

Access to transfusion therapy in Cameroon: a “real obstacle course”

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Abstract: In Cameroon, as elsewhere in the world, transfusion therapy is the best and/or only therapeutic option for some people suffering from severe anemia or chronic diseases such as cancer, kidney failure, etc. However, it is observed that the blood transfusion system in Cameroon is embryonic. The lack of safe and quality blood intended for the treatment of patients is felt very acutely in health facilities. Despite this failure, populations manage to access blood therapy as best they can through their stratagems. Hence the need to make the strategies for accessing transfusion therapy in Cameroon intelligible. The methodology is based on an essentially qualitative approach. The theory of social resources and strategic analysis are mobilized to analyze the data collected using semi-structured interviews with the populations of the city of Yaoundé. Ultimately, the major result that emerges from this research is the following: Patients as agents endowed with rationality in the hospital field opt for both conventional and unconventional strategies of access to transfusion care to be treated in blood transfusion centers in Cameroon.

Keywords: Anemia, blood crisis, transfusion therapy, blood donation, unconventional strategies for accessing care.

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Introduction

Cameroon's health system is still struggling to provide adequate and comprehensive care for patients and to promote the health of the population, despite the proactive projections of the 2016-2027 Health Sector Strategy (HSS) and the creation since 2013 of the National Blood Transfusion Program (NBTP). Today, one of the major public health problems in Cameroon is access to blood secure and of quality. Blood transfusion is also called into question, as one of the most important determinants that maintain the HIV/AIDS epidemic, the prevalence of viral hepatitis, in Cameroon (SSS 2016-2027: 42-43). In terms of access to transfusion therapy, only 10% of annual needs were met in 2014 (NBTP 2014). In 2018, this coverage rate increased to 25% (NBTP 2018). However, according to the World Health Organization (2007), blood transfusion is an essential component of the modern health care system. It saves millions of human lives each year (Chobli, 2011). Indeed, it is a treatment that consists of using the blood products including red blood cells, blood platelets and plasma, collected from individuals called donors and transfused to patients called recipients. Blood transfusion is particularly crucial in complex medical and surgical procedures. It improves the quality and life expectancy of patients with all kinds of acute or chronic conditions. Blood therapy plays a vital role in Preventing deaths from pre- and postpartum hemorrhage, hemorrhage caused

by disasters and various conflicts. It also helps reduce suffering and deaths from severe anemia caused by malaria and other chronic diseases such as cancer and HIV. The lives of some patients, particularly those on dialysis, depend on regular blood transfusions. It is difficult or even impossible to treat massive hemorrhage, as well as for many surgical procedures or hematological disorders such as hemophilia, leukemia, etc. without recourse to the blood transfusion service (Hollan, 1975).

Nowadays, reducing the mortality and morbidity rate linked to the lack of safe and quality blood is one of the most prominent health programs in Cameroon. The deficit of blood products necessary for the care of patients is responsible for forty percent (40%) of maternal mortality following hemorrhagic complications. The same is true in many cases of deaths of children under five (5) years of age suffering from severe anemia, mostly resulting from malaria and/or malnutrition. This deficit also reflects the inadequacy in the care of chronic patients such as hemodialysis patients, hemophiliacs, etc. whose treatment depends on blood products (NBTP, 2014).

Generally speaking, the number of blood bags is estimated at 400,000 necessary for the annual care of patients in Cameroon (NBTP, 2014). The deficit of blood bags to be filled for the effective care of patients requiring blood transfusion in the country's health facilities amounts to approximately seventy-five

percent (75%) (NBTP, 2018). With particular regard to the Central region, the region of the political capital of Cameroon, It is noted that the highest demand for blood is there. It is estimated at 73,941 the quantity of blood bags necessary for the annual care of patients and the coverage rate is approximately 47% (NBTP, 2018). The supply of blood products in blood banks remains far from being proportional to the demand. Despite the existence of health facilities with a high technical platform for blood transfusion, the observation is revealing of the fact that the majority of needy patients do not have access to safe and quality blood, which increases the mortality and morbidity rate in Cameroon (Noah Owona, 2017).

The glaring shortage of safe, high-quality blood in Cameroon subjects populations to specific attitudes and practices when they need a blood transfusion. It is in this sense that this text questions strategies for accessing transfusion therapy in the context of a "blood crisis" in Cameroon.

1. Theoretical and methodological framework

1.1. Theoretical framework

Two theories are regimanted to analyze the data:

The social resources theory of (Lin, 1995: 691) is essential in the context of this study in this sense where it stipulates that: "as soon as the actor enters into a relationship with a contact having better resources, his chances increase of seeing his direct or indirect resources help him to achieve the goal of his action". As an analytical approach, it consists of considering social resources, belonging to the social relations to which one has access in a network in the same way as the personal resources possessed by the actors. This theory is relevant in the context of this study in the sense that, in the Cameroonian hospital field, individuals call on their network of social relations which can be made up of members of his family, his friends and acquaintances, his colleagues, etc. to facilitate access to transfusion care through blood donations made by the latter.

Strategic analysis (Crosier and Friedberg, 1981) is also essential for this study in the sense that, in the Cameroonian health system, actors have room for maneuver that they use strategically in their interaction with others to access blood therapy. They are therefore not deprived of the possibilities of reaction to the "blood crisis". As a result, blood requesters and health personnel allow themselves deviations from the standards of biological qualification and delivery of blood, as well as from the ethics of blood donation.

1.2. Methodological framework

This study is part of the qualitative approach. It is conducted in an urban Cameroonian environment, particularly in the city of Yaoundé. The choice was made on this urban center because it contains all kinds of mixes, which made it possible to diversify the profile of the respondents. The data necessary for the development of this work are essentially based on three collection methods, namely: documentary research, observations which were carried out in two (02) blood banks, namely: the blood bank of the district hospital of the Cité Verte and that of the district hospital of Byem-Assi. Thirty (30) semi-structured interviews were conducted with health actors, patients and their relational network. Group discussions were also conducted within the populations of Yaoundé. These data collection methods made it possible to

identify the contours of the "blood crisis" and the strategies for access to blood therapy.

2. Origin of the blood crisis in Cameroon

"Behind every social fact, there is history, tradition, language and habits." (Mauss, 1950: 288).

2.1. Socio-cultural and religious representations of blood unfavorable to the practice of blood donation and blood transfusion in Cameroon

Analyzing representations of blood is one of the conditions without which the complexity of access to transfusion therapy in Cameroon cannot be understood. Blood transfusion is an area that is subject to much prejudice. Ancestral and religious beliefs, as well as certain cultural practices, compromise the practice of blood donation. According to the 2013 study on Knowledge, Attitudes, and Practices (KAP) relating to blood donation in Cameroon, published by the National Committee for the Fight against AIDS (CNLS), most respondents, 52%, cite superstitions, cultural, or religious beliefs to justify their refusal to donate blood. This situation does little to promote the availability of blood products because populations are reluctant to donate blood. For some people, blood represents a family identity and an ancestral heritage; therefore, it is not easily shared with strangers. 71.2% of the subjects of the above-mentioned survey perceive blood in this way. Blood is indeed the bond of consanguinity, hence the expressions "blood ties" and "blood brothers" which refer not only to biological family relationships, but also to strong social affiliations between people (Sutterlüty, 2012). For example, for the Bamileke and Beti in Cameroon, blood is perceived as a characteristic specific to a lineage or kinship, hence the expression "to have hot blood." Perceived from this angle, blood would only reside in the family and it would be forbidden to give blood for an individual with whom one does not have a family connection.

Some believe that blood is sacred, that it represents both life and death. Therefore, it cannot be allowed to flow outside the body at the risk of taking life with it. In other words, blood that flows outside the body leads to death. In some cultures, particularly among the Bassa in the coastal region, blood is considered to be the person themselves; their blood represents their life, and therefore, if they donate blood, they risk giving themselves away. Individuals who share this point of view are moving in the same direction as (Duboz et al., 2011) when they stipulate that: blood belongs to the body; it is closely linked to life. It is a concentrate of the organism's characteristics; it is the identity of the individual from whom it is taken. Therefore, blood therapy would lead to the incorporation of the donor's vital characteristics. It is a kind of alliance between strangers sanctioned by blood (Fantauzzi, 2012). In this respect, the patient receiving blood also receives the qualities, vices and passions of the donor. Indeed, blood donation is also considered a gift of self. The Baya in the East region of Cameroon also subscribe to this school of thought because for them, blood transfusion transfers sins (Noah Owona, 2017). This logic of representations of blood that supports abstinence from donation is observed beyond Cameroonian borders. It should be noted that the possible transmission of identity characteristics from the donor individual to the recipient individual is a fear that is also observed among the populations of Nigeria (Ottong, 1997). In communities where blood is perceived as a vector of alliance or filiation, the practice of blood donation is not "common currency"

because it can create aberrant forms of alliances during the transfusion (Grassineau, 2007).

According to some religious beliefs, for example among Jehovah's Witnesses, donating blood is a sin. The same is true for blood transfusions; it is not uncommon to see patients and their families refuse transfusion therapy because this medical procedure is not consistent with their religious beliefs. According to the results of the 2013 KAP study on blood donation in Cameroon, published by the CNLS, followers of new religious movements (NRMs), which include Jehovah's Witnesses, are more reluctant to donate blood. The rate of reluctance among the study population is 16.7% for NRMs, 15.2% for Muslims, 11.9% for Protestants, and 10.8% for Catholics.

2.2. Psychological, clinical and other barriers

In Cameroon, the practice of blood donation is a medical act that can generate several kinds of fear on the part of individuals, 50% represents the rate of reluctance to donate blood due to certain fears. First of all, we note the phobia linked to the COVID19 pandemic, the phobia of blood and needles. Added to this is the fear of having one's blood drained, of feeling dizzy or of losing consciousness during or after the act of donation. During the period from 2015 to 2019, there were one thousand seven hundred and thirty-two (1732) cases of discomfort during donation and six hundred and five (605) cases of discomfort after donation nationwide (Project to Strengthen the National Blood Transfusion System, abbreviated PRESYNATS, 2021). But it should be noted that these cases of discomfort were well controlled by health workers. Losing blood means losing strength, yet keeping it in and boosting its volume boosts vigor (Gomez Cardona, 2018).

Secondly, there is a fear among urban populations of being screened for certain diseases or of contracting blood-borne diseases, which is perceived by the low rate of donors having withdrawn the results of blood tests according to the NBTP activity reports 2015 and 2018. In 2015 only 17.03% of donors came into possession of their results, this fear still persists in 2018 because we note that the rate of donors having withdrawn their results is approximately 16%.

Thirdly, individuals in the capital city are afraid that a blood sample will deteriorate their health, which they consider fragile given their living conditions. There is a significant number of healthy volunteers who are themselves anemic and/or limited by the minimum weight. Despite traditions and superstitions, some people are willing to donate blood, but poverty, the fragility of the economy, insufficient infrastructure and the presence of a large number of blood-borne diseases influence the practice of blood donation (Schneider, 2012). In Cameroon, there is a high prevalence of HIV seropositivity, hepatitis B and hepatitis C among some volunteers as well as in other countries on the African continent according to (Chobli, 2011). In a study on the prevalence of blood transfusion-transmissible infections among blood donors at the Yaoundé Central Hospital, (Mayomo Fohoue et al, 2019) show that the seroprevalence of blood-transmissible diseases is 26% among blood donors.

Fourthly, there are fears among the population of the city of Yaoundé related to the use of blood for mystical, satanic, vampiric and magical purposes. Some individuals are afraid that donated blood will be used for "non-Catholic purposes", which means that the beneficiary is no longer necessarily the sick person but rather

the followers of pernicious sects who drink blood and also use blood for rituals.

2.3. The weakness of the blood transfusion system

On the technical level, there is a lack of health facilities that have adequate technical equipment for blood collection, biological qualification and preparation. According to the 2017 NBTP activity report, the majority of blood transfusion centers in Yaoundé only use whole blood because only 1/5 of health facilities have the necessary equipment for the preparation of labile blood products, including red blood cells, platelets and plasma. In this case, a blood donation can only be used to treat one patient instead of three, which exacerbates the shortage of blood products.

Given the lack and/or absence of equipment maintenance, the majority of health facilities do not have the capacity to carry out the three types of tests for the detection of infections transmitted by blood transfusions, namely rapid tests, ELISA chain tests and automated tests. Rapid tests alone are carried out on almost all blood bags collected in Cameroon. This is why the WHO in its 2013 report stipulates that blood bags collected in Cameroon do not benefit from biological qualification. This is due to the fact that less than half of the blood bags collected are biologically qualified for all the recommended markers. Apart from HIV, there is no screening algorithm for infections transmitted by blood transfusion. Similarly, immuno-hematological tests are not sufficiently carried out in blood transfusion centers in the city of Yaoundé. This situation is the cause of several cases of patient contamination with diseases such as hepatitis.

Added to this is a certain failure in the cold chain, three hundred and thirty-five (335) blood bags were destroyed due to the break in the cold chain (PRESYNATS, 2021). In short, the transfusion system is struggling to ensure access to safe and quality blood throughout the national territory.

At the community level, awareness is very low. Those involved in blood transfusion and blood donation do not communicate enough on this issue, and as a result, some populations in Yaoundé are under-informed. They are not sufficiently aware of the vital need to donate blood to save lives. According to the results of the survey on the assessment of Knowledge, Attitudes and Practices relating to blood donation in Cameroon, published by the National Committee for the Fight against AIDS in 2013, only 20% of informants claim to have already donated blood in their lifetime. The major constraint identified is the lack of information, which is justified by the fact that only 34.8% of respondents report having ever heard a message about blood donation. This highlights the lack of awareness of blood transfusion or blood donation, as well as the collection points, among the population. Furthermore, the analysis of NBTP reports reveals a reduction in the number of mobile collections within the population. In 2015, one hundred and nineteen (119) collections were carried out, while in 2019, there was a drastic drop in the number of mobile blood collections, which was fifty-six (56), a decrease of 52.94%.

3. Strategies for access to transfusion therapy in Cameroon

Talking about strategies for accessing transfusion care means giving back to the actor his share of initiative in the development of his life (Godard, 1990). This concerns the efforts

that each individual deploys to satisfy his own needs as well as those of his social network in the hospital field in the face of the "blood crisis". Therefore, it should be said that "cities in crisis are places of survival strategies" (Ela, 2006:16). Blood seekers and health workers are therefore full of imagination to access blood or blood therapy despite the crisis.

3.1. Access to blood products through digital blood banks

In order to reduce the difficulties linked to access to safe and quality blood, intended in the care of patients, two health start-ups have emerged that connect blood donors to recipients. These are the Hemo application and the Infuss application (Kouagheu, 2019).

3.1.1. The Hemo app

As its name suggests, the Hemo application comes from the word "hemoglobin", this start-up was developed in 2018 by Forkou Djuiko and collaborators; fourth-grade students at the Quality International School in the city of Yaoundé in Cameroon; winners of the "STEM Prizes" 2018 initiative, a competition organized by the Denis and Lenora Foretia Foundation whose aim is to encourage young Cameroonians and Africans aged 13 to 21, especially girls, to take an interest in science and technology. Hemo is accessible from an Android phone and can be downloaded from the Playstore. Blood donor recruitment is based on online registration. To do this, the potential donor registers their contact information, including their identity, blood type, etc. A patient requiring a blood transfusion and/or their network of contacts can go to the "donor search" section, enter their location and desired blood type, select the donor, and contact them. However, this choice is hampered, on the one hand, by the limited number of potential registered donors. This is what emerges from the comments of this interviewee:

I was prescribed three bags of blood and for that it was necessary to look for six donors, I was still able to find the donors through my family and my friends, at the last minute I was told that one of the donors was not able to donate blood, it was at that moment that a friend of my daughter advised us to look for donors in online from the Hemo app. We were very lucky to find a donor because there aren't many people registered on this site."

There are about thirty registered individuals, spread across several cities in Cameroon, namely Douala, Yaoundé, Dschang and Nanga-Eboko. Furthermore, the paid transfusion system is an obstacle to recruiting blood donors because, according to some sources, health facilities are making money from blood donors.

3.1.2. The Infuss app

Infuss is an Android application developed in the hospital field in 2017 by a nurse named Mélissa Bime, winner of the Cartier Women's Initiative 2018 for Sub-Saharan Africa and the Sisco Global Problem Solve Challenge 2020. It is an online blood bank that connects the country's various blood banks. Its goal is to facilitate blood stock management. Indeed, this start-up provides all blood transfusion centers with the same level of information regarding the availability of blood bags, blood groups, and rhesus. From this application, blood transfusion services experiencing a shortage can obtain supplies from those that have them. By sending a request by message or by calling the Infuss platform, the latter coordinates the transport of the required blood from the nearest

transfusion center through appropriate logistics. This start-up has a database of all the groups and rhesus available in blood transfusion centers in Douala, Yaoundé and the main cities of Cameroon.

In addition, Infuss is a blood bag procurement and delivery platform. In other words, this application allows blood donors to be recruited and blood to be delivered directly to patients in their hospital beds, once they request it. To recruit donors, this company conducts awareness campaigns with churches and associations to encourage the population to donate blood. Infuss currently works with forty-five hospitals that have a blood bank and in collaboration with the National Blood Transfusion Center for quality assurance and control of the vital fluid. This allows for a continuous blood supply.

Many patients lose their lives because they don't have timely access to safe, quality blood. Some hospitals don't have blood banks, and when a patient needs a transfusion, access to a blood bag is akin to what should be called "A real obstacle course." To reverse the trend, the Infuss application, based on its blood bank management system, connects hospitals that have blood banks to hospitals without blood banks to allow all individuals to have access to transfusion therapy when the need arises. Over the course of two years, 3,800 blood bags were transferred from one hospital to another and 300 blood bags were sold directly to patients (Bimé, 2020). Thanks to this platform, people can now order blood online or donate blood to save lives.

3.2. The National Blood Donor Card (NBDC)

The NBDC is both a donor retention strategy and a strategy for access to blood transfusion care in Cameroon. This card is issued to individuals who practice ethical blood donation. According to Decree No. 2019/067 of February 12, 2019, on the organization and operation of the National Blood Transfusion Center in Cameroon, ethical blood donation is "blood donation respecting the principles of voluntariness, anonymity, commitment, hygiene, safety, and quality." In the event of illness, the NBDC facilitates access to care for ethical donors and their close family members. Indeed, when a donor in the aforementioned category or their direct ancestors require transfusion therapy, thanks to the NBDC, they no longer need to mobilize replacement donors before accessing treatment. Another advantage this card offers its holder is the opportunity to save money by getting a free health checkup as a volunteer blood donor. After donating, blood test results are available within two weeks at blood transfusion centers in Cameroon.

3.3. Social resources, a strategy access to therapy transfusion in Cameroon

Most of the time, we observe in the blood transfusion centers of the political capital of Cameroon, the practice of family donation and/or replacement donation. The prevalence of family donors is 98.7% at the central hospital of Yaoundé (Mayomo Fohoue et Al, 2019). It turns out that the social and family environment of the patient is involved in the process of taking care of the latter (Djouda, 2010). As a result, access to blood transfusion is determined by the family and/or relational "habitus". In a relational network, access to transfusion medicine is determined by the way of perceiving, judging and behaving towards the practice of blood donation. Based on the theory of social resources, we can think with (Lin, 1995: 691) that "as soon as the actor enters into a relationship with a contact with better resources, his chances

increase of seeing his direct or indirect resources to help him achieve the goal of his action." In the Cameroonian hospital field, the patient mobilizes his family members, friends or colleagues to facilitate access to transfusion care through blood donations made by the latter. This strategy therefore constitutes a kind of "claim" or "investment" (Forse, 2000). In other words, the more the requester of therapeutic blood holds the credits, the more he has the possibilities as well as the privilege, to receive the treatment.

In Yaoundé's health facilities, there are two categories of blood recipients: irregular recipients and regular recipients. Irregular recipients are patients with severe anemia caused by malaria, massive blood loss following surgery, or accidents. traffic etc. In this category, the resolution of the anemia crisis does not require regular transfusion. Therefore, they only contact the actors in their network of relationships when they are in need. Families are actively involved in health facilities in the face of multiple institutional shortcomings.

As for regular recipients, these are individuals who carry sometimes incurable pathologies whose treatment depends on regular blood transfusions. For example, we distinguish cancer patients who undergo heavy and intensive treatments such as chemotherapy and patients with kidney failure who undergo dialysis. The care process is built around social relationships involving the patient's network of relationships, which very often compensates for blood shortages in the hospital field. To minimize the difficulties related to access to care, some patients who are loyal to blood therapy become promoters of blood donation within their "social network", which is perceptible in the comments of this interviewee:

"In order not to find myself with my back to the wall, I explained my situation to the members of my family and friends. I made them understand that my life depends on blood donation and that if they do not want to lose me prematurely, they must contribute to my treatment by donating blood regularly or whenever I need it."

In this case, it appears that the right to privacy is being violated in order to access therapeutic blood, in the sense that information concerning their state of health is now shared within their social capital and no longer constitutes a secret between the patient and the health personnel.

3.4. Economic capital, a strategy for accessing therapeutic blood

3.4.1. Purchasing blood products

Blood transfusion is essential for reducing mortality and morbidity rates in Cameroon because it is sometimes the only solution for the survival of certain patients in health facilities. Nowadays, no treatment or synthetic drug is capable of replacing human blood. Despite advances in science, blood is not produced in a laboratory and the need for blood products is increasing more and more (NBTP, 2020). Blood is the raw material derived from the body and necessarily donated, but processing and distribution come at a cost (Duboz et Al, 2011). Despite the Cameroonian government's desire to cover all the health needs of the population and promote universal access to care, the annual budget allocated to the sector in question does not evolve accordingly. As a result, the health system is forced to resort to a partial cost recovery mechanism from patients; the transfusion care sector is no exception to the rule. Patients requiring blood therapy are asked to

pay a sum lower than the costs incurred for blood collection operations as well as the processing and distribution of this product. The cost of a blood bag varies from 17,500 to 25,000 CFA francs depending on each blood transfusion center in Yaoundé (NBTP, 2020). But according to some interviewees, the price of a blood bag can go beyond 25,000 francs depending on the rarity of the product. To this must be added the costs of caring for the donor in the event that the latter does not come from the "social network" of blood recipients and/or the costs of biological qualification of blood in the event of a total stock shortage. For some blood product recipients, the cost of this medication is exorbitant or even inaccessible because, according to the fourth Cameroonian household survey carried out in 2014 by the National Institute of Statistics (INS), 37.5% of Cameroonians live below the poverty line, estimated at 269,443 CFA francs per adult per year. However, blood is an essential medicine whose price should be affordable for all individuals and communities (WHO, 2004). In addition to purchasing power, access to a blood bag is conditional on the mobilization of two donors. Consequently, patients requiring transfusion therapy mobilize family members and friends, etc., to find donors, or they resort to certain strangers who donate their blood for a financial consideration.

3.4.2. Access to transfusion care through the bidding war of blood products

The practice of overbidding is a common phenomenon in blood banks in Yaoundé. This scourge is perpetuated as much by medical staff as by the patient and/or his "social capital" (Bourdieu, 1980). "They tell you that there are still bags of blood, but that they are for the doctor's patients and that he does not need them at the moment." (...) *and it's up to you to see how you can make the doctor's blood bags come back to you*". This informant's words reveal one of the unhealthy strategies used by some corrupt health workers to make money off the backs of patients. Indeed, they organize the bidding war around the issuance of blood bags. To achieve their goal, they sometimes create a restrictive artificial shortage to further raise the cost of the blood bag (NBTP, 2020). For fear of reprisals "if I speak out, they might not take good care of my father and I wouldn't be able to bear that," some patients and their families are contributing, in spite of themselves, to the deterioration of the transfusion care system in the sense that they refuse to denounce those guilty of "blood trafficking" in the country's health facilities. Furthermore, it should be noted that in this context where the demand for blood is higher than the supply, some nurses, out of circumspection, themselves offer to buy blood bags from health workers at slightly higher prices in order to reserve the product necessary for the treatment of their patient. This is the process that some call the "blood mafia" in Cameroon.

3.4.3. Recruitment of paid blood donors

The practice of paid blood donation is noted in health facilities in Cameroon. Health workers have a list of paying donors in their database (NBTP, 2020). Indeed, a profitable blood donation network made up of all blood groups and rhesus has developed around blood transfusion centers, hence the expressions "blood seller, blood business, etc.". The use of this type of donor takes place when the patient does not have the capacity to mobilize through his social network, as many donors to generate the number of blood bags needed for his treatment. The number of donors to mobilize depends on the quantity of blood bags prescribed. As a reminder, access to a single blood bag is equivalent to the

mobilization of two donors. In other words, the number of blood bags prescribed must be multiplied by two to have the exact number of donors to mobilize. This is made very difficult, especially when the need is urgent. So, from its database, the medical staff of the blood transfusion center directs the applicant to the appropriate "sellers" according to the patient's characteristics, in particular the blood group and rhesus. According to the NBTP (2020), the price of recruiting a donor varies between five thousand (5,000) and ten thousand (10,000) CFA francs depending on the rarity of the blood group and the rhesus sought. But, according to our informants, the observation is revealing of the fact that the cost of mobilizing a donor goes beyond ten thousand (10,000) CFA francs.

"When we were in difficulty, they gave us the contact details of the donors, and it was us to pay these donors. And since my mother was O negative, this made the situation more complicated and even worse, her rhesus was not at the hospital that day. The donor I found asked me for fifty thousand (50,000) francs, I had to beg him to reduce this cost".

However, blood donation is a voluntary and free act, blood is not a commodity, "man cannot sell anything that makes up his body, even blood" (Savatier, 1954:141) quoted by (Duboz et Al, 2011). It is also noted that it is the "highest bidder" who benefits from the services of certain "blood sellers". It is indeed a kind of auction. "The potential donor I contacted asked me how much I was willing to pay because, according to him, I was not the only person to ask him for this service". The recruitment of the paid blood donor depends on the "economic capital" of the patient (Bourdieu, 1979). From this situation emerges a kind of "business" around blood donation and blood transfusion in Cameroon. Paid blood donors are part of the logic of (Maus, 1923-1924) which states that there is no donation without a counter-donation. The free nature of blood donation does not pose a problem, what is an obstacle is the lack of reciprocity in the exchange because blood administered to patients is paid for, blood becomes a commodity and the fact that it can be commercialized would taint the service by breaking the circle of donation without counter-donation (Cam, 1994).

4. Discussion

Cameroon as Africa in miniature is full of cultural and religious diversity. Consequently, the meanings given to blood or blood therapy are diverse and make the practice of blood donation very unproductive. In most cases, representations of blood reduce it to the family or community sphere. Hence the increase in family or replacement donations (90%) to the detriment of ethical blood donations (10%) (NBTP, 2014). Indeed, if the actors of a social network do not find themselves with a loved one who is hospitalized or in need, they do not give blood. However, the Ethics would require that the gift be anonymous, voluntary, benevolent and regular. "It is a gift without counter-gift that is part of an altruistic relationship with the unknown" (Duboz et Al, 2011). Blood, once outside the body, no longer belongs to the donor, nor does it contain a part of his identity. It is no longer attached to the values of individuals, much less to the destinies of families. It is an impersonal, renewable tool, of a medicinal nature.

The critical shortage of therapeutic blood has prompted healthcare providers to accept family donations/replacement donations, and even paid donations to supply blood banks. These alternatives are not without consequences, donors registering in

these aforementioned categories present a high risk of spreading blood-borne infections. Out of 50 blood bags collected from family donors, it may happen that around twenty are infected with different diseases (NBTP, 2018). In addition to this, the prevalence of positive serology is higher among replacement donors than among volunteer and regular donors. At the Yaoundé Central Hospital, for example, it should be noted that 5.9% of family donors are HIV positive while among volunteers there are only 1.7%; as for the hepatitis C virus, 7.2% of family donors are tested positive while among volunteers there are only 3.3% positive cases; in addition, 9.7% of replacement donors are carriers of the hepatitis B virus, which represents triple the portion of volunteer donors carrying the same virus (MayomoFohoue et al, 2019). The therapeutic use of blood is a medical act of vital necessity, but if the ethics of blood donation and/or blood transfusion are not respected, transfusion therapy could be a channel of transmission of diseases such as HIV, STIs and other infections such as viral hepatitis, syphilis etc. as was the case in several countries including the United States, France, England, China, Canada and Japan. The contaminated blood scandal that raged in these countries is the consequence of the non-existence or ineffectiveness of safety measures (Chauveau, 2008). In view of this, the issue of ethical blood donation is not only limited to survival, it also contributes to the resilience of the national blood transfusion system and consequently to the improvement of the health status of a large section of the Cameroonian population.

Blood donations are most often made during emergency situations. It should be noted that blood collected in this situation is not properly tested. In an emergency, only basic tests are performed, such as compatibility, HIV, and hepatitis. This lack of care in the biological qualification of blood is due to the fact that in Cameroon, surgical procedures are not usually performed on a scheduled basis. Also, it is worth mentioning that crisis situations, including the "Anglophone crisis", rail (Eséka 2016) and road (Dschang 2020) disasters, etc., arise in Cameroon like "a thief in the middle of the night who surprises a sleeping family". Besides this, it is important to remember that the majority of blood transfusion centers do not have the appropriate technical equipment to fully ensure the blood circuit.

Conclusion

In the Cameroonian context where the blood transfusion system is still embryonic, safe and quality blood products are rare, very expensive and inaccessible for some individuals. This is due to the fact that 37.5% of the population lives below the poverty line estimated at 269,443 CFA francs for each adult per year (INS, 2014). The deficit of blood bags to be filled for the annual care of patients amounts to approximately 300,000 bags. This situation stems from the reluctance of the population to practice ethical blood donation. This reluctance is firstly motivated by sociocultural and religious representations of blood which do not encourage the practice of blood donation. Then there are the psychological and clinical barriers as well as the resistance of the coronavirus pandemic and finally the weakness of the blood transfusion system in Cameroon. Individuals, through their actions, constantly construct strategies for accessing care; they are therefore actors who develop fully conscious maneuvers to cope with daily realities. Those seeking therapeutic blood are no exception. Faced with the "blood crisis" raging in blood transfusion centers in Yaoundé, individuals are constantly coming up with strategies to facilitate access to transfusion care. Generally speaking, we can

distinguish: the development and use of start-ups for blood collection and distribution of blood products; the mobilization of social resources (family blood donation) and economic capital (paid blood donation, overbidding) to access transfusion care in Cameroon. In short, in blood transfusion centers, we observe both conventional and unconventional strategies for accessing transfusion care. This is given that the methods used to acquire therapeutic blood do not all comply with the strict rules of donor selection, transportation, analysis, storage, preparation of blood products, and delivery. Having safe, high-quality, and sufficient quantities of human blood is a condition without which the Cameroonian transfusion care system cannot be resilient in the face of the rise in numerous pathologies. It should also be remembered that "good blood, transfused at the right time, by the right person" practitioner, to the right patient who really needs it: that is a good job waiting for us" (Chobli, 2011).

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