



ORIGINAL RESEARCH PAPER

Orthopaedics

ORTHOPEDIC HEALTHCARE TRAJECTORIES AND MEDICAL PLURALISM: ABOUT 91 CASES OBSERVED AT YAOUNDE CENTRAL HOSPITAL

KEY WORDS: self-medication, ethno medicine, therapeutic use, biomedicine, therapeutic routes.

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ABSTRACT

Introduction: The universalization of cognitive and cultural models has influenced practices of societies, particularly in the health domain. In addition, contact with other societies has favoured the coexistence of opposing cognitive and cultural paradigms, at the origin of the emergence of new therapeutic models and the diversification of therapeutic pathways. As a result, from traditional healers to nurses to modern doctors, medical pluralism has emerged in a society which is losing cultural orientations and is in search of the health factor.

Methodology: This was a retrospective cross-sectional study that lasted four months (from October 2017 to January 2018). The study covered a five-year period between 2012 and 2017. It was carried in the departments of orthopedic surgery and traumatology A and B of Yaounde Central Hospital. Included in the study were patients with fractures of the tibial plateau and humerus sampled during previous MD thesis respectively on the "etiologies, the mechanisms of injury and therapeutic indications of fractures of the tibial plateau of the adult" and on the "performance of the anterior approach in humeral plating osteosynthesis in adult". Patients were recalled and interviewed for the purpose of completing a data sheet designed for this study. The data sheet made it possible to detect the orthopedic healthcare trajectories taken by the patient as well as the reasons for changing care systems (medical or therapeutic pluralism).

Results: The sample consisted of 91 patients including 42 cases of tibial plateau fractures and 49 cases of humeral shaft fractures. Self-medication was the first resort for most of the patients in event of fractures. Fifty-one percent of the patients first resorted to self-medication. The fact that materials generally used in making local splints were easily accessible at the accident sites, combined with the availability of essential drugs (analgesic and anti-inflammatory drugs) in local pharmacies, constituted the main reason for self-medication in the case of fractures recorded in our series (87.2% of self-medication). The resort to biomedicine and ethno medicine were mainly motivated by the severity of the fractures for the former (66.7% of the resort to biomedicine), and by the beliefs, cultural and religious orders for the latter (these were the sole reason for resort to ethno medicine as first therapeutic option).

Traditional medicine represented the second most practised care system (58.2%), particularly for reasons of complementing surgery through massage sessions with traditional therapists, and also because of difficulties related to surgery (especially financial constraints). Biomedicine was mainly the second resort (treatment option) in our series because of the inefficiency of the previous systems of care attempted by patients (in 60% of cases).

Almost half of the patients systematically did not use a third system of care in our study (46.2% of the total sample) because of their satisfaction with the care received in the previous attempts. Biomedicine was adopted as a third option in 22.4% of the cases and this was mainly when the previous attempts were found inefficient. The most adopted treatment option were those involving auto-medication as a first resort (51.7%).

Conclusion: Auto-medication and ethno medicine were the main care systems adopted as first and second therapeutic option, respectively, in the case of proven fractures in our study, at the expense of biomedicine. In addition, the most common therapeutic pathway was that involving self-medication as a first resort. Consequently, the medical sector seems unable to satisfy the total demand for care, hence some patient go to self-medication and traditional medicine.

INTRODUCTION

At the ALMA ATA conference in 1978, UNICEF and the heads of government of many countries agreed on the involvement of population in their individual and collective health, and on the development of primary health care (PHC). In 1987, the Bamako Initiative consolidated this community participatory approach with the aim of revitalizing health services. And it was in 1993 that Cameroon opted for the reorientation of its health system, through the implementation of the district health system giving a place of choice for community participation. Moreover, the deleterious economic situation the country went through during this period, marked by massive dismissal in the civil service, a drastic reduction in wages in 1993, and the devaluation of the local currency (the CFA franc) a year later, will be at the origin of the degradation of the health system, bringing with it the

deterioration of the health of the populations [1]. These dysfunctions favoured the implementation of not only economic but also health adaptation strategies, leading to the emergence of new therapeutic models and the diversification of therapeutic routes. However, this diversity of therapeutic option has revealed a systematic and recurrent combination of uses of biomedical medicine and alternative medicine, the latter being where individuals will look for what would be lacking in biomedicine [2].

Therapeutic resort refers to the request for healthcare addressed to individuals or institutions who are not necessarily health professionals. To this effect, the use of biomedicine corresponds to the requests for healthcare addressed to persons or institutions whose explicit function is to treat and who have a biomedical culture that values not only the biological aspects, but also

scientific rationality (health professionals) [3,4]. However, resort to auto-medication or ethnomedicine translates requests for healthcare addressed to persons or institutions who are not health professionals. These may include pharmacies, street pharmacies (street vendors of medicines), traditional healers or moral and religious authorities [4].

In this light, this research work brings forth the problem of therapeutic resort mechanisms and has as main aims to determine orthopedic care trajectories and the causes of medical pluralism among patients seen at Yaounde Central Hospital.

METHODOLOGY

This was a retrospective cross-sectional study that lasted four months (from October 2017 to January 2018) and covered a five-year period between 2012 and 2017. It took place in the departments of Orthopedic surgery and traumatology A and B of the Yaounde Central Hospital. Included in the study were patients with fractures of the tibial plateau and humerus recruited during the MD theses carried in the wards the same year on the "Etiologies, mechanisms of injury and therapeutic indications of fractures of the tibial plateau of adults" and on the "Performance of the anterior approach in humeral plating osteosynthesis in adults". These patients were called back and explained the study. Those amongst them who voluntarily agreed to participate in this new study were recorded and then interviewed on their fractures in order to complete a data sheet formerly designed for this study. This data sheet made it possible to detect the circumstances of the fracture, the therapeutic trajectories taken by the patient and those around him, as well as the reasons for changing the healthcare systems (medical or therapeutic pluralism). The questionnaire had four main parts: socio-clinical profile of the patient with elements of the fracture and three other parts dealing respectively with the first, second and third therapeutic resort of the patient with reasons for medical or therapeutic pluralism.

RESULTS

The average age of the participants in our series was 41.8 ± 11.4 years old. There was a clear male predominance (sex ratio 2.5) and 18.7% of households lived in conditions of poverty.

Self-medication was the most popular care system adopted by patients as first resort (51.6% of cases). The fact that materials generally used in making local splints were accessible at the accident sites, combined with the availability of essential drugs (analgesic and anti-inflammatory drugs) in local pharmacies, constituted the main reason for self-medication in our series (87.2% of self-medication). (Table I) What prompted patients to resort to biomedicine and ethno medicine were mainly the severity of the fractures for the former (66.7%), and the cultural and religious beliefs for the latter (the beliefs were also the main motivation for resort to ethno medicine as first therapeutic option).

Traditional medicine was for the most used healthcare system for second resort (58.2%) especially as the people thought it was complementary to surgery (secondary massages) and also because of financial difficulties (Figure 1). Biomedicine was also a common second resort in our series especially when the first resort adopted by the patient proved to be inefficient (this was in 60% of cases).

Almost half of the patients systematically did not have to resort to a third healthcare system in our study (46.2% of the total sample) because they got their satisfaction from the previous attempts. Biomedicine was adopted as a third resort in 22.4% of the cases, with main reason being the inefficiency of the previous systems. The most adopted treatment routes were those involving self-medication as a first resort (51.7%).

DISCUSSION

Self-medication was sought as the first resort in 51.6% of cases, with principal reason being the accessibility of this system. In line with this are they findings of a study in Burkina-Faso in 2014 on healthcare trajectories for suspected cases of malaria where around 72.7% of patients first resorted to self-medication as first therapeutic option [5]. A study in Cameroon conducted on 3754

patients in 2011 reported 51.9% of resort to self-medication as first option [4]. Similarly, in the Benin in 2005, resort to both modern and traditional self-medication was noted as first option [6]. However, biomedicine was the second most adopted healthcare system especially when the level of perception of the fracture was considered serious by the patient's entourage. Indeed, the medico-legal consequences of this inadequate treatment, namely the persistence of pain and functional impotence, affected their daily lives and their professional future, hence the decision to return to biomedicine. This result is consistent with the finding of another study where the severity of cases also motivated the resort to biomedicine; in fact, biomedicine accounted for 56.9% of first resorts against 39.6% for the use of self-medication in cases of serious illness [4].

Ethno medicine was the most sought care system as second line (58.2%) mainly as it is practised as a complement to surgery (especially traditional osteopathy which replaced physiotherapy) but also because of financial difficulties. This finding is similar to that found in a study conducted at Yaounde Central Hospital in 2017, where low-income patients had a greater tendency to use ethno medicine as a health care system [7]. In the same manner, a study found a high rate of resort to traditional healers as a second-care system, at 72% [8]. However, this parallel use of traditional medicine in addition to modern medicine is not exclusive to our study since it is described in the literature. In fact, in a research conducted at the Bobo-Dioulasso Hospital Center in 2003 on therapeutic routes for epileptic patients, it was noted that nearly 69.5% of patients resorted at the same time to ethno medicine and biomedicine [9].

Nearly half of the patients did not systematically use a third system of care in our study (46.2%). This result is almost half the frequency found in a study in Cameroon in 2015, where about 88% of patients were satisfied with their second care systems and therefore did not seek third therapeutic option [4]. In fact, this could be explained by the fact that biomedicine was highly sought as second option in their study (thus guaranteeing a better result) when the first option had failed; whereas in our study, ethnomedicine was mostly sought as second option. The inefficiency of second therapeutic options, crystallized by the patient's lack of satisfaction, was the main reason for adopting biomedicine as the third health care system.

CONCLUSION

At the end of this work, it appears that self-medication and traditional medicine have been the main therapeutic approaches adopted in cases of proven fractures in our study. Biomedicine was mostly sought only in case of ineffectiveness of these alternatives. Ultimately, the medical sector seems unable to meet all the demand for care and thus some patients resort ineluctably to self-medication and traditional medicine.

TABLE AND FIGURE

Table I: Frequency of first resorts and reasons for adoption

Variables		n=91 (pourcentage)
First resort		
Self-medication		47 (51,6)
Biomedicine	First consultation to the orthopaedic surgeon	38 (41,8)
	First consultation to a health center	4 (4,4)
Ethnomedicine (First consultation to a traditional bone settler)		2 (2,2)
First resort and reason for adoption		
Self-medication	Accessibility	41 (87,2)
	Financial constraints	6 (12,8)
Biomedicine	Severity of the fracture	28 (66,7)
	Cultural and religious beliefs	10 (23,8)
	Accessibility	4 (9,5)
Ethnomedicine	Cultural and religious beliefs	2 (100)

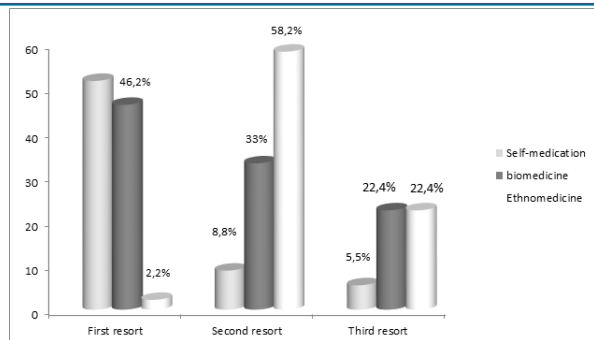


Figure 1: Frequencies of health care systems with respect to resort.

Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of **this article**

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