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ORIGINAL ARTICLE

PREVALENCE OF COMMUNITY INFECTIONS DIAGNOSED IN THE FAMILY HEALTH STRATEGY

PREVALÊNCIA DAS INFECÇÕES COMUNITÁRIAS DIAGNOSTICADAS NA ESTRATÉGIA SAÚDE DA FAMÍLIA

PREVALENCIA DE LAS INFECCIONES COMUNITARIAS DIAGNOSTICADAS EN LA ESTRATEGIA SALUD DE LA FAMILIA

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ABSTRACT

Objective: identifying the prevalence of community-acquired infections diagnosed in the Family Health Strategy. ***Method:*** a descriptive, retrospective study of a quantitative approach. The sample consisted of 90 patients attended in a Basic Health Unit. Data were organized in double typing in Excel version 2010 and exported to SPSS to perform frequency analysis of frequency of the variables, which allowed a descriptive analysis distributed in figures and tables and analyzed based on literature. The project was approved by the Research Ethics Committee, CAAE 23560313100005214. ***Results:*** among the infections, the respiratory were among the most prevalent with 52,2%, and 32,3% of these are represented by tonsillitis. Regarding treatment, 84% presented prescription of antibiotics, and the most prescribed was amoxicillin (43%). ***Conclusion:*** adult female patients, single with prevalence of respiratory infections represented by tonsillitis and with a high incidence of antibiotic prescriptions represented by amoxicillin. ***Descriptors:*** Infection; Community Health Nursing; Prevention.

RESUMO

Objetivo: identificar a prevalência das infecções comunitárias diagnosticadas na Estratégia Saúde da Família. ***Método:*** estudo descritivo, retrospectivo de abordagem quantitativa. A amostra constituiu-se dos 90 pacientes atendidos em uma Unidade Básica de Saúde. Os dados foram organizados em dupla digitação no programa Excel versão 2010 e exportados para o SPSS para realização de análise de frequência das variáveis, o que permitiu uma análise descritiva distribuídos em figuras e tabelas e analisados à luz da literatura. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, CAAE 23560313100005214. ***Resultados:*** entre as infecções, as respiratórias estiveram entre as mais prevalentes com 52,2%, sendo que 32,3% destas estão representadas pelas amigdalites. Quanto ao tratamento, 84% apresentou prescrição de antibiótico, sendo que o mais prescrito foi a amoxicilina (43%). ***Conclusão:*** pacientes adultos do sexo feminino, solteiros com prevalência de infecções respiratórias representada pela amigdalite e com alta incidência de prescrição de antibiótico representado pela amoxicilina. ***Descritores:*** Infecção; Enfermagem em Saúde Comunitária; Prevenção.

RESUMEN

Objetivo: identificar la prevalencia de las infecciones comunitarias diagnosticadas en la Estrategia Salud de la Familia. ***Método:*** este es un estudio descriptivo, retrospectivo, con un enfoque cuantitativo. La muestra consistió en 90 pacientes atendidos en una Unidad Básica de Salud. Los datos se organizaron en doble tipificación en Excel versión 2010 y exportado a SPSS para realizar el análisis de frecuencia de las variables, lo que permitió un análisis descriptivo distribuidos en figuras y tablas y analizados basados en la literatura. El proyecto fue aprobado por el Comité de Ética en la Investigación, CAAE 23560313100005214. ***Resultados:*** entre las infecciones, fueron las respiratorias entre las más frecuentes con el 52,2% y el 32,3% de éstos están representados por amigdalitis. Como con el tratamiento, el 84% presentó prescripción de antibióticos, y la amoxicilina fue la más prescrita (43%). ***Conclusión:*** los pacientes adultos del género femenino, solas con la prevalencia de las infecciones respiratorias representadas por amigdalitis y con una alta incidencia de prescripciones de antibióticos representados por amoxicilina. ***Descriptores:*** Infección; Enfermería en Salud Comunitaria; Prevención.

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INTRODUCTION

Since the beginning of their existence, men seek to meet the challenges of the occurrence of infection, since the dynamic and progressive process of adaptive selection for the survival of the species, which occurs every day in nature, involves important phenomena that affect the health status of human populations. Thus, to our efforts to understand the age-old occurrence of infection is in isolated or collective procedures, understanding the disease confused with the history of beliefs and ideas without any experimental investigative support.

It is understood that diseases have a complex etiology, they can be of hospital origin, caused during hospitalization or discharge related to hospitalization, or community in which it is characterized by this infection incubation period in time in which the patient has entry into hospital, provided it is not related to previous hospitalization.[1]

Infections represent one of the clinical diseases with the greatest impact for humanity in the face of high rates of morbidity and mortality, social disruption, as well as the worldwide recorded economic losses. Unquestionably challenge the scientific and technological advances, mobilizing the attention of professionals, researchers and organizations looking for effective measures to prevent and control.

In 1980, it implemented the Unified Health System (SUS), which originated in significant changes in health care in Brazil, which sought to overcome inequalities in access to these services achieving equity within the health system.[2]

In 1994, the there was founded the Family Health Program, now known as the Family Health Strategy (FHS) in order to reorganize the current health care model, with substitute, universal way, complementing conventional practices, with a focus on preventive and comprehensive care, giving practices to conform the reality of the population and providing better quality of life for them, especially for those socially vulnerable.[2]

The FHS was established with the proposed control to most prevalent diseases; as well as features a combination of technology and a correlation of favorable forces to the changes which often provides subsidy for establishing strategies for situational awareness and strengthening prevention through health education.[2] Thus, it was defined as objective of this study:

- Identifying the prevalence of community-acquired infections diagnosed in the Family Health Strategy.

METHOD

This is a descriptive, retrospective study with a quantitative approach, developed in a Basic Health Unit (BHU) in the south of Teresina zone. It constitutes a BHU (Basic Health Unit) composed of teams from the Family Health Strategy (FHS), which are responsible for primary health care for more than the 1.851 families, which corresponds to 5,668 people.

The study population consisted of people registered in that BHU treated at medical appointments and who have been diagnosed with some kind of community infection, acquired in January 2013 to January 2014. The sample consisted of 90 patients. Data collection was performed by applying a previously validated questionnaire as to form and content.

It was used as a criterion for inclusion of participants: be diagnosed with community infection following medical care in that BHU in the period from 1st January, 2013 to 31st January, 2014. The exclusion criteria matched to users who were treated at BHU, but they have not been diagnosed with some kind of community infection. The charts with garbage data were eliminated and those in which the information for suitability evaluation were not available.

Data were organized in double entry in the 2010 version of Excel and exported to SPSS to perform frequency analysis of the variables, which allowed a descriptive analysis distributed in figures and tables and analyzed based on literature.

The study was approved by the Ethics Committee of the UFPI, CAAE 23560313100005214.

RESULTS

The results are distributed in tables and in a figure. Table 1 shows the total distribution of treated patients with community-acquired disease at the basic health unit. Of all participants 46 (51,1%) were female and 44 (48,8%) males, 21 (23,3%) were aged between 10-18 years old. Regarding marital status, it was observed that 64 (71,1%) were single.

Table 1. Number and percentage distribution of patients seen in the basic health unit, according to identification variables. Teresina, PI, 2014. (n= 90).

Variables	N (%)
Gender	
Female	46(51,1)
Male	44(48,8)
Age (years)	
1 - 5	14(15,6)
6 - 9	7(7,8)
10 - 18	21(23,3)
19 - 25	15(16,6)
26 - 40	16(17,8)
> 40	17(18,9)
Marital Status	
Single	64(71,1)
Married	24(26,7)
Divorced	2(2,2)

Table 2 shows the high prevalence of respiratory infections, 47 (52,2%), and from that total 29 (32,3%) were diagnosed as tonsillitis with greater prevalence in children under 10 years old; bronchitis then with 11 (12,2%).

Table 2. Percentage of patients seen in a basic health unit of Teresina, according to the prevalence of community infections. Teresina, PI, 2014 (n= 90).

Type of infection / Age	**n** (%)		
Respiratory infection	47 (52,2)	Faixa etária	n
Tonsillitis	29(32,3)	< 10	11
		10 a 18	8
		>19	10
Bronchitis	11(12,2)	1 a 5	2
		6 a 9	1
		10 a 18	4
		19 a 25	2
		26 a 40	2
Pneumonia	5(5,5)	1 a 5	1
		10 a 18	1
		19 a 25	1
Meningitis	1(2,1)	> 40	1
Tuberculosis	1(2,1)	> 40	1
Sexually Transmitted Infection	20(22,2)		
Syphilis	14(70,0)	10 a 18	1
		19 a 25	3
		26 >	10
Trichomoniasis	3(15,0)	10 a 18	1
		19 a 25	1
		26 a 40	1
Chlamydia	3(15,0)	10 a 18	1
		19 a 25	2
Skin infection			
Furuncle	9(64,3)	1 a 5	1
		10 a 18	1
		26 a 40	2
		> 40	5
Onychocryptosis	5(35,7)	19 a 25	3
		> 40	2
Intestinal infection			
Diarrhea	9(10,0)	< 10	8
		10 a 18	1

The figure shows the percentage of infected patients attended at a basic health unit of Teresina/PI, according to the prescription of antibiotics. Of the total participants, 76 (84%) made use of antibiotics under medical prescription.

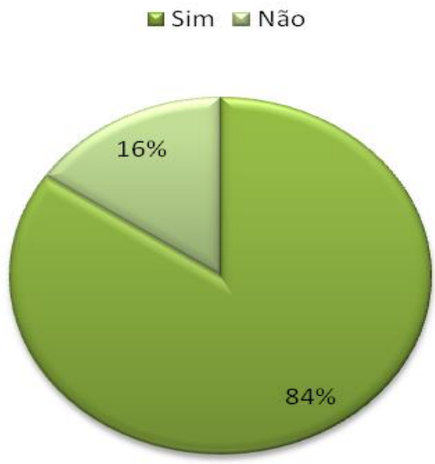

Figure 1. Percentage of patients with infection attended in a basic health unit of Teresina, in accordance with the prescription of antibiotics. Teresina/PI, 2014 (n= 90).

Regarding the type of antibiotic prescribed for patients with community-acquired, 36 (48%) made use of amoxicillin, followed by 13 (17%) of penicillin, 9 (12%) sulfamethoxazole + trimethoprim and 6 (8%) of cephalexin.

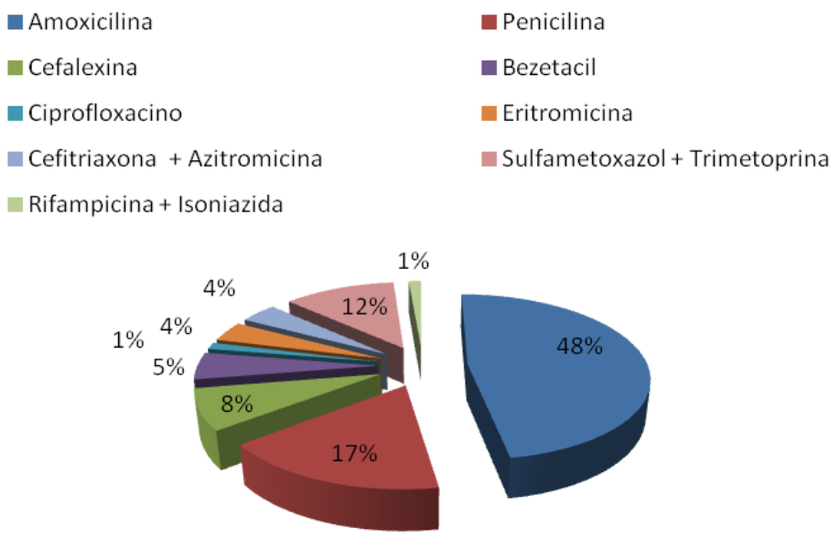

Figure 2. Percentage of antibiotics prescribed in a health unit of Teresina. Teresina/PI, 2014 (n= 80).

DISCUSSION

The provision of care to patients in developed countries has undergone significant changes since many patients are leaving hospitals to receive the necessary care in their homes with the intention of reducing hospital stays and possible costs; however, this new form of care ends up generating other problems such as infections caused by home care.[3]

Several factors involve the presence of infectious diseases acquired in the community, among these are: the changing aspects of nature, the variety of pathogens to which the population is exposed and the demographic changes in the community, affecting the resistance of pathogens to antibiotics.[3]

Regarding the profile of the patients seen in the FHS, the number of women 46 (51,1%) is higher compared to males. It is significant that compared to males between the age group 10-18 years old they were more representative, corresponding to 21 (23,3%). The small number of adult males can demonstrate a strong cultural reflection, unpreparedness of the professionals at the care or adherence to the public or inaccessibility to health services. According to the health ministry there is adequate acceptance of men aged 20 to 59 years old to the health service, when they look for the health service at least once a year.[4,5]

A study conducted in João Pessoa/PB, in order to investigate the strategies used by nurses to elucidate communication with users males showed that for adequate acceptance and capture the man in the health service communication it is important nurse therapy as a crucial tool in care.[6]

In relation to respiratory infections, have higher incidence in the community and are considered the fourth most common cause of death worldwide, surpassed only by ischemic heart disease, stroke and chronic obstructive pulmonary disease (COPD), these are also considered the second reason more often for years of life lost.[7]

In this study respiratory infections were the most prevalent 47 (52,2%), the most significant tonsillitis 30 (63,8%). Similar results were found in a study conducted in the southern region of Brazil where prominent respiratory infections were acute pharyngitis, tonsillitis and nasopharyngitis.[8,9] It is noteworthy that the antibiotic prescription occurred in 95,5% of cases of tonsillitis of this study. A study in southern Brazil that has shown that this type of infection is mostly of viral etiology and the use of antimicrobial aims to preventing complications such as rheumatic fever or peritonsillar abscesses. One of the main bacterial agents responsible for these infections is the Streptococcus pyogenes.[9]

Bronchitis was the second most prevalent among 10 respiratory infections (21,3%). This result is similar to study in order to describe the profile of drug treatments used in respiratory infections. This infection commonly affects the population and can be acute or chronic, it has, in most cases, viral etiology, which draws attention because, although they result from super bacterial infections can be treated with simple actions such as clearence measures and draining the respiratory secretions, without the use of drugs.[9]

Pneumonia was the third most prevalent among respiratory infections 5 (10,7%), one of the main problems are the costs for both the health service as society. A study in Western Europe revealed that expenditures are approximately 10 billion Euros, this fact is especially true because both the infection and the hospital recurrence and lost workdays.[7]

Several are listed risk factors for pneumonia as age over 65, smoking, alcoholism, immunosuppression condition chronic obstructive pulmonary disease, cardiovascular disease, kidney disease, diabetes mellitus and dementia, low nutritional status. Adults with risk factors for community-acquired pneumonia should be vaccinated against influenza and pneumococcal pneumonia as a way to minimize the risk of lower respiratory tract infections. The lowest percentage of respiratory infections is represented by meningitis and tuberculosis, which are infections that require vigilance to avoid spread.[7]

Besides the Streptococcus pyogenes there are other species such as Haemophilus influenzae, Streptococcus pneumoniae (Pneumococcus) and catarrhalis Moraxelia who are among the bacteria responsible for respiratory infections acquired in the community.[10]

Respiratory infections bring as main consequences morbidity, mortality and resource demands for health on a worldwide level. According to the consensus established in Portugal there are required general actions for the prevention of respiratory infections in adults as smoking cessation, control of chronic diseases, judicious use of immunosuppressive therapies, counseling in relation to alcohol and drug addiction, state proper nutrition and some specific actions such as anti-flu vaccine and pneumococcal.[11]

Regarding the Sexually Transmitted Infections, syphilis acquired greater prominence, followed by trichomoniasis and chlamydia. These infections are considered a public health problem and are among the top five categories of diseases for which adults in developing countries most seek medical treatment.[12]

The study showed that a greater number of syphilis cases occurred in people over the age of 26 years old, reaching mainly adult and elderly. In a study aiming to identify the preventive measures that older people are using for the prevention of Sexually Transmitted Diseases and Acquired Immune Deficiency Syndrome showed that many elderly people had active sex life, and few performed the use of prevention measures against sexually transmitted diseases which reflects the vulnerability of the elderly, the study reinforces the importance of educational strategies in order to provide change in the behavior of the elderly with emphasis on prevention.[13]

The most serious implications and of longer duration of these infections occur mostly in women causing cervical cancer, pelvic inflammatory disease, infertility, miscarriage and ectopic pregnancy, can lead to maternal death. Thus we observe the importance of to list risk factors on patient care as alcohol, drugs, violence, and assess sexual behavior, such as age at first intercourse, number of partners, marital status, use and knowledge condoms, for the health team to implement actions within the Family Health Strategy in full.[12]

The skin infection is the third most prevalent infection among these stands out the skin abscess (furuncle), followed by onychocryptosis. Staphylococcus aureus is one of the main responsible for these infections, this microorganism is part of the natural flora and adverse conditions such as breakage of the skin barrier or decreased immunity, they are installed in the body causing infections involving the skin, reaching the subcutaneous tissue. The processing related to such infection may be accomplished with the drainage of abscesses or local treatment every day in cases of minor abscesses extrafacial of 5 cm diameter in non-diabetic patients without involving immunocompetent and myofascial.[14-5]

Intestinal infections were less prevalent among community-acquired infections (10%), and all cases represented by diarrhea 9 (100%) in children under 10 years old, and all patients were prescribed sulfamethoxazole + trimethoprim as antibiotic therapy. This fact relates the importance of health promotion, focusing and health education through community engagement in health related issues, and monitoring of Diarrhoeal Diseases as the Health Ministry's recommendation.

A study of diarrheal infections in adults discourses that acute infection is mainly caused by viruses. Most are caused by calicivirus, rotavirus, enteric adenovirus and astrovirus. When infections caused by these bacteria are serious and Salmonella bacteria is the most common.[16]

The treatment aims acute diarrhea maintain adequate hydration by the administration of fluids and electrolytes, it is possible to orally and intravenously fludotherapy, the diarrhea is accompanied with persistent vomiting, pre-treatment with antiemetics orally is important or intramuscularly. In the first 24-48 hours after start of diarrhea it is desirable to have a liquid diet after reintroduction of solid food in small quantities.[16]

The indiscriminate use of antibiotics is characterized as a serious problem that affects the health services around the world for high occurrence of resistant bacteria in the community. The random use of antibiotics combined with the acceptance deficiency to control and prevention of infections, it has contributed to the increased morbidity and mortality, time and treatment costs. It is important to note that with the increase of microbial resistance and do not discovery of new drugs in future treatment options are more limited.[17]

According to Graph 1 the prescriptions of antibiotics reflect high rates of infections present in the community. The diagnosis made during the consultation in primary care was predominantly based on clinical examination and is not identified any diagnostic laboratory examination within BHU. The care of patients with infection can be difficulties in establishing the etiology of infection due to the unavailability of fast complementary laboratory tests at the primary level of health care.

Upper respiratory tract infections are presented as the main reason for the use of antimicrobials, but most of these infections have viral etiology which reflects little benefit of this action, demanding high costs and major contribution to the transmission of resistant bacteria. The use of antibiotics can go through four stages: the first stage for the aspects of diagnosis, identification of the infection; followed by choice of the appropriate antimicrobial agent to the type of infection. The third stage relates to the treatment time and the last dosing involves aspects such as dose, dosing interval and route of administration. The irresponsibility or negligence of the categories presented may favor the increase in microbial resistance.[18]

Regarding the type of antibiotic prescribed amoxicillin performed in half the prescriptions, corroborating another national study that analyzes drug prescriptions, which showed rates of 47% of amoxicillin prescriptions. Such a drug has broad spectrum, oral administration and good tolerability favoring their choice in the basic health units.[18]

Penicillin was the second most prevalent, followed by cephalexin. Penicillin has several indications from post-operative (caesarean, nail removal, phimosis, Appendix) to treat infections of the upper airways to ovarian infections to bone fractures. It also has broad spectrum which contributes to your choice. Cephalexin is a first generation cephalosporin group of ß-lactam antibiotics with structural features similar penicillins. It is a broad spectrum antibiotic, widely used. The other antimicrobials have lower prescription ratios to 9%..[19-20]

CONCLUSION

Community infections can occur at all ages in both genders. Regarding the male showed a predominant age group between 1-19 years old (21,1%). Among the infections present in respiratory primary care are among the most prevalent with 51,1%, and the tonsillitis the most prevalent. Regarding the treatment of

infections, 89% presented prescription of antibiotics, and the most commonly prescribed antibiotic is amoxycillin (50%).

It is important to identify the nurse, the FHS, its powers to act in health promotion focusing on the prevention of many diseases that affect the community in all age groups; this activity can be accomplished through the implementation of the FHS programs, projects and/or prevention and control of infections in primary care, with a view to improving access to health services based on effective and Public Policy.

The electronic medical record can be a facilitator for health team communication, since the non-comprehention of the data contained in the records makes difficult planning actions and intercommunication between the team.

Another relevant factor is the issue of complete filling of the record, in addition to not fulfilling the socio-economic data form, the non-identification favors impracticability of building action plans, promotion and prevention of health of risk factors for diseases and disorders affecting the subjects of this research.

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