



RESEARCH ARTICLE

OPEN ACCESS

ACCEPTABILITY OF PRODUCT GENERIC FOR STUDENTS OF A COLLEGE PRIVATE SECTOR IN THE MUNICIPALITY OF VICTORY CONQUEST, BAHIA

¹Larissa dos Santos Mendes, ⁷Sândila Tainá Dourado Nascimento, ⁹Rita Leite Queiroz, ¹Bruna Cristina da Trindade, ³Adriana Vanderlei do Amorim, ⁴Rafael Cerqueira Campos Luna, ⁵Beatriz Rocha Sousa, ⁸Rosimara de Jesus Andrade Caitite, ^{2,3,4}Stenio Fernando Pimentel Duarte and ^{2,6}Léia Alexandre Alves

¹Student Independent College of the Northeast - Bahia, Brazil; ²Teacher Independent College of the Northeast; Lecturer University Center Faculty of Technology and Sciences; Lecturer Faculty of Santo Agostinho; ³Master Teacher and Dentist by ABEPO; ⁴Doctor and Professor of Medicine, Santos Agostinho School of Health - FASA; ⁵NEPEdc Specialist Professor and Researcher; ⁶Master's in Genetics, Biodiversity and Conservation; ⁷Pharmacist Clinic with Emphasis on Pharmaceutical Prescription; ⁸Pharmaceutical Specialist in Public Health (IBPEX), Specialist in Clinical Analysis and Toxicológicas (FAINOR) and Specialist in Hematology (Candido Mendes University); ⁹Postgraduate Pharmaceuticals in Clinical Pharmacology, Graduate Student in Clinical Pharmacy with Emphasis on Prescription Pharmaceuticals

ARTICLE INFO

Article History:

Received 09th August, 2019
Received in revised form
20th September, 2019
Accepted 26th October, 2019
Published online 30th November, 2019

Key Words:

Effectiveness, Generic drugs, Lower cost.

*Corresponding author:

Stenio Fernando Pimentel Duarte

ABSTRACT

Generic drugs are similar to reference drugs, produced after expiration or waiver of the patent or other exclusive rights, with efficacy, safety and quality. Generics represent the major technical and scientific advance for Brazil, with the aim of facilitating the population's access to medicines. This study aimed to verify the level of acceptability and knowledge about the generic drug in students from a private college in Victoria of Conquest-Ba. This is a descriptive exploratory study of qualitative and quantitative analysis with the desired samples and variables, conducted with 300 students enrolled in higher education courses in a private college located in the city of Vitória da Conquista, Bahia. As a result, it was observed that the majority of respondents were 18 and 23 years old, and 52.3% were female. Among them, the vast majority (94.3%) stated that they had already used generic medicines, with 85.7% of participants believing that the generic medicine has the same effect as the reference medicine and 77.3% of them claimed to buy generic medicine. motivated by the lowest cost of this type of medicine. It was concluded that most participants showed to have a good level of knowledge and acceptability regarding generic drugs. In addition, most reported being satisfied with the results obtained with the use of the drug and the lower cost.

Copyright © 2019, Larissa dos Santos Mendes et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Larissa dos Santos Mendes, Sândila Tainá Dourado Nascimento et al. 2019. "Acceptability of product generic for students of a college private sector in the municipality of victory conquest, Bahia", *International Journal of Development Research*, 09, (11), 32057-32062.

INTRODUCTION

In the current pharmaceutical scenario, there are three presentations of commercial forms of medicines: generic, similar and reference. In focus, the generic drug is the closest to the reference drug, because it has the same active ingredient and in the same concentration, conveyed in the same pharmaceutical form, with similar route of administration and with equal dose and indication.

In turn, the Reference is considered an outstanding product, patent holder, ie innovative, being registered and marketed in the country through the certification of the National Health Surveillance Agency (ANVISA) before the tests of quality, efficacy and safety (Achilladelis, 2012). The Generic Drug Policy (PMG) brings greater rationality in the management of these drugs, providing information from cost to interchangeability. In this arrangement, the role of the pharmacist is brought into focus. It is necessary for the pharmacist to be educated and qualified to have efficient and

credible information, providing all appropriate guidelines for quality assurance in dispensing (Alencar *et al.*, 2016; Frank, 2011). The commercialization of generic drugs in Brazil was only possible after Law 9,787 was sanctioned and made possible the interchangeability of the generic drug with the reference drug. In prescriptions, there were significant changes, especially in the public sector, in which to prescribe the patient's pharmacotherapy, the name of the drug must be in accordance with the International Common Name (DCI) or Brazilian Common Name (DCB) (Araújo *et al.*, 2010; Moraes, 2016; January, 2016). In the Brazilian pharmaceutical market, there has been an increase in competition for sales since the integration of generics. One of the contributing factors is the low cost compared to the other two groups, drawing consumer attention at the time of purchase. Generics require less investment in research to be commercialized and appear as a strong option for the appropriate choice of pharmacotherapy (Rickwood, 2017; Moraes, 2016). In the first five months of 2018, sales increased by 9.73%, with a total of 556.3 million units sold in pharmaceutical retail in the same period, compared to 506.9% in 2017. That is, each increasingly with the progression of generic drugs in the Brazilian pharmaceutical sector, having a major impact on the national economy (Portal Saúde Business, 2018; Bertoldi, 2015; Drozdowska, 2015). With the demand for medication use by the population, there are still divergences in the acceptance of the use of generics to compose individualized pharmacotherapy. The population still has resistance to its use, as well as the prescribers have related its prescription as protagonists of pharmacotherapy (Pereira, Freitas, 2008; Blatt *et al.*, 2012). Among these, the level of education is a variable that reveals the education level of the university students who will be submitted to the questionnaire. Therefore, in this context, these variables will be evaluated by identifying the degree of acceptability and knowledge through a study that will be carried out in a private college in the interior of Bahia, where it is expected that young people and those with more education will follow advances in generic drug policy and have more favorable beliefs about their effectiveness. In this aspect, this study aimed to verify the level of acceptability and knowledge about the generic drug in students from a private college in Vitória da Conquista-Ba.

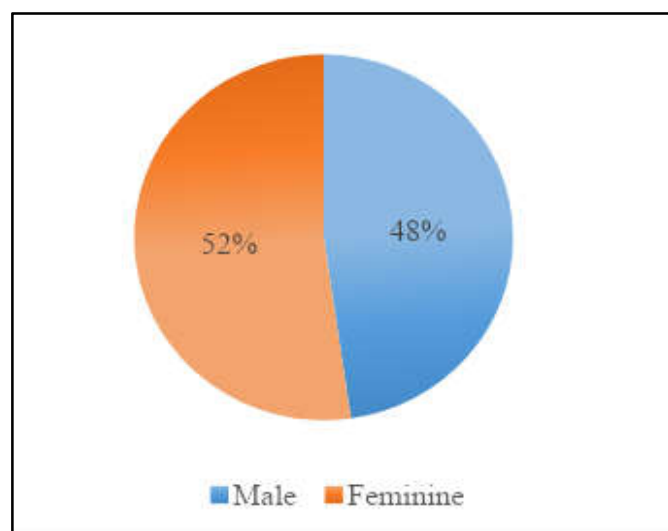
METHODOLOGY

This is a descriptive exploratory study in which qualitative and quantitative analyzes will be performed with the desired samples and variables. The research was conducted in a private college located in the city of Vitória da Conquista, Bahia, located in the northeastern semiarid region. Its population in 2010 is 306,866 people, and an estimated 338,885 people in 2018 (Júnior *et al.*, 2012; IBGE, 2010). The college has approximately 4,000 incoming students and the study population was 300 students enrolled in the institution's higher education courses at random probability. When applying the questionnaire to the volunteers, they received explanations about the purpose of the research. Data collection prized for the highest confidentiality of the information offered. The questions composed pertinent information to the theme, and the personal aspects of the interviewee were not addressed. At the time of data collection, the questionnaire was delivered, which was completed by the student himself in the presence of the researcher, and given to the respondent a Free and Informed Consent Form - ICF, for signature. A structured

questionnaire containing 13 closed questions for data collection was applied, based on the authors' work Marco (2013); Moraes, (2016). The questionnaire consisted of two variables: the first was the sociodemographic data (gender, age, course and semester), and the second was the specific data focused on the use of the generic drug. To interpret the research results, qualitative and quantitative analyzes were performed through a spreadsheet in the Microsoft Excel® 2013 program using descriptive statistical measures (frequency and percentage) and expressed as tables. And subsequently confronted in the scientific literature. The articles used for this study were extracted from databases such as Lilacs, Google Scholar and SciELO. Inclusion criteria were: people from 18 years of age who regularly attend and are enrolled in some college offered at the institution mentioned and voluntarily agree to participate in the research. Exclusion criteria were: People who for some reason do not want to participate and refuse to sign the free and informed consent form. Participation was voluntary, seeking to respect all established ethical aspects of research on human beings, which is provided for in Law 196/96 of the National Health Council (CNS). The person who was considered a research participant signed the Informed Consent Form which was attached in two copies to the questionnaire. This study was approved by the Ethics Committee of the Independent Faculty of the Northeast - FAINOR through Opinion No. 3,566,056 and CAEE 14429119.4.0000.5578.

RESULTS AND DISCUSSION

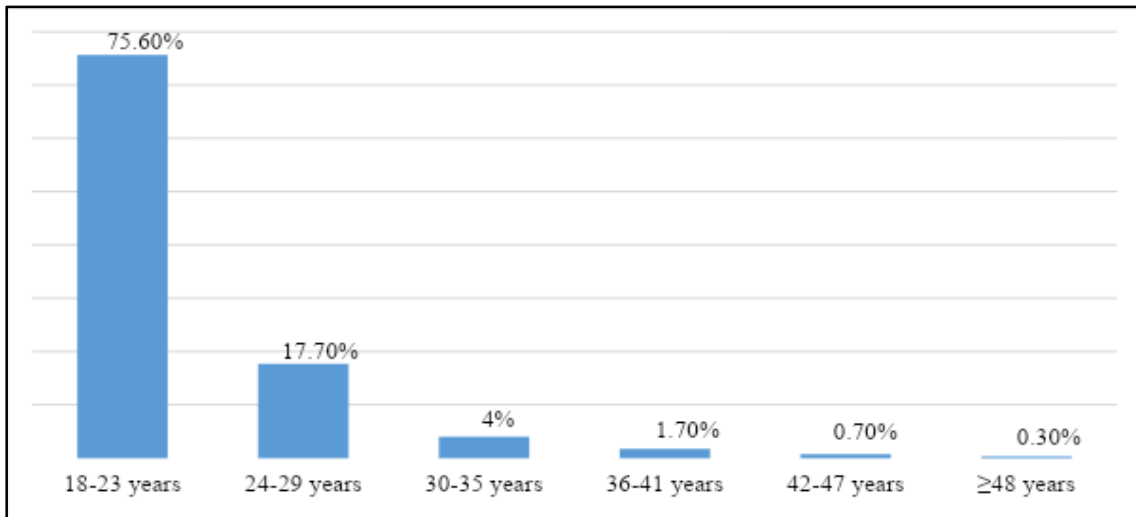
The present study verified the acceptability of the generic drug in a private college in the city of Vitória da Conquista, Bahia, with the participation of 300 interviewees, in which after the application of the questionnaire, the following results were obtained. The questionnaire was applied to the classes by course, and afterwards a comparison of the knowledge of health students in relation to students in other areas, about the knowledge of generic medicine.



Source: Data collected by the researcher (2019)

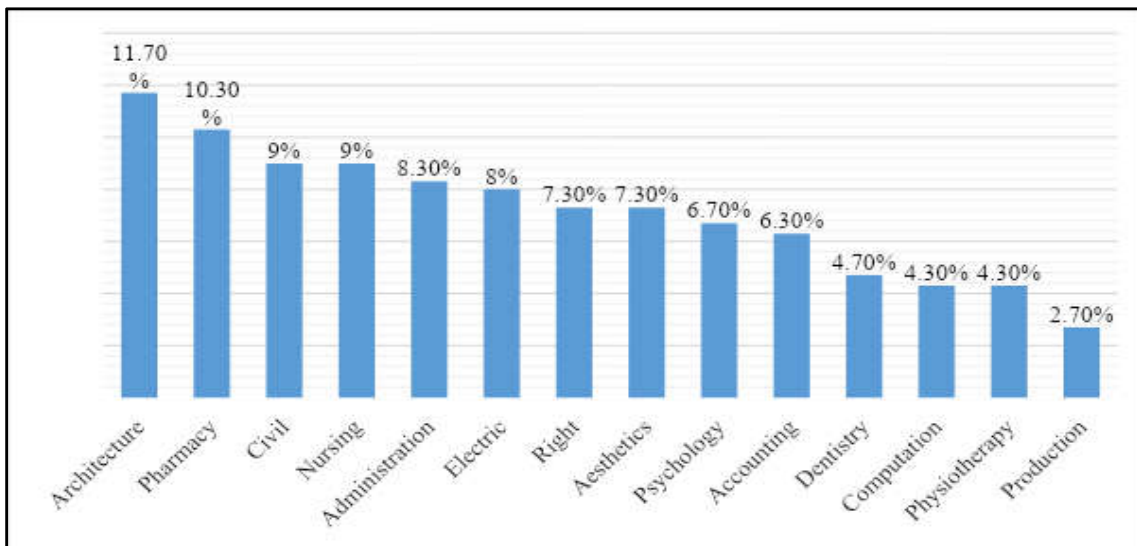
Graph 1. Gender of participants in a private college in the city of Vitória da Conquista, Bahia, 2019

Graph 1 shows that among the survey participants, females were predominant, with 52.3% (n = 157), the age of respondents varied. Between 18 and 23 years old corresponds



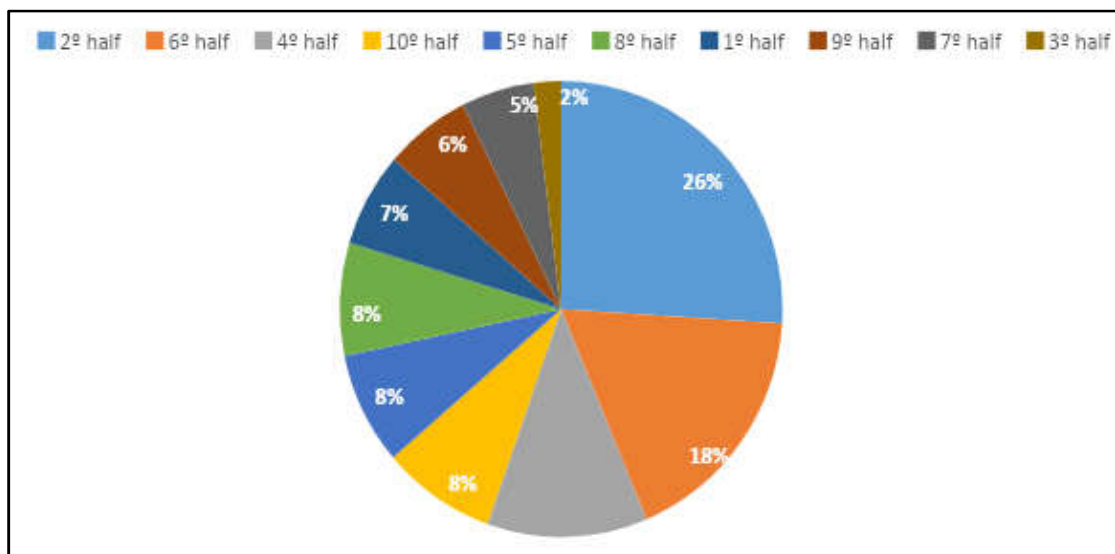
Source: Data collected by the researcher (2019)

Graph 2. Age range of participants in a private college in the city of Vitória da Conquista, Bahia, 2019



Source: Data collected by the researcher (2019)

Graph 3. Variables in relation to the courses of participants in a private college in the city of Vitória da Conquista, Bahia, 2019



Source: Data collected by the researcher (2019)

Graph 4. Variables in relation to the semester of participants in a Private college in the city of Vitória da Conquista, Bahia, 2019

to 75.6% (n = 227) of respondents, similar to a study found in the literature of Januário (2016). Concerning participants, Architecture/Town Planning and Pharmacy were the most frequent with 11.7% (n = 35) and 10.3% (n = 31), respectively. Most students were in the 2nd semester of the respective courses mentioned, with 26% (n = 78). 89% (n = 267) of the students said they accepted suggestions for replacing the reference medicine with generic by the pharmacist, similar to the study named by Moraes (2016) and Marco, (2013). Pharmacists, in most situations, refer to generic drugs, which is in line with Fernandes *et al.* (2011), who in their study found that 80% of participants reported that the pharmacist refers to the generic drug at the time of purchase (Fernandes *et al.*, 2011). This shows that most users have a high level of confidence in the pharmacist's ability to change medicines at the time of purchase (Marco, 2013). In designing what is a generic medicine, there have been reports of

[...] how it has the same effect as the reference medicine.

[...] has the same composition as the reference medicine.

[...] cheaper than the reference medicine.

[...] does not have the same effect as the reference medicine.

Table 1. Participants' opinion on generic drugs in a private college in the city of Vitória da Conquista, Bahia, 2019

VARIABLE	n	%
Do you accept the suggestion of substitution of the generic medicine by the pharmacist?		
Yes	267	89
Not	33	11
Have you used generic medicine?		
Yes	283	94.3
Not	4	1.4
Do not remember	12	4
Did not answer	1	0.3
Do you believe the generic medicine has the same effect as the reference medicine?		
Yes	257	85.7
Not	39	13
Did not answer	4	1.3

n: Number; %: Percentage; Source: Data collected by the researcher (2019)

These data show that over the years since the Generic Law has been in force, the population has been improving their knowledge and expanding their experience regarding generics (Souza, Rodrigues, 2015). The generic drug has efficacy, quality and safety proven by bioavailability and bioequivalence tests (Brasil, 1999). Generic drugs should be bioequivalent to their innovative version, exhibiting the same safety and quality profile as the reference drug (Hassali *et al.*, 2009). The bioequivalence test, through pharmacopoeias, evaluates the physical, chemical and microbiological conditions, ensuring that the generic is totally equivalent to the reference drug. (Aghion, 2012; Fiúza, 2012; Grossman, 2013; Hurwitz, 2017). The bioavailability test evaluates the concentration of the drug in the bloodstream that exerts therapeutic action since its administration (Araújo *et al.*, 2010; Kamien, 2016; Babar, 2014). Probably those people who reported not believing in the effectiveness of generic drugs did so because they had a negative experience with such drugs. However, such an effect is not unique to generics. This can be attributed to interindividual variation, which is a serious problem in which pharmacological efficacy and adverse effects may be lost (Lira *et al.*, 2014). Most participants mentioned that they had already used some generic drug, with 94.3% (n = 283), a result that corroborates the findings of other studies by Moraes (2016); Oliveira *et al.* (2005) and

Souza, Rodrigues (2015). In 85.7% (n = 257) of the students believed that the generic drug has the same effect as the reference drug, a result similar to the study by Keenum *et al.* (2012). It demonstrates in the results of the present study a clear predisposition to the consumption of generic drugs. Participants of both sexes claim to have confidence in these products. The result is in line with research by Lira *et al.* (2014) and Blatt *et al.* (2012), where most participants rely on the efficiency of these drugs. Generic drugs are available for routine use in treating a wide range of diseases. However, the use of generics has increased considerably because they are available at a lower price and provide a cheaper alternative to branded drugs. Therefore, encouraging the substitution of generic drugs can provide a better opportunity to save on health expenses (AL HUSSAINI *et al.*, 2018).

Table 2. It presents the categories among the reasons for the participants to use or not to use generic medicines in a private college in the city of Vitória da Conquista, Bahia, 2019

VARIABLE	n	%
Do you usually buy generic drugs?		
Yes	258	86
Not	42	14
If so, what reasons influence you in choosing the generic drug?		
Confidence in generic medicine	76	25.3
Price	232	77.3
Prescription	44	14.7
Pharmacist's indication	84	28
Referral of friends / family and etc.	27	9
Do the doctors / dentists you usually consult always prescribe generic drugs?		
Yes	84	28
Not	216	72
Have you heard of generic drug interchangeability?		
Yes	27	9
Not	273	91

n: Number; %: Percentage; Source: Data collected by the researcher (2019)

Most participants, 86% (n = 258) used to buy generic drugs and 77.3% (n = 232) mentioned that price influences the choice of generic drug, which is similar to the study by Keenum *et al.* (2012). Therefore, it is important for the population to have access to the choice between the reference drug and the generic drug, choosing the one that suits them or the one that best fits their family budget, since the expenses of the low-income population with medicines they account for 61% of health expenses (Fernandes *et al.*, 2011). The use of generic drugs is advantageous, especially in terms of cost reduction in their purchase, enabling people to have access to quality drugs with proven safety and low cost (Fernandes *et al.*, 2011; Lima *et al.*, 2013). Factors related to consumer behavior, pricing or even employee suggestions may be influencing this choice (Guttier *et al.*, 2017). Nardi *et al.* (2016) pointed to price, efficacy and safety as important factors that may contribute to the decision to buy generic drugs. Regarding generic prescribing, respondents point out that 72% (n = 216) of doctors and dentists do not prescribe generic, and only 28% (n = 84) prescribe. In the study named by Januário (2016) and Lira *et al.* (2014), demonstrates that the medical class rarely or never prescribes generic drugs to patients. The participation of the physician and pharmacist in providing information about the generic drug is very important for users to trust this product, and to know and know how to use it (Marco, 2013). Study by Tamashiro *et al.* (2010) reports that 62% of respondents said they need to ask their doctors to prescribe generic drugs rather than branded ones. It is observed that there is a resistance on the part of some doctors to prescribe or recommend generic medicine. These actions

contradict the provisions of RDC No. 135 of May 29, 2003, which establishes that the professionals responsible for prescriptions must adopt, within the scope of the SUS, the Brazilian Common Denomination (DCB), or in its absence, the International Common Name (DCI) (Brazil, 2003). According to Souza *et al.* (2011), the justifications are the low prescription of these drugs by doctors and the fact that a large part of the population is unaware of generics. The present study also showed that only 9% (n = 27) of the students have heard about generic drug interchangeability, that is, most participants have never heard of 91% (n=273). Interchangeability indicates the possibility of replacing a reference medicine with a generic medicine. Since they must have the same effects and the same safety, demonstrated in the pharmaceutical equivalence and bioequivalence tests performed and approved by the National Health Surveillance Agency and the Ministry of Health (Alonso *et al.*, 2015; Antunes, 2008; Moraes, 2016; Brazil, 2003; Brazil, 2014; Souza, Rodrigues, 2015).

Regarding the category of interchangeability generic drug, the following were reported:

[...] replacement of a reference medicine with a generic one.

[...] one who can have the substance table of each other.

Interchangeability is accepted, provided that it is authorized by the prescribing professional as stated in RDC 16/2007, however, it is up to the pharmaceutical professional to perform the interchangeability, ie, to indicate the replacement performed in the prescription (Brazil, 2007). The development of the generic drug is considered by many to be a breakthrough as it contributes invaluablely to the growth in the market due to the continually offered prices and discounts, some data show that the value is up to 35% more affordable than the reference drug. (Chiavegatto, 2015; Moraes, 2016).

Final Considerations

It can be observed that the generic drug has good acceptability of the majority of the interviewees, and showed that most of the population evaluated already used the generic drug at some point in their lives. In addition, it showed to have preference for generics and confidence in the results obtained when using them, being satisfied with the lower cost compared to the reference drug. It was evidenced that the interviewees have knowledge about generics, regarding effectiveness and cost. However, there is a need to implement measures in order to point out relevant factors on the subject, which can demonstrate the importance of information and stimulation of the use of generic medicine, directed to doctors, pharmacists and students in these areas, enabling changes and greater social impact. , increase the presence of generic drugs in the market, facilitating access to lower cost products.

REFERENCES

- Achilladelis. B. and antonakis, n. The dynamics of technological innovation: case of the pharmaceutical industry. Volume 30. Research Policy. 2012.
- Aghion, P. and Howitt, P. 2012. A model of growth through creative destruction. *Econometrica*, v. 60, n. 2.
- AL Hussaini, M., Alsaffar, N., and Abdulraheem, A. 2018. Exploring community pharmacists' knowledge, perception and experiences towards branded and generic medicines in Kuwait: Highlighting the role of pharmacist. *Bulletin of Faculty of Pharmacy, Cairo University*, v. 56, n. 1, p. 109–114.
- Alencar, Aurelia Rodrigues, *et al.* 2016. Adesão ao tratamento com medicamentos genéricos no Brasil: uma revisão integrativa. *Rev. Saúde em Foco. Teresina*, v. 3, n. 1, art. 1, p. 46-65, jan./jun.
- Alonso, Marília Aparecida Silva *et al.* 2015. Adesão à prescrição de medicamentos genéricos por parte dos profissionais da área médica. *Acta Biomedica Brasiliensia / Volume 6/ nº 1/ Julho de 2015*.
- Antunes, A., Magalhães, J. L. Oportunidades em medicamentos genéricos – A indústria farmacêutica brasileira. Rio de Janeiro: Editora Interciência; 2008.
- Araújo, L. U. *et al.* Medicamentos genéricos no Brasil: panorama histórico e legislação. *Rev Panam Salud Publica*. v. 28, n. 6, p. 480–492, 2010.
- Babar Zud, Kan SW, Scahill S. 2014. Interventions promoting the acceptance and uptake of generic medicines: a narrative review of the literature. *Health Policy*, n. 117, p. 285-96.
- Bertoldi AD, Helfer AP, Camargo AL, Tavares NUL, Kanavos P. 2015. Medicine prices, availability and affordability in Southern Brazil: a study of public and private facilities. London: London School of Economics and Political Science. (LSE Health Working Paper, 18/2010).
- Blatt, C. R. *et al.* 2012. Conhecimento popular e utilização dos medicamentos genéricos na população do município de Tubarão, SC. *Ciência e Saúde Coletiva*, Santa Catarina, v.17, nº. 1, p.79-87.
- Brasil. Lei nº 9.787, de 10 de fevereiro de 1999. Altera a Lei nº 6.360, de 23 de setembro de 1976, que dispõe sobre a vigilância sanitária, estabelece o medicamento genérico, dispõe sobre a utilização de nomes genéricos em produtos farmacêuticos e dá outras providências. 1999.
- Brasil. Ministério da Saúde - Agência Nacional de Vigilância Sanitária. RESOLUÇÃO DA DIRETORIA COLEGIADA - RDC Nº 58, DE 10 DE OUTUBRO DE 2014.
- Brasil. MINISTÉRIO DA SAÚDE / AGÊNCIA NACIONAL DE VIGILÂNCIA SANITÁRIA / DIRETORIA COLEGIADA. Resolução - RDC nº 135, de 29 de maio de 2003(*). 2003.
- Brasil. Resolução RDC nº 16, de 02 de março de 2007. Aprova o Regulamento Técnico para Medicamentos Genéricos, anexo I. Acompanha esse Regulamento o Anexo II, intitulado "Folha de rosto do processo de registro e pós-registro de medicamentos genéricos". 2007.
- Chiavegatto Filho ADP, Wang Y-P, Malik AM, Takaoka J, Viana MC, Andrade LH. Determinants of the use of health care services: multilevel analysis in the Metropolitan Region of Sao Paulo. *Rev Saúde Pública*, n. 49, p. 1-12, 2015.
- Drozdowska A, Hermanowski T. Predictors of generic substitution: the role of psychological, sociodemographic, and contextual factors. *Res Social Adm Pharm*. v. 12, p. 119-29, 2015.
- Fernandes, J. Á.; Coutinho, J. V.; do Valle, M. G. Aceitação o medicamento genérico em diferentes níveis de escolaridade e renda familiar do Distrito Federal. *Cenarium Farmacêutico*. Brasília, v. 4, p. 1-31.
- Fiúza, E. P. S. and Lisboa, M. B. Bens credenciais e poder de mercado: Um estudo econométrico da indústria farmacêutica Brasileira. Technical report, Texto para Discussão do IPEA, Rio de Janeiro, 2012.

- Frank, R. G. and Salkever, D. S. 2011. Pricing, patent loss and market for pharmaceuticals. Technical Report 3803, *National Bureau of Economic Research*. 2011.
- Grossman, G. M. and Lai, E. L. C. International protection of intellectual property. Technical Report 8704, *National Bureau of Economic Research*, 2013.
- Guttier, M. C., Silveira, M. P. T., Luiza, V. L., and Bertoldi, A. D. Factors influencing the preference for purchasing generic drugs in a Southern Brazilian city. *Revista de Saúde Pública, Rev Saude Publica*. p. 51:59, 2017.
- Hassali, M.A. A. A. Shafie, S. Jamshed, M.I. Ibrahim, A. Awaisu, Consumers' views on generic medicines: a review of the literature, *Int. J. Pharm. Pract.* v. 17, n. 2, p. 79–88, 2009.
- Hurwitz, M. A. and Caves, R. E. Persuasion or information? promotion and the shares of brand name and generic pharmaceuticals. *The Journal of Law and Economics*, XXXI, 2017.
- IBGE – Instituto Brasileiro de Geografia e Estatística. Disponível em: <<https://cidades.ibge.gov.br/brasil/ba/vitoria-da-conquista>>. 2010.
- Januário, Marsimone Batista. O uso de medicamentos genéricos entre consumidores adultos de uma drogaria de porte médio no município de Buritis/RO. Monografia. Ariquemes - RO 2016.
- Júnior, José Patrício Bispo et al. Envolvimento comunitário na Estratégia de Saúde da Família: dilemas entre institucionalização e efetiva participação. *Physis Revista de Saúde Coletiva*, Rio de Janeiro, v. 22, n. 4, p. 1313-1332, 2012.
- Kamien, M. K. and Zang, I. Virtual patent extension by cannibalization. *Southern Economic Journal*, n. 66, p. 117–131, 2016.
- Keenum AJ, DeVoe JE, Chisolm DJ, Wallace LS. Generic medications for you, but brand-name medications for me. *Res Social Adm Pharm.* v. 8, n. 6, p. 574-8, 2012.
- Lima, Tiago Rodrigues de, et al. Avaliação do conhecimento e da aceitação de Medicamentos genéricos pela população do município de São Miguel do Anta, Minas Gerais, Brasil. *Anais V SIMPAC - Volume 5 - n. 1 - p. 241-246, Viçosa-MG - jan. - dez. 2013.*
- Lira, C. A. B. et al. Conhecimento, percepções e utilização de medicamentos genéricos: um estudo transversal. *Einstein*, São Paulo, v.12, nº. 3, p. 267-73. 2014.
- Marco, Thayane de. Verificação do grau de aceitação de medicamentos genéricos em uma farmácia de médio porte situada no sul de Santa Catarina. Trabalho de Conclusão de Curso. CRICIUMA, 2013.
- Moraes, Sânya Leticia Claudino da Silva. Avaliação do perfil e aceitação do medicamento genérico de clientes de uma drogaria na cidade de Quirinópolis – GO. Monografia. RIO VERDE, GO, 2016.
- Nardi EP, Ferraz MB. Perception of the value of generic drugs in São Paulo, Brazil. *Cad Saude Publica*. v. 32, n. 2, 2016.
- Oliveira, S. F. et al. Prevalência do Uso e Aceitação de Medicamentos Genéricos Pela População de Maringá-PR. *Iniciação Científica CESUMAR*, Vol. 07, n. 02, p. 133 – 140, Jul. Dez. 2005.
- Pereira, Leonardo Régis Leira; FREITAS, Osvaldo de. A evolução da Atenção Farmacêutica e a perspectiva para o Brasil. *Revista Brasileira de Ciências Farmacêuticas*, vol. 44, n. 4, out./dez., 2008.
- Portal Saúde Business. Vendas de Medicamentos Genéricos crescem 9,73% nos cinco primeiros meses do ano. 13 de julho de 2018.
- Rickwood S, Kleinrock M, Nunez-Gaviria M. The global use of medicines: outlook through 2017. Danbury: IMS Institute for Healthcare Informatics, IMS Health; 2013.
- Sousa, T. M. et al. Análise da disponibilidade de medicamentos genéricos em farmácias e drogarias do município de Ipatinga-MG. *Revista Brasileira de Farmácia*, Rio de Janeiro, v. 91, nº. 2, p. 89-95, 2011.
- Souza, Eder dos Reis Xavier, Rodrigues, Maria Augusta Carvalho. Aceitabilidade e conhecimentos sobre medicamentos genéricos da comunidade do Paranoá-DF. *Jornal Brasileiro de Ciência da Saúde*, v.1, n.1, pp.1-6, 2015.
- Tamashiro, E. R. S. et al. As Atitudes dos Consumidores Frente aos Medicamentos Genéricos: Um Estudo com Alunos de uma Instituição de Ensino Superior do Interior Paulista XXX ENCONTRO NACIONAL DE ENGENHARIA DE PRODUÇÃO, Maturidade e desafios da Engenharia de Produção: competitividade das empresas, condições de trabalho, meio ambiente. São Carlos, SP, Brasil, 12 a 15 de outubro de 2010.
