an LSP user, and the staff of the bank in particular must not only have the technical competence but also the relevant message to the donor candidate, the donor or even the applicant for PSL, the small but versatile staff of the bank, capable of transferring tasks, is unaware that blood transfusion is very well supervised in Cameroon, and that there are national diploma courses. He is aware of all the procedures and technical operations relating to the conduct of the transfusion but is not interested in the ancillary activities, he also does not know what is the cost of operation even approximate of a blood bank, or a mobile collection. The financial management of the service, the imperatives of the blood transfusion system (STS) and the latest national and regional advances in TS must be an integral part of the bank's empowerment and monitoring program, in addition to the UPRs and similar activities already initiated. Bank members should be invited and even delegated to, training, mentoring and on-the-job professional development related to blood transfusion activities, and restitution workshops, increased supervision missions to these staff by the responsible health authorities and made more formative. To provide specialized training in TS, to guarantee a career plan and incentives (emoluments, profit-sharing system) for the staff/technical unit of the bank with good performance because good performance attracts partners. fully or partially responsible for the training, tutoring, on-the-job professional development of staff in services related to blood transfusion activities, the provision of laboratory equipment, TS equipment, infrastructure, etc. The action of the PFT appears transversal between the bank's human resources and the candidates for donation. These are several and support in multiple ways to volumes ranging from flyers to the provision of bank equipment. Funding depends on both the help of partners and the commitment of states [9]. The publication and sharing of its activities encourages and attracts partners, as far as MINDEF and its institutions are concerned: the right information, the right gesture with regard to blood transfusion and the right attitude in their context of defense, emergency and acquisition of the stock to face all their possible imperatives (military camps, medical centres, infirmaries training centres). Messages reinforcing good practice among them need to be amplified.

Staff should also be briefed and exchanged with clinician users on the proper clinical use of blood, the various blood products available, compliance with transport and storage conditions before transfusion, recipient monitoring, the latest international and regional advances in blood safety and haemovigilance. An epidemiological survey revealed that 52% of respondents believed that blood donation posed a risk of HIV infection: a figure that highlights the need to continue information campaigns for the general population [6]. The affiliation of the population to medical resources located in the same territories creates more favourable conditions that modulate the organization of resources according to the needs of the population and greater territorial autonomy [7]. Strategies that have proved successful elsewhere should not be ignored, such as the final exclusion of donors recognised as HIV-positive from donating blood, the strengthening of questioning during the pre-donation medical interview, and the advice given during public appeals encouraging at-risk subjects to stop using blood donation as a diagnostic test.

The notion of the cost of a bag can be counterproductive to the mobilisation of voluntary donors, the latter questioning the “sale” of blood donated free of charge [8], educational efforts must be undertaken so that the population of potential donors understands the implications and realities of blood donation and the supply chain. Indeed, since blood is a free resource, its production has a cost, and so does the destruction of pockets improper for consumption. The quality, accessibility and availability of inputs have an impact on the production and disposal costs of PSLs, the diversity and quality assurance guarantee of the products delivered, as well as on delivery times. The phenomenon of the expiry of pockets in a context of pronounced shortage emphasizes the need to disseminate information on the availability of PSLs, contact between producers (CTS) and prescribers (Doctors), and within the producing health facilities (FOSA) with those without PSL preparation equipment. It is essential that the redirected or modified orders, the other blood transfusion centres (STCs) receive information on this subject with emphasis on the production and storage capacity of this blood bank, arguments also of interest to clinicians who perform scheduled surgeries and autotransfusion.

The management modalities of candidates for donation, the psycho-social accompaniment and the care given to candidates screened positive for ITT, the dispensing of bags are also important as information given to blood seekers and PSL, as well as the care given to candidates screened positive for ITT, logistical and military support activities and free access for indigents.

The desire to sensitize the men present in the establishments is commendable but should obey a rigorous approach in accordance with the canons (authorities and principle of equity). In concrete terms, the authorities’ approval should be obtained for advocacy in favour of setting up a specific programme of information, education and communication on blood donation and transfusion directed at men in uniform, its implications in their context, taking into account the framework of their missions. The objective is to raise their awareness, for a change of behavior in the hope of constituting a voluntary, safe, informed and operational military blood donor base.

Conclusion

At various levels by different actors, the levers on which to act to improve the blood supply at HMRI are known, ranging from mobilization potentialities to resource capacity. Levers that, if addressed methodically, will accelerate and intensify progress in the safe and secure blood supply and ensure that the response to these ever-growing needs is translated into reality.

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