Knowledge, attitudes and use of generic medicines: a cross sectional study among patients in Marcory-Treichville Health District Cote d'Ivoire

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ABSTRACT

Background: The regulation of generic medicines is a policy adopted in order to reduce pharmaceutical cost in many countries and Cote d’Ivoire is no exception. However, the acceptance of generics depend on people’s beliefs that is why we conducted a study notably in order to assess the level of knowledge, attitude and usage profile for generic medicine among patients in Cote d’Ivoire.

Methods: A cross-sectional study was conducted with 320 patients (210 women and 110 men, aged 35.1±11.3 years) selected at random in four health facilities of Marcory-Treichville Health District. A questionnaire was drawn up with questions on their knowledge, attitude and use, perceptions and knowledge of generic medicines. All the collected data were entered into PASW®18.0 for descriptive analysis.

Results: Half of the participants (55.6\%) knew that generic medicines exist, but only 56.2\% were able to define them correctly. These information sources were mainly through television (28.1\%), followed by doctors (21.4\%), word of mouth (20.2\%). Regarding generic medicines characteristics, 88.2\% declared that they were confident about their efficacy and quality, 75.3\% believed that generic medicines have the same effect as branded medicines, 72.5\% said that generics were priced lower than branded medicines, and 65.2\% stated that if their doctor prescribed a branded medicine and the pharmacist proposed them a cheaper generic, they would agree to switch. With regard to medicines prescribed by medical practitioners, 80.4\% said that their doctors often prescribed generics; 12.5\% confirmed that their doctors always prescribed generics and 7.1\% that they “never”.

Conclusion: These findings suggest that more awareness should be created among health professionals to boost generic medicine prescriptions and substitution, and also among patients by education program.

Key words: Reference medicine; Generic medicine; Health policy; pharmaceutical policy; Patient education.

INTRODUCTION

Health care systems are facing the medico-economic pressure and governments are in the obligation to find systems of regulation of pharmaceutical costs. The regulation of generic medicines (GMs) is part of these policies notably in developing countries where access to medicines is one of the main obstacles in improving health (Kavanos, 1999; Karim et al, 1996).

According to World Health Organization, a generic drug is a pharmaceutical product, usually intended to be interchangeable with an innovator product that is manufactured without a license from the innovator company and marketed after the expiry date of the patent or other exclusive rights (World Health Organization, 2015). Generic medicines are required to have the same active substance, strength, pharmaceutical form, and route of administration as their brand counterparts, but can be different in some aspects, such as inactive ingredients, color, and shape (Birkett, 2003).

Generic medicines provide the opportunity for major savings in health care expenditure directly to the consumers as well as to the government, given that they are generally lower in price than their brand-name equivalents\textsuperscript{5, 6} (King and Karvanos, 2002; Dylst et al, 2013). Generally, the generic medicines are 20-90\% less expensive than the branded medicines. It has been estimated that €25 billion (more than $30 billion) is the annual save made by European patients and health care systems for using generic medicines (King and Karvanos, 2002).
In many countries throughout the world, the practice of generic prescribing and substitution is strongly supported by health authorities, and Côte d’Ivoire is no exception. Indeed, the articles 9 and 11 of the Law nº94-435 of August 16th 1994 modifying the Law nº62-249 of July 31st 1962 establishing the Code of Ethics for Pharmacists, concern respectively the substitution and the registration of GMs.

Before registration, similar to all medicines including original brand medicines, a generic medicine must pass through a rigorous registration process and stringent requirements to ensure its quality, safety, and efficacy, and that it meets all the required standards (National Pharmaceutical policy Côte d’Ivoire, 2015). However the acceptance of generic medicines by patients is an important issue and an essential factor given the fact that patients are the end users of these pharmaceutical products (Wong and al, 2014). In fact, correct understanding, knowledge, and positive perceptions are prerequisite to the acceptance of generic medicines by patients.

In Côte d’Ivoire there were few studies undertaken to elicit the views of consumers pertaining to the use of generic medicines. Furthermore, their knowledge on the issues surrounding generic medicines remained unexplored. With the aim to contribute to the development of educational campaigns to promote rational medication use, we conducted this study to explore patient-provider communication about generics, patients’ knowledge, attitude and usage profile and to identify barriers to their use of generic medicines in Côte d’Ivoire.

METHODS

This is a descriptive, cross sectional study with 320 patients chosen at random, where a questionnaire was used to collect data from patients who attended care in 4 public health facilities of Marcory – Treichville Health district located in Abidjan: school children aged under 18 years were excluded from the sample, as well as people with cognitive disorders that prevented them from understanding the data collection tools.

The data were collected from 26th June to 15th August 2015. After a detailed explanation of the objectives and procedures of the study, the participants signed the Informed Consent Form. Anonymity of respondents was preserved in the study, as names of participants were not included.

The questionnaire was tested with 30 patients and revised after pilot testing. The questionnaire was divided into four sections. The first section characterized the respondents’ demographics; the second section evaluated the knowledge of the respondents by giving a simple definition of branded medicines and generic medicines with examples. The third section evaluated the preferred prescribed medicines and the perceptions regarding branded medicine to generic substitution and the costs of generics compared to branded medicine. The last section assessed the use of generics by the respondents.

All the collected data were entered into PASW®18.0 for descriptive analysis using descriptive statistics techniques. This study was approved by the Research Ethics Committee of Abidjan Côte d’Ivoire.

RESULTS

Demographic characteristics of responding patients

A total of 320 patients participated in this study; the basic demography of the responding patients is summarized in Table 1. The sample was in majority composed of females (210, 65.7%). The participants had in average 3.26±1.04 generic medicines in their prescription (Table1).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Modalities</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female</td>
<td>210 (65.7%)</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>110 (34.4%)</td>
</tr>
<tr>
<td>Education</td>
<td>Analphabete</td>
<td>94 (29.3%)</td>
</tr>
<tr>
<td></td>
<td>Primaire</td>
<td>81 (25.3%)</td>
</tr>
<tr>
<td></td>
<td>Secondaire</td>
<td>113 (35.4%)</td>
</tr>
<tr>
<td></td>
<td>Universitaire</td>
<td>32 (10.0%)</td>
</tr>
<tr>
<td>Monthly income</td>
<td>&lt; 60000 FCFA</td>
<td>141 (44.1%)</td>
</tr>
<tr>
<td></td>
<td>≥ 60000 FCFA</td>
<td>179 (55.9%)</td>
</tr>
<tr>
<td>Mean of the number on generic medicine on the prescription</td>
<td>3.26±1.04</td>
<td></td>
</tr>
<tr>
<td>Age mean</td>
<td></td>
<td>35.12 ± 11.32</td>
</tr>
</tbody>
</table>
Knowledge on generic medicines

The results showed that 178 (55.6%) of the respondent had already heard about generic medicines against 142 (44.4%). The continuation of analysis only concerned all of the patients having heard of generic medicines.

When asked to define generic medicine, 100 respondents (56.2%) gave a correct definition of generics, 15 (8.4%) did not define correctly the generics, and 63 (3.5%) did not know how to answer this question.

Additionally, information about generic medicine was obtained through the following means: television (28.1%), medical practitioners (21.4%), word of mouth (20.2%), pharmacists (3.4%), newspaper articles (7.7%), radio (15.2%), street advertising (3.7%); Internet (0.3%).

Perception of generic medicines

Regarding the characteristics of generic drugs, 157 (88.2%) declared that they were confident about their efficacy and quality, 134 (75.3%) believed that they had the same effects and were safe as the reference medicines. Nevertheless, 42 (23.5%) thought that generic drugs were of poorer quality than reference drugs and 120 (67.4%) would not select the generic instead of reference drug if they had the choice.

According to our findings, concerning the price of generic medicines compared to references medicines, out of the respondent who reported having heard of generic medicines, 129 (72.5%) stated that they are cheaper. However, 20 (11.2%) of the patients surveyed, had no idea of the price 19 (10.7%) that the generic medicines are more expensive and 10 (5.6%) that they got the same price. When asked “If your doctor prescribed a branded medicine and the pharmacist proposed you a cheaper generic, would you agree to switch? 116 (65.2%) responded that they would.

Use of generic medicines

When asked if their doctors prescribed them generic medicine, the majority of the respondents 143 (80.4%) stated “often” generic medicines; when 22 (12.5%) responded “always” and 13 (7.1%), “never”.

Concerning the availability of generic medicines, when the respondents were asked whether they found them easily, 64 (35.7%) stated that they always found them, 114 (64.3%) declared that they often found them.

DISCUSSION

The success of the policy of the generic medicines takes place on the propensity of the patient to accept the substitution. The link between the level of knowledge of GMs and their acceptance was shown in a study carried out by Valles et al. in which short information of the patient on generic medicine made it possible to double the rate of substitution from 2.8 to 5.9% (Valles et al, 2003).

The results of our study showed that out of the 320 patients included in the study, only one half had heard about GMs. With regard to the definition of a GM, out of the patients having heard about it, 56.2% of the respondents defined it correctly. The results get closer to those obtained by Ringer et al, where 57% of the respondents were good definers of GMs (Ringuier et al, 2008)

In a study conducted in Malaysia of 216 people, Thomas and Vitry assessed knowledge about generic medicine, the wish to take them and the reasons for choice. Among the sample assessed, 32.5% stated that they knew what generic drugs were. However, when asked to provide a more exact definition, 7% (out of the 32.5%) were unable to do so (Thomas and Vitry, 2009).

Concerning the information sources, the most cited were according to our study: television (28.1%), medical practitioners (21.4%), and word of mouth (20.2%). Findings similar to those presented in this study were described in a study carried out in Morocco (Zaoui et al, 2013).

Moreover in this study, only 3.4% of the respondents had obtained information on GM from pharmacists. These results highlighted the fact that pharmacist do not play enough, their role of adviser with the patients, this can be explained by the fact that pharmacists prefer selling branded medicines which are more profitable to them. However, other studies found that pharmacists were the first information source of the consumers because of their knowledge on this medicine and their frequent contact with patients, followed by doctors and the mass media (Nabil et al, 2008).

The healthcare professionals have a key-role to be played which is to inform well and to educate their patients on the interest of the use of generic medicines but they have to be motivated by the GMs too. Unfortunately the healthcare professionals are not well informed about the GMs as demonstrated in a study carried out with doctors in Morocco (Zaoui et al, 2011). In another study conducted in Burkina Faso among health professionals, the therapeutic efficiency of the generic medicines was considered as “doubtful” by 75.2% of the prescribers, and only 24.8% of them considered that GMs have the same efficiency than branded medicines. (Savadogo et al, 2002).

Information from both prescribers and pharmacists can help allay patients’ concerns about generic medicines and help them feel more confident in their choice (Hassali et al, 2005).
A well informed patient is irrefutably a major component for a better use of GMs, but the level of information of the patient is closely linked to that of the healthcare professionals. An in-service training, a better communication with healthcare professionals and education campaign can be more effective if they concentrate on these two partners.

Our study highlighted the fact that in spite of a good confidence towards GMs (71.7%), in practice the respondents (67.4%) stated that they would not use reference medicines if they had the choice. For 65.2% of the respondents, if their doctor prescribed a branded medicine and the pharmacist proposed them a cheaper generic, they would agree to switch. These results showed that the price of the generic medicine is a factor which determines the patient attitude towards generic medicines. Moreover our findings also show that the reticence towards GMs comes from the fact that the patients doubt the quality of the GMs. Indeed, 23.5% of the respondents declared that generic medicine is a lower quality. It has been demonstrated that the patient attitude towards generic medicines is widely determined by their understanding of the word “generic” and the confidence that generic medicines have the same quality, efficiency and security than reference medicines. (Palagyi and Lassanova, 2005)

With regard to prescribing medications by doctors, 13 (7.1%) patients stated that their doctors never prescribed generic drugs and only 22 (12.5%) said that they always prescribed generics. In a study conducted by Blatt et al., 34.6% replied that their primary physicians never prescribe generics while only 23.5% always prescribe generics (Blatt et al., 2012). Similar findings were also obtained in the study carried out in Brazil where 17.6% of the participants stated that their physicians never prescribed generic medicines and only 7.5% said that their physicians always prescribed generics (Lira et al., 2014).

Furthermore, in our sample 44.1% of the participants had a monthly income less than 60000 FCFA which is the minimum inter professional guarantee salary (SMIG) in Cote d’Ivoire. This fact suggest that more awareness among should be created among prescribers and pharmacists concerning generic medicines prescription, and also among patients toward education program.

At last, the availability of generic medicines at affordable prices must be included in the list of topics addressed by public health policies seen that less than half of the patients stated that they easily found generic medicines.

CONCLUSION

The surveyed patients showed fair knowledge of generic medicine in terms of definition, efficacy and cost in this sample. The findings also suggest that direct patient education by the healthcare providers on issues relating to safety and efficacy of generic medicines could further enhance their uptake. Programs should also be implemented in order to reinforce generic medicines prescriptions by medical practitioners and substitution by pharmacists.

COMPETING INTERESTS: none

AUTHORS’ CONTRIBUTIONS

Sagou Patrick Olivier YAYO: has given substantial contributions to the conception and design of the study, has been involved in revising the manuscript critically for important intellectual content, has given final approval of the version to be published; and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Kadidiatou Raissa KOUROUMA: has been involved in the conception of the study, the acquisition of data and their analysis and interpretation, and has participated in drafting the manuscript.

Johanna Francisca ATTISSOU: has participated in the conception of the study and data interpretation.

Orphée KOUAKOU: has been involved in the conception of the study, the data analysis and interpretation, and has also participated in drafting the manuscript.

Salimata DAGNOKO: has been involved in the conception of the study and in data collection and interpretation.

Eulalie OGA has been involved in the conception of the study and the data collection and interpretation.
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Eulalie OGA: Pharm D Research Unit Technical Assistant at the Programme National de Développement de l’Activité Pharmaceutique.

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