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Analysis of the Management of Drug Supplies in the Central Purchasing Center in Congo – Brazzaville: the Case of CAMEPS

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Abstract
The purpose of this article is to analyse the management of drug supplies in the Central Purchasing of Essential Medicines and Health Products of the Republic of Congo (CAMEPS). To do this, the study relied on four main methods: guided qualitative inquiry, the 5P method, the problem tree method and the weighted voting method. The data was compared to regional drug supply guidelines in Central Africa. The analysis revealed several factors contributing to the ineffective management of essential medicine supplies at CAMEPS, including the lack of accurate data, clear procedures, adequate funding and effective supervision. These results thus highlight systemic gaps requiring interventions to improve the management of drug supplies.

Keywords: Supply management, essential medicines, Central Purchasing, 5P method, Problem tree method, Weighted voting method

INTRODUCTION

The concept of essential medicine appeared in the 1970s in the resolutions of the World Health Organization (WHO) responsible for global health issues. For several years, African countries in general, and those who have been members of the Organization for Coordination and Cooperation for the fight against major endemics in Central Africa (OCEAC) in particular, have been confronted with the thorny issue of the supply of essential medicines.

These countries purchased specialty drugs, products which were expensive both for the states which purchased them and for the populations which consumed them. These high price levels have long constituted, and rightly so, a barrier to accessibility for a large part of the African population. These high costs, coupled with pharmaceutical legislation not adapted to modern pharmacy practice, have opened a gap to parallel markets for medicines of substandard quality and/or from dubious sources, with the obvious risk of an increase in mortality linked to their consumption.

Following these difficulties in supplying medicines, difficulties mainly linked to purchasing costs, states have met on several occasions with the support of the WHO to find suitable solutions, one of them being the creation of public purchasing centres. Their essential mission is to ensure the availability of quality medicines at lower cost and to channel sources of supply.

In Central Africa, due to the absence of a real essential medicines policy, the non-rational use of medicines and the persistence of dysfunctions in medicine supply systems, the OCEAC is committed to WHO's support in meeting these challenges. As such, it proposed guidelines to enable the said organization, made up of Cameroon, Congo, Gabon, Equatorial Guinea, the Central African Republic and Chad, to have a reliable, effective, efficient and viable supply system for essential medicines.

The Republic of Congo, a member of OCEAC, adopted these guidelines and created the National Central for the Purchasing of Medicines, Vaccines and Essential Medical Consumables (CENAMES), by Decree No. 95-207 of November 13, 1995 creating of CENAMES, to alleviate the problem of supply of essential medicines. Faced with management problems, CENAMES was dissolved in favour of the "Congolaise des Médicaments Essentiels Génériques" (COMEG). The latter was created in 2005 as a non-profit association with the support of development partners and the health sector, such as the European Union, the World Bank, the WHO, and Doctors of

Africa. Facing the same problems as CENAMES, COMEG has been supplanted by the Central Purchasing of Essential Medicines and Health Products (CAMEPS).

CAMEPS was created by Law No. 26-2015 of October 29, 2015 creating CAMEPS, in the form of a Public Industrial and Commercial Establishment. This purchasing centre guarantees absolute transparency of essential medicines. It is the main body for the implementation of the national pharmaceutical policy of the Republic of Congo and its mission is to make essential medicines and health products accessible and at lower cost to populations throughout the national territory. It particularly purchases generic drugs. Since its inception, CAMEPS has regularly faced supply problems which undermine its ability to fully play its role and achieve its objectives. These problems lead to either an overabundance of medicines with the risk of expiry, or a shortage of medicines which can encourage consumers to turn to unapproved products and/or from dubious sources. These two (2) situations have harmful impacts on the financial resources of CAMEPS (losses linked to the expiration of medicines) and on the health of the population (consumption of unapproved products or from questionable sources). In relation to these consequences, particularly those relating to the health of populations, being potentially harmful, the present work seeks to identify the explanatory factors of this inefficiency in the management of supplies of essential medicines from CAMEPS.

The general objective of this work is to carry out an analysis of the management of supplies of essential medicines to CAMEPS. Specifically, this work aims to:

1. identify the central cause of the ineffectiveness of CAMEPS's management of supplies of essential medicines;
2. identify and analyse the main factors which explain the central cause of this inefficiency in the management of supplies of essential medicines;
3. propose solutions for improving the management of supplies of essential medicines for this structure.

To understand what undermines the management of supplies of essential medicines at CAMEPS, we asked the following question: ***what explains the ineffectiveness of the management of supplies of essential medicines at CAMEPS in Congo?***

The answer to this question leads us to structure this paper into four (4) essential points. The first point concerns the theoretical framework. This is the literature review on the subject. The second point synthesizes the analysis models resulting from the literature review. The third point is devoted to the methodological

framework. Finally, the fourth and final point relates to the analysis of the results and their discussion. This work ends with a conclusion.

1. CONCEPTUAL FRAMEWORK AND DRUG SUPPLY CYCLES

Mastery of the main concepts relating to supply management is essential for a better understanding of the drug supply logistics cycle.

We will therefore begin with a definition of these concepts, before presenting the logistical **cycle** of drug supply.

1.1 Definition of concepts

According to FOURNIER P. and MENARD JP. (2014), procurement is a process that manages commercial aspects as well as business relationships with suppliers and brings together all the steps to meet a desire to purchase, mixed sourcing, negotiation, supplier selection and feedback. As for the Supply Chain, it constitutes the network of companies linked together by the exchange of products, services and information in order to satisfy the demands of a customer (FOURNIER and MENARD, 2014, p 58). It is defined as the management of the flow of goods and services and includes all the processes that transform raw materials into finished products. It is the management of purchasing and business relations with different suppliers according to the two authors.

The Procurement Plan consists of describing the entire procurement process that the project team will follow to acquire goods and services (Public Services and Procurement Canada, 2021). It is a planning tool developed for a period of 1 year, which defines for each medicine and health product the forecast schedule of quantities to be ordered and deliveries.

Article L.5111-1 of the French Public Health Code (2021) defines medicine as any substance or composition presented as having curative or preventive properties with regard to human or animal diseases, as well as any substance or composition which can be used in humans, in animals or which can be administered to them, with a view to establishing a medical diagnosis or to restoring, correcting or modifying their physiological functions by exerting a pharmacological, immunological or

metabolic action. Dietary products which contain in their composition chemical or biological substances which do not themselves constitute food, but whose presence confers on these products either special properties sought in dietary therapy, or properties test meal. Products used for disinfection of premises and for dental prostheses are not considered medicines.

A distinction is thus made between essential medicines and generic medicines and falsified or counterfeit medicines.

Essential medicines are medicines that address the priority health needs of a population (WHO, 2021). These are the drugs that need to be available at all times in a well-functioning health system. They are presented in an appropriate dosage form, with guaranteed quality and at an affordable price for both the individual and the community.

Regarding generic medicines, the French Public Health Code in its article L.5121-1, defines them as a specialty which has the same qualitative and quantitative composition in active ingredients, the same pharmaceutical form, and whose bioequivalence with the reference specialty has been demonstrated by appropriate bioavailability studies. It is the exact copy of an original medicine whose patent has fallen into the public domain that is to say of the same pharmaceutical form (capsule, tablet, suspension or suppository) with exactly the same properties as the product of origin (Public Health Code, 2021).

As for pharmaceutical specialties, these are "any medicine prepared in advance, presented in particular packaging and characterized by a special name" (Article L. 5111-2 of the Public Health Code, 2021 Edition).

Falsified or counterfeit medicine is any medicine containing a false presentation; that is to say: • its identity, including its packaging and labelling, its name or its composition with regard to any of its components, including excipients and the dosage of these components; • its source, including its manufacturer, its country of manufacture, its country of origin or the holder of its marketing authorization; • or its history, including authorizations, registrations and documents relating to the distribution channels used (Article L. 5111-3 of the Public Health Code, Edition 2021-10-09, page 645).

Health products are products involved in obtaining or maintaining a complete state of physical, mental and social well-being. These are products for health purposes (DELETRAZ-DELPORTE, 2012). A medication or health product is said to be "expired" when it has reached its expiry date before its use by the patient. Its identification is made possible by a good physical inventory which takes into account the expiry dates of all products. As a precaution, when the day is not specified on the expiry date, the first day of the month indicated must be considered (Manual of procedures for integrated logistics management of pharmaceutical products in the Republic of Guinea, 2016). A medicine or health product is said to be "deteriorated" or "damaged" when visual inspection shows the physical characteristics of deterioration which are the change in odour or colour, the absence of clarity, the formation of a deposits or lumps, etc. Deterioration of the primary or secondary packaging of a product during storage or handling is another form (Manual of procedures for integrated logistics management of pharmaceutical products in the Republic of Guinea, 2016).

Involved in the management of drug supplies, purchasing centres are structures managing the purchases of its affiliates who may be retailers or wholesalers (INSEE, 2021). These centres can be pharmaceutical when they bring together community pharmacists within a structure with legal personality (company, economic interest group, association) with a view to purchasing non-reimbursable medicines on behalf of pharmacists with member pharmacies (*Le Monitor des Pharmacies*, 2021).

Essential in the supply of medicines, delivery is the quantity of pharmaceutical products delivered at one time in execution of an order or a particular request (Guide to good practices for the distribution and importation of pharmaceutical products for human use in UEMOA Member States, 2010). As for its deadline, it is the time interval between the moment when the order is placed and when the products are available and usable (Manual of procedures for integrated logistics management of pharmaceutical products in the Republic of Guinea, 2016).

All medicines delivered are intended for consumption or use during a given period. This average consumption, which can be monthly, is calculated from the stock sheet where all entries and exits from stock for a product are noted.

These drugs are subject to selection, that is to say a process which consists in choosing the drugs best suited to the management of a given pathology in a region taking into account epidemiological and socio-economic data – economic

and health. The aim is to rationalize the use of pharmaceutical products meeting the needs of the population.

This selection is accompanied by quantification which is the process used to determine the quantitative needs for medicines. It is a carefully made assessment of the quantities needed for each medication. It is based either on adaptation of past consumption or on anticipation of disease types and their standard treatment, and can be expected to correspond reasonably well to actual needs. The goal is to avoid stock shortages and overstocking. The different tools necessary for quantification are: average monthly consumption, delivery time, safety stock, minimum stock; acquisition/purchase: acquisition is the process of obtaining medicines. It can be done either through purchase or through donations. Its goal is to have quality medicines in the right quantity, at the right time, at the right price and from a reliable source. Storage: storage is a set of rules and procedures for placing, storing, and keeping products in a warehouse. It refers to the principles of storage and arrangement of stocks of medicines and other products following very specific rules. Distribution: Distribution is the system of transportation and delivery of inputs from one level to another, from one point to another. The distribution component includes transport, deliveries, inventory management, storage and conservation conditions. Use or rational use of medicines: this means prescribing the most appropriate product, obtained on time and at a price affordable for all, delivered correctly and administered in the appropriate dosage, for an appropriate period of time. The use stage includes: • Medical diagnosis; • Medical prescription; • Pharmaceutical dispensing; • Compliance/biological monitoring; • Pharmacovigilance. Quality assurance: quality assurance is a broad concept which covers all the points which, taken one by one or taken together, influence the quality of a product. It includes all the measures taken to ensure that pharmaceutical products have the quality attributes that they are supposed to have for their use.

1.2 Drug supply logistics cycle

All of these definitions as well as guidelines on the supply of essential medicines in Central African countries make it possible to build a logistical drug supply cycle. This, constituting our conceptual or analytical model, is presented as follows:

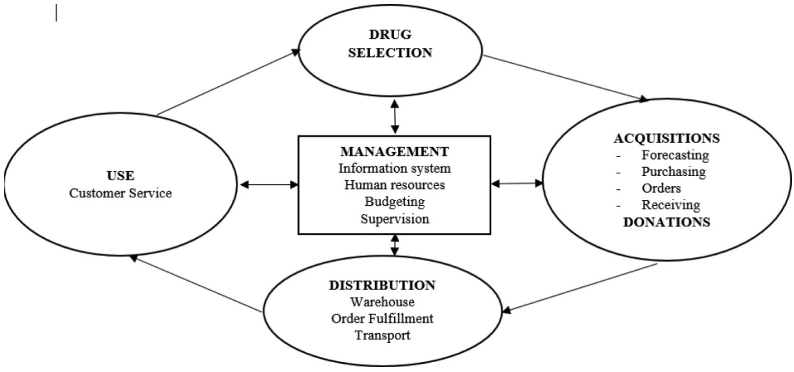

Figure 1: Logistics drug supply cycle
Source: Guidelines on the supply of essential medicines in Central African countries

There are three systems that govern the pharmaceutical supply cycle:

- pharmaceutical regulations;
- the logistics management information system (SIGL);
- the quality management system.
- Pharmaceutical regulations are all the legislative and regulatory texts in force which govern:
- the approval and evaluation of medicines and health products;
- the evaluation of medicines and health products;
- the manufacture of medicines and health products;
- importation of medicines and health products;
- inspection and control of medicines and health products;
- storage and distribution of medicines and health products;
- the use of medications and health products.

At the level of the information system for logistics management, these are the activities which make it possible to organize the supply cycle. It consists of:

- collecting information;
- store information;
- process information;
- disseminate information.

The quality management system is a set of measures that ensure that the product that reaches the end user is safe, effective and meets quality standards. In Congo, the public supply network is organized into three (3) levels: the central level,

the intermediate level and the peripheral level. The central level is CAMEPS which ensures the supply, storage and distribution of essential medicines and health products. The intermediate level is represented by health districts, which act as district depots and distribute medicines to district health centres and hospitals. Distribution is made once a quarter, or four (4) times a month. The peripheral level is made up of health centres and reference hospitals as well as general hospitals. The latter have medication dispensation points within them, which supply the various services and dispense medications to patients. Finally, as for the Private Supply Network, the latter is organized into two (2) levels: wholesale distributors and retailers. Wholesale distributors obtain their supplies from their distribution centres based abroad. These centres are responsible for collecting medicines from pharmaceutical industries.

2. THEORETICAL FRAMEWORK: LITERATURE REVIEW ON MEDICINE PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

The literature about the supply of medicines is structured around several axes relating to the different actors, the different stages of the supply process, the difficulties linked to the supply of medicines as well as their causes and solutions.

Regarding the main actors involved in the supply of medicines, they are of two types, namely national and regional actors. Regarding national actors, GANSO (2021) identifies, in the context of Mali, pharmacies, which are responsible for supplying public and parapublic establishments (EPH), with essential medicines and other quality products that are financially accessible to populations, and also private suppliers are responsible for supplying private pharmacies with essential generic medicines. The Directorates of Pharmacy and Medicines (DPM) are responsible for control and inspection while the National Health Laboratory (LNS) carries out analytical control on imports and on the national distribution network. For inspection, the Health Inspectorate (IS) is responsible for monitoring and ensuring compliance with legislation, regulations and procedures.

P. FOURNIER and JP. MENARD (2014) offer a complete vision of the procurement process by highlighting the most important steps found in the majority of procurement processes. They believe that each company has its own method of procurement. R. PERROTIN and F. SOULET de BRUGIERE (2007) believe that

the crux of the matter for a supplier is its ability to predict the need and match it with the supplier's production capacity. Too much stock means the margin evaporates, too little stock means turnover drops due to shortages. Measuring product consumption is becoming increasingly easier to achieve thanks to the performance and miniaturization of meters and the capacity of data transmission systems. The challenge of good supply management is therefore to give all links in the chain visibility on variations in consumption of the final link. C. MOUALA, J. ABEYE and A. GOUMBA (2009) evaluate access to essential medicines in primary health centres in the Mambéré-Kadei health prefecture. They suggest that drug prescriptions, in a context where generic essential drugs are available, facilitate access to medical care for the population in Mambéré-Kadei.

Although the availability and accessibility of generic essential medicines are good in this health prefecture, it is worth emphasizing the need to put in place better care for indigent patients. K. HOUNMENOU and O. MULANGU (2019) analyse the CAMEPS supply system, thus highlighting the main problems that undermine the pharmaceutical system in Congo.

The difficulties linked to supply are of several types and rest on all those involved in the manufacturing and distribution chain. The different breaking points can be at the level of the raw material supplier, manufacturers, wholesalers, and distributors (Fournier-Bidoz, 2021). The Report from the National Academy of Pharmacy (National Medicines Safety Agency, 2019) on the unavailability of medicines distinguishes three main causes. The first economic causes because certain manufacturers no longer invest in their production site due to their low profitability for certain drugs that have been marketed for a long period and whose price has not been updated. In addition, by favouring massification in the context of calls for tenders and the single supplier in the purchasing policy of establishments have led to a reduction in the number of manufacturers offering medicines and therefore an increase in supply difficulties. As for the industrial causes, they are linked to the globalization of industry which has modified the drug circuit with, among other things, the relocation of production. For example, 35% of the raw materials used in the manufacture of medicines in France come from India, China and the United States. The complexity of the logistics chain, the difficulty of sales forecasts, and production with multiple destinations can also explain this phenomenon. Regulatory causes concern Good Manufacturing Practice standards and are increasingly restrictive. Added to these causes are increasingly complex administrative constraints.

The EAHP survey (European Association of Hospital Pharmacists, 2019) collected the possible causes of ruptures from different healthcare professionals. Depending on the type of professional, the answers were different. For hospital pharmacists, the causes were mainly the rupture of an active ingredient, manufacturing and supply chain problems. For doctors, the price of the drug, supply chain problems and problems related to parallel export were the main causes. The nurses, for their part, responded that it was the price of the drug, manufacturing problems and supply chain problems.

The works of TADLAOUI, CHAFI and ENNADI (2015) propose actions that focus on improving the main stock shortages identified. The first of these actions is the centralization of purchasing by the supply division, which will allow a reduction in prices. The second proposed action aims to compensate for the absence of a hospital information system. These include the computerization of hospital pharmacies and the installation of an integrated information system in provincial and regional hospital centres on the one hand, and, on the other hand, in the provincial delegations for complementarity and coordination in terms of inventory management when necessary.

Another action to ensure the proper functioning of regional pharmacies is the assignment of pharmacists and qualified handling staff. These pharmacists will have the role of coordination, planning and management for pharmaceutical products in public structures. They will be responsible for pharmaceutical affairs in their region. In particular, they will organize, in coordination with the pharmacy inspectorate dependent on the Medicines and Pharmacy Department, the control of pharmaceutical establishments in their region. They will also be responsible for contacts with professional pharmaceutical organizations at the local level.

To reduce the risk of deterioration or loss of medicines in hospitals, hospitals should be equipped with cold rooms or refrigerated cabinets and their temperature should be controlled, especially for heat-labile products.

Finally, a reorganization of current distribution systems through the operationalization of regional pharmacies, the acceleration of the construction, redevelopment and equipment of regional depots and the assignment of pharmacists and handling staff is proposed.

3. METHODOLOGICAL FRAMEWORK

In this section, we will endeavour to answer the question of why CAMEPS's management of supplies of essential medicines is ineffective ?

To this end, we formulate the hypothesis according to which the inefficiency of the management of supplies of essential medicines from CAMEPS is due to a dysfunction of the logistics management information system.

Following its development, this methodological framework will successively present the research field, the nature of the study, the collection of data and the analysis of the data collected.

3.1 The research field

CAMEPS, whose head office is located in Brazzaville, in the Republic of Congo, is a public establishment of an industrial and commercial nature (EPIC), endowed with legal personality, financial and management autonomy created by Law No. 26 -2015 of October 29, 2015 creating CAMEPS22. It began its activities on August 17, 2017 following decree no. 2017-2010 of August 14, 2017 appointing its Managing Director. It is placed under the supervision of the ministry in charge of health which exercises power of direction and control. CAMEPS is subject to the rules and practices of pharmaceutical establishments in accordance with the national pharmaceutical policy. Its missions are: • to acquire essential medicines and health products; • provide public and private health facilities with essential medicines and health products; • make essential medicines and health products available, accessible and at lower cost to populations throughout the national territory; • support government action in the implementation of free policies (AIDS, malaria, tuberculosis, etc.).

CAMEPS is placed under the authority of a board of directors which is the design, orientation and administrative body. It is managed on an organizational level by a General Directorate with an organization chart (see appendices) corresponding to both the needs and functionality of the institution. The directorates of CAMEPS are: • Directorate of Pharmaceutical Supplies; • Directorate of Inventory Management and Distribution; • Directorate of Logistics and Heritage; • Sales, Marketing

and Communication Management; • Administrative, Financial and Accounting Department.

CAMEPS has two (2) categories of staff: civil service staff on secondment and CAMEPS contractual staff. CAMEPS staff are subject to the regulatory provisions applicable to health workers, particularly in terms of hygiene, safety and ethics. LA CAMEPS currently has fifty-three (53) employees, including forty-three (43) in Brazzaville and ten (10) in Pointe-Noire, presented as follows:

Table 1: CAMEPS workforce

Categories	Women	Man	Total
Senior executive	0	5	5
Department heads	5	3	8
Foremen	3	0	3
Enforcement Officer	8	29	37
Total workforce	16	37	53

Source : CAMEPS Human Resources Services

3.2 Data collection

Our study included both primary and secondary data.

The primary data are those collected during interviews as well as direct observation in the field. These interviews, which were made possible by using the interview guide, allowed us to reference the main themes to be addressed and the questions to ask the actors. Thus, we used the semi-structured interview, thanks to which we centred the speech of the interviewees around the themes defined previously and recorded in an interview guide.

Secondary data comes from the general management of CAMEPS. These are essentially the reports, studies and internal documents of CAMEPS, the exploration of which was carried out in compliance with the confidentiality rules in force in the company.

3.3 Data processing

The information collected as part of our work was processed on the Excel Table. This treatment concerned all the methods used: interviews, the 5P method, the problem tree and the weighted voting method. This phase made it possible to retain information that was not relevant to the theme addressed by our work. The processing of the information resulted in the analysis of the central cause of the problem studied as well as the five (5) factors justifying it, based in particular on the different causes identified using the problem tree. The information collected as part of our work was processed on the Excel Table. This treatment concerned all the methods used: interviews, the 5P method, the problem tree and the weighted voting method. This phase made it possible to retain information that was not relevant to the theme addressed by our work. The processing of the information resulted in the analysis of the central cause of the problem studied as well as the five (5) factors justifying it, based in particular on the different causes identified using the problem tree.

4. RESULTS AND THEIR INTERPRETATION

This section focuses successively on the main results obtained and then on their interpretation.

4.1 Presentation of the results

The results can be grouped into two main categories based on the methods used.

Thus, the interviews carried out allowed us to answer our research question by showing that **the ineffectiveness of the management of supplies of essential medicines from CAMEPS is due to the dysfunction of the logistics management information system.**

Regarding the other methods selected, the collection and processing of data by the methods selected allowed us to identify seven (07) main factors explaining the dysfunction of the logistics management information system.

These results are summarized in the following table 2.

Table 2: Summary of explanatory factors for the dysfunction of the logistics management information system

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Permanent absence of data necessary to identify the country's needs for essential medicines	Lack of timeliness and irregularity of data	The absence of popularization, the insufficiency and lack of application of texts, procedures and supports	Weaknesses in supervision and quality control	Weaknesses in the circulation of information	The financing gap	Lack of application of texts

Source: The authors

4.2 Results interpretation

The results obtained allowed us to confirm our research hypotheses.

Indeed, with regard to the hypothesis relating to the central cause of the ineffectiveness of the management of supplies of essential medicines from CAMEPS, it is linked to the permanent absence of data necessary for the identification of the country's needs in essential medicines. This can be explained by the non-transmission of this data to the central office by the Directorate of Pharmacies and Medicines since the creation of the central office. This data is an important factor in determining the quantity and type of medications to order. This situation affects the capacity of the plant to optimally carry out its supplies and makes the identification and estimation of the country's needs by its internal pharmacists complex.

In this sense, the results relating to the explanatory factors of this dysfunction of the information system allow us to draw several lessons.

Regarding the lack of timeliness and irregularity of data, we noted that health districts and integrated health centres do not transmit their reports on time to the Directorate of Pharmacies and Medicines. Due to the lack of rational discharge data, the placing of orders for medicines by CAMEPS is done randomly because we sometimes observe an irregular period of consumption. Indeed, the survey shows that the current state of CAMEPS is characterized by a low availability of essential generic medicines on the one hand, and by a low coverage of supplies of Essential

Generic Medicines (MEG) compared to the National List of Essential Medicines (LNME) on the other hand.

As for the absence of popularization, the insufficiency and lack of application of texts, procedures and supports, they are linked to the weakness in CAMEPS documentation. This does not have procedures, particularly on quality policy, administrative, financial and technical procedure manuals for the acquisition, storage and distribution of health products. In the absence of such procedures, CAMEPS uses different reception tools and supports to carry out its drug reception operations. These tools include: reception reports, time sheets, transfer sheets, reception tracking sheet (Excel), the SAGE Commercial software.

Regarding the weaknesses in supervision and quality control, it should be noted that the centre does not have a robust quality management system to effectively carry out drug quality controls. Due to the lack of a laboratory at the national level for scientific control of medicines, CAMEPS has no other choice than to limit itself to organoleptic controls and to rely on the information contained in the analysis certificates transmitted by suppliers. This in no way guarantees the quality of the medicines.

Weaknesses in the circulation of information are linked to the virtual absence of transfer of skills, itself caused by the deterioration of the social climate resulting particularly from conflicts of interests and skills. This climate leads to insufficient retention or transmission of information between CAMEPS directorates, resulting in inefficiency in the supply of essential medicines.

The problems of funding deficit and lack of application of texts are the result of a lack of political will. Indeed, the centre was born from the state's desire to provide the entire population with access to quality medicines at affordable prices. Aware of the difficulties and failures that this structure is exposed to, the state should therefore play its supporting role by carrying out regular checks, ensuring compliance with the information circuit by health facilities, and encouraging recruitment and the training of qualified personnel, by encouraging compliance with the standards contained in the OCEAC guidelines, or by providing funding necessary for the normal operation of CAMEPS. But in reality, it is clear that state actions in favour of the rational management of medicines are rare. The consequence of this lack of political intervention is the ineffectiveness of the management of supplies of essential medicines.

CONCLUSION AND RECOMMENDATIONS

This article focused on the analysis of the management of supplies of essential medicines at CAMEPS. Concretely, this involved: (i) identifying and analysing the main factors justifying the central cause of the ineffectiveness of the management of supplies of essential medicines to CAMEPS; and (ii) propose solutions for improving the management of supplies of essential medicines to CAMEPS.

To do this, we used four (4) successive methods: the qualitative survey based on an interview guide, the 5 P method, the problem tree method and the weighted voting method. To analyse the data collected during our interviews, the guidelines on the supply of medicines in Central Africa served as comparison tools.

The results obtained confirmed our hypotheses. Indeed, the ineffectiveness of CAMEPS's management of supplies of essential medicines is caused by several factors, the main ones of which are: (i) the permanent absence of data necessary to identify the country's needs for essential medicines, (ii) lack of promptness and irregularity of data, (iii) lack of popularization, insufficiency and lack of application of texts, procedures and supports, (iv) weaknesses in supervision and control quality, (v) weaknesses in the circulation of information, (vi) the financing gap and (vii) the lack of application of the texts.

To overcome these dysfunctions and strengthen the efficiency of the management of supplies of essential medicines to CAMEPS, we offer solutions:

- A strengthening of the logistics management information system within CAMEPS to have real-time information on stock;
- The development of a descriptive manual of the logistics management information system intended for professionals involved in the management of the medicines supply chain at all levels of the health pyramid;
- The development of a procedural manual adapted to the operation and activities of CAMEPS;
- The multiplication of pleas to the state in order to obtain financial and material support with a view to the creation of a quality control laboratory;
- The establishment of a supply plan to improve the availability of essential generic medicines in CAMEPS agencies and avoid emergency orders;
- Improved order, purchasing and inventory management.

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