Antibiotic Use in Respiratory infection among Children in Vientiane Capital, Laos PDR

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Received 18 July 2022; received in revised form 20 November 2023; accepted for publication 25 November 2023

Abstract

Rationale and Background: Little to known about information about epidemiological data and rationale antibiotic use in respiratory infection among children in Laos. Therefore, we need to know the antibiotic use for children with respiratory infection for proper health planning.

Objectives: to determine the proportion of antibiotic use in Respiratory infection among children in Vientiane Capital. Laos PDR.

Methodology: Cross sectional descriptive study was carried out. 320 mothers or fathers of ill children were interviewed. Data were collected in the children hospital in May 2023. Descriptive statistics will be used for data analysis.

Results: 99 (30.3%) children were taken antibiotic prior to see doctors. 55.5% were taken amoxicillin. 43.1% and 38.1% were diagnosed for common cold and tonsillitis respectively. Doctors prescribe antibiotic for 156 48.8% and writing unclear suggestion to take medicine 54%, 275 cases (86%) and 45 cases (14%) were diagnosed as upper respiratory infection and lower respiratory infection respectively.

Conclusion: Irrational antibiotics use was done in this study. Therefore, the rationale antibiotic therapy guideline for respiratory infection must be developed and implemented properly in order to avoid the socio-economic and public health negative effects.

Keywords: Antibiotic use, Respiratory infection, Children, Laos.

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Introduction

Mortality from infectious diseases is a major health issue, especially among children. The appropriate use of antibiotics is critical for paediatric medical care. Upper respiratory tract infections (URTIs) are commonly observed among children under 5 years of age (U5) for whom antibiotics have been frequently prescribed. Self-medication with antibiotics is also commonly observed in many developing countries, and unnecessary medication and inappropriate antibiotic use can lead to antimicrobial resistance, treatment failure, and increased healthcare costs [1] [4]. Thus, healthcare providers need to pay close attention to inappropriate antibiotic prescription [5] [6], and policy makers should develop efficient strategies to reduce such inappropriate prescriptions [7].

Several studies on community antibiotic use have been performed in high-income countries [8] [9]. Among the developing countries, antibiotic over prescription has been reported in Pakistan and India, as well as in several African countries [10] [11]. The overuse of drugs, linked to inappropriate prescription practices, may increase health cost budgets in countries aiming for universal health coverage.

Studies addressing this issue in Lao People's Democratic Republic (Lao PDR) are limited. Available studies have revealed the prevalence of inappropriate antibiotic use practices in private pharmacies in Lao PDR [12] [13].

The use of antibiotics is critically important for the treatment of infectious diseases including respiratory tract infections (RTIs) which is common in people of all ages and gender, especially children. The goal of using antibiotics is to eradicate bacteria (or prevent them from spreading) at the sites of infections where rational use of antibiotics implies (appropriate choice of an antibiotic administered at correct dose, frequency, and duration using the most suitable route of administration) prescribed by physician, and dispensed per the prescription by pharmacist. This would make the use of antibiotics the most beneficial for the patient and minimizes complications that might arise, i.e. drug resistance, allergy, side effects, etc. These will affect the capability to treat infectious diseases and are directly related to increased morbidity and mortality in the future. There are several classes of antibiotics with different mechanism of action and bacterial targets.

Each antibiotic is effective only against certain types of bacteria. On the other hand, several factors are important in choosing the most appropriate anti-micro bacterial agent. The misuse of antibiotics could contribute to the development of antibiotic resistance and adverse side effect, including a harder infection to treat, resulting in higher treatment costs, longer hospital stays, and increased mortality. Moreover, antibiotic resistance can be transferred among different species of bacteria, making the problem of drug resistance even more severe.

Nowadays, it is found that numbers of patient are consuming antibiotic misuse, i.e. buying medicines without prescriptions, medical advice from friends, or buying medicines from a pharmacy without a pharmacist, including taking similar medication as persons with similar conditions; this results in consequences where patient not receiving antibiotic that is susceptible to the disease, or antibiotics not working against bacteria that cause the disease, not receiving the correct amount of medication for a specific time including improper dosage of medication, etc.

Therefore, infections are no longer healing with antibiotics and there are bacteria that resist to treatment which leads to the development of multi-resistance organism, and superinfections, due to side-effect of drug used including drug allergy. The best way to prevent an allergy reaction is to avoid medicine known to be the causes of allergies and opt to alternative antibiotics which are costly, and unreasonable. It is crucial to find out solution to these problems as soon as possible.

Lao PDR showed substantial progress in decreasing the mortality rate among U5, achieving Millennium Development Goal 4 in 2015 [14]. The U5 mortality declined from 163 per 1000 in 1990 to 70 per 1000 in 2012 [15]. During this period, under the National Drug Policy Programme, the Ministry of Health (MoH), Lao PDR recommended all provincial and district hospitals to establish their own drug and therapeutics committee (DTC). In addition, indicators to evaluate DTC performance and Standard Treatment Guideline (STG) use were developed for measuring the quality of treatment, rational use of drugs (RUD) during prescription, and better hospital management [16].

This study aimed to examine knowledge and practices, as well as the practices related to antibiotic prescription for children from 0 day to 15 years old with respiratory infection at OPDs in National Children Hospital, Vientiane capital, Lao PDR.

Rationale

Globally, antibiotic consumption in children population is increasing. The most common childhood illness is respiratory tract infection (RTI), in particular, upper respiratory tract infection (URTI) usually caused by viral infections. Viruses does not respond to antibiotics; therefore, antibiotic therapy is not recommended.

Problems arise from irrational use of antibiotics poses a serious concern among patients in many countries. The major causes can be categorized as those

deriving from health care human resources engaged in health care services, and partly due to self-medication practice among parents, i.e. awareness and behavior of parents in purchasing non-prescription medicines for their ill children. These contribute to inappropriate use of antibiotics, over use of antibiotics, excessive costs, and higher risks of antibiotic resistance [17].

Another concern is irrational use of antibiotics, i.e. as we can see parents buying antibiotics for their children with common cold symptoms, or taking antibiotics prior to see health workers, even though there are no indications to take antibiotics for the flu which are caused by viruses, so antibiotics will not relieve cold and the flu symptoms, nor prevent the illness.

Methods Study design

Prospective descriptive cohort study (exit interview) conducted by two researchers with 0 to 15 years old at outpatients diagnosed with respiratory infection were sampled from the list of outpatients who visited the hospitals during the first visit from 1st – 31th May 2023 (in total 31 days).

Study site

At out-patients ward, National Children Hospital, Vientiane Capital, Lao PDR.

Sampling and participants

By parents/care providers of 0 to 15 years old were selected through convenient sampling and interviews were conducted by three researchers at outpatients diagnosed respiratory infection. Respiratory infection was defined as symptoms of inflammation in the both upper and lower respiratory tract infection with body temperature exceeding 37 °C (URTI and LRTI including pharyngitis, otitis media, and tonsillitis was defined as the presence of a sore throat, coughing, running nose, difficulty in swallowing, red throat, white particles in the throat, and/or earaches, bronchiolitis, bronchitis, pneumonia and asthma was defined as the presence of all above and breathing fast, breathing difficulty, tirage, wheezing, crackle and rhonchi with a body temperature exceeding 37 °C).

Questionnaire

The questionnaire administered to parents/care providers consisted of eight main items: (1) characteristics of the interviewee, (2) general information of children and parents, (3) cause, (4) sign and symptoms, (5) physical examination, (6) result of investigation, (7) understand about disease or diagnosis, (8) history of antibiotic used and understand about prescription. The questionnaire was pretested at Children Hospital, Vientiane capital. The above information was collected with a face-to-face interview using the questionnaire during 25–30 min per interviewee. Information of 0 to 15 years old outpatients was collected using an interview the parents and data form from medical charts. This included information on (1) sex, (2) age, (3) diagnosis, (4) number of prescribed drugs, (5) number of prescribed antibiotics, (6) drug name, (7) examination and tests before diagnosis, (8) diagnosis and (9) rationale of prescription practice based on the STG recommendations.

Standard treatment guideline for children in Lao PDR

The Pocket book of Hospital care for children (Guidelines for the management of common childhood illnesses. Department of Healthcare and Rehabilitation of MoH cooperation with the Lao paediatric association was responsible for developing the National Standard Treatment Guideline [18]. The National STG is distributed among all levels of health facilities in Lao PDR. It has been used by healthcare providers as a reference for treatment and prescription. The recent STG for URTI recommends a 10-day regime consisting of (1) penicillin V 50,000–100,000 UI/kg/day, four times daily, (2) erythromycin 40mg/kg/day, four times daily in cases of allergy to penicillin V, or (3) amoxicillin 30-50mg/kg/day, three times daily, for LRTI recommends a 10-day regime consisting of (1) in mild case used amoxicillin 30-50mg/kg/day, iv form with three times daily (2) in severe case used third generation cephalosporin 30-50mg/kg/day, iv form with two times daily as well as antipyretic (paracetamol) medication and recommendations for sufficient water and food intake and relaxation [18].

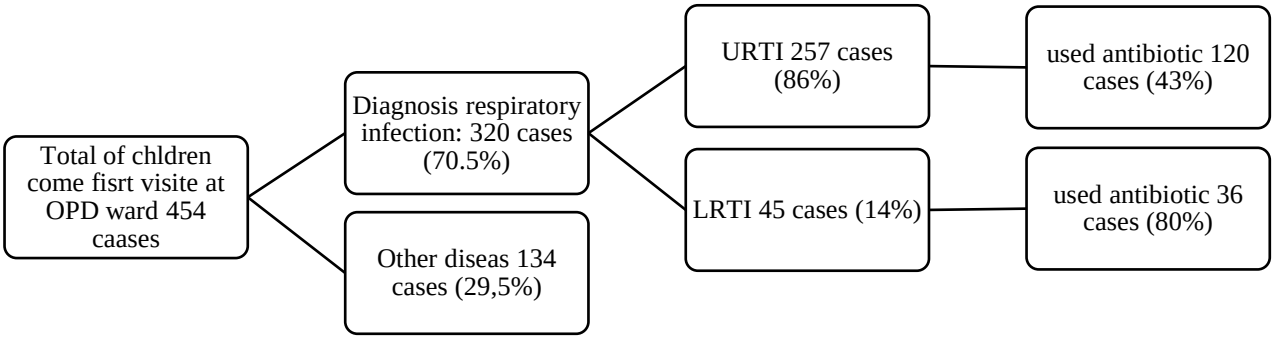
Statistical analysis

CS Pro version 7.1 was used for data entry, and IBM Statistical Package for Social Sciences (SPSS) version 25 was used for statistical analysis. Categorical data were examined using a chi-square test. The 95% confidence interval (CI) of the percentage was calculated using the binomial distribution. An unconditional logistic model was applied to estimate odds ratios (Ors) and their 95% Cis. A p value less than 0.05 was considered statistically significant.

Results

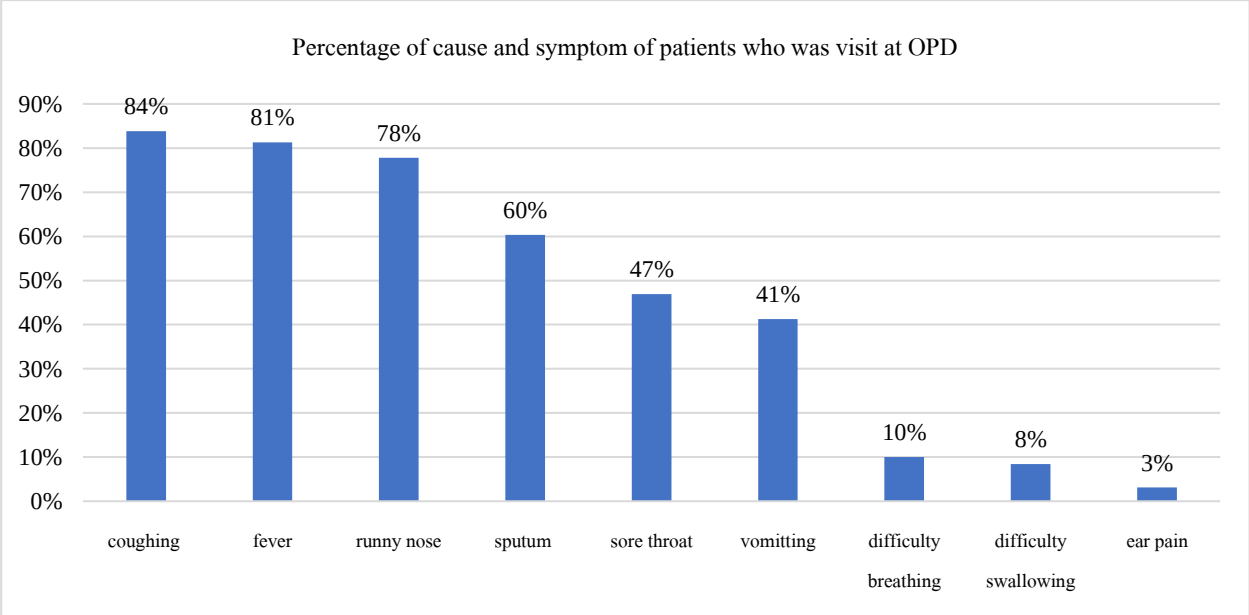
Prospective descriptive cohort study (exit interview) conducted by two researchers with 0 to 15 years old at outpatients diagnosed with respiratory infection were sampled from the list of outpatients who visited the hospitals. The number of sample size are 320 children, boy: girl ratio 1.1:1, group 1 aged 3 month to 5 years old 219 person (69,1%) and more then5 years old 49 persons (15,3%). Upper respiratory tract infection (URTI) 257 cases (86%) and lower respiratory tract infection (LRTI) 45 cases (14%), URTI had received antibiotic 120 cases (43%) and LRTI had received antibiotic 36 cases (80%) (Figure 1)

Figure 1: Number of sample size and percentage of antibiotic used in patients who was diagnosis on respiratory infection



Findings revealed that the main reasons for visiting outpatient department were coughing which account for 268 (84%), followed by fever 260 (81%), runny nose 249 (78%), secretion 193 (60.3%), sore throat 150 (46.9%), vomiting 132 (41.3%), difficulty breathing 32 (10), difficulty swallowing 27 (8%) and ear pain 10 (3%); some of the children had multiple symptoms (Figure 2).

Figure 2: percentage of cause and symptom of patients who was visit at OPD



History of Antibiotic Consumption before Visiting the Hospital

Research findings revealed that patient had received antibiotics before visiting the hospital was 99 cases (30.9%), where patient who did not received antibiotics was 221 cases (69.1%). The duration of patient taking antibiotic before visiting the hospital was mostly 1-3 days, account for 62 case (62.6%); 3-5 days, 35 cases (35.4%) and >7 days, 2 cases (2%).

The primary source where patient get antibiotics was healthcare provider's prescription from clinics, 32 cases (32.3%), followed by central hospital, 25 cases (25.3%), self-purchasing 20 cases (20.2%), district hospital 11 cases (11.1%), private hospital 9 cases (9.1%), and health centre 2 cases (2%).

Table 1: History of antibiotic consumption before visiting the hospital

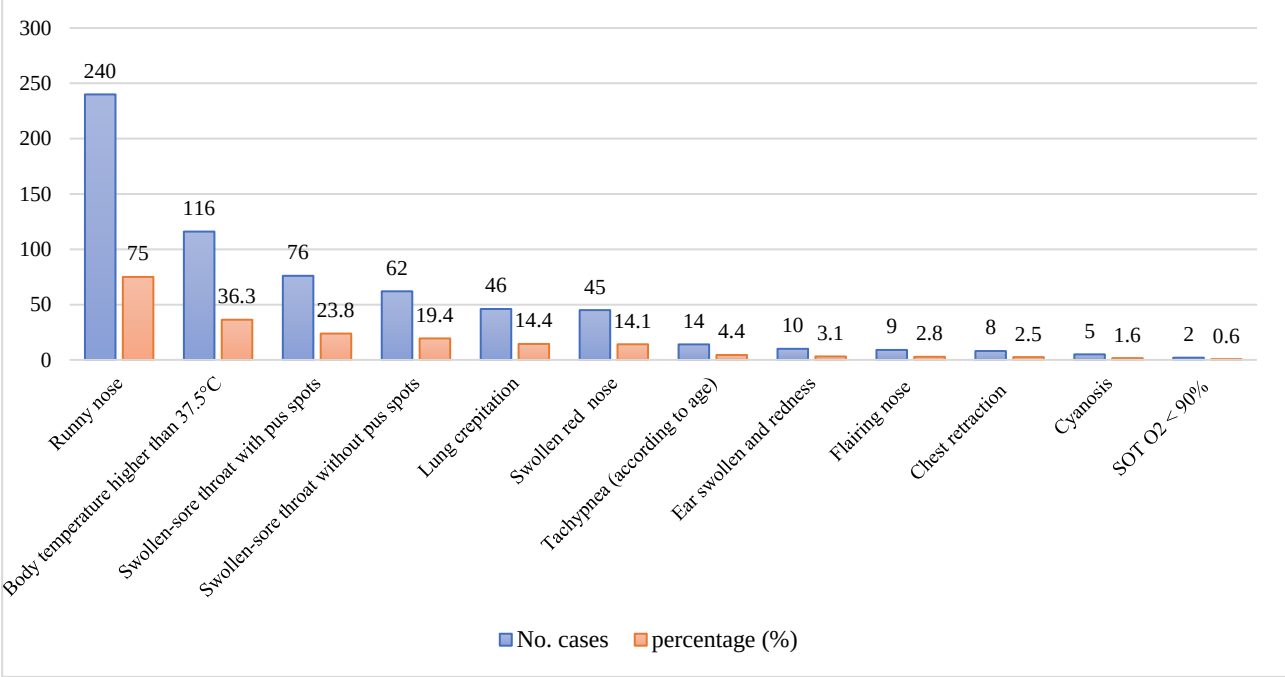
Variables	Number (n=320)	Percentage (%)
Antibiotics consumption before visiting the hospital		
Yes	99	30.9
No	221	69.1
Duration of taking medicine (n= 99)		
1-3 days	62	62.6
> 3-7 days	35	35.4
> 7 days	2	2
Source of antibiotic (n= 99)		
Private clinic	32	32.3
Public hospital	25	25.3
Drug store	20	20.2
District hospital	11	11.1
Private hospital	9	9.1
Health centre	2	2

Variables	Number (n=320)	Percentage (%)
Type of antibiotic		
Amoxicillin	55	55.5
Augmentin	23	23.2
Cefixime	8	8.1
Azithromycin	3	3.1
Don't know	10	10.1

Signs and Symptoms

Research findings revealed that the most common symptoms found was runny nose, 240 cases (75%), followed by body temperature higher than 37.5°C, 116 cases (36.3%), swollen-sore throat with pus spots 76 cases (23.8%), and swollen-sore throat without pus spots 62 cases (19.4%), crepitation 46 cases (14.4%), swollen red nose 45 cases (14.1%), tachypnea (according to age) 14 cases (4.4%), ear swollen and redness 10 cases (3.1%), flairing nose 9 cases (2.8%), chest retraction 8 cases (2.5%), cyanosis 5 cases (1.6%), SOT O_2 < 90% 2 cases (0.6%). Among those patient, 84 cases (26.3%) had performed CBC blood test, and 10 cases (3.1%) had performed chest X-ray (figure 3).

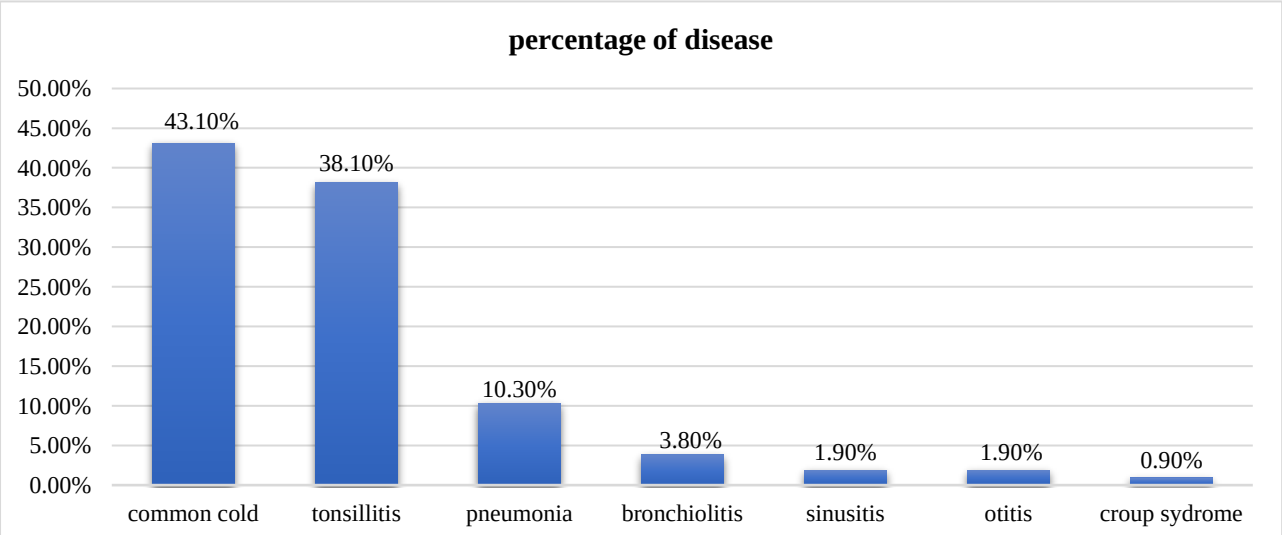
Figure 3: Sign and symptom.



Diagnosis

Findings shows that the most common illness that has been diagnosed was common cold 138 cases (43.1%), followed by Tonsillitis / Pharyngitis 122 cases (38.1%), Pneumonia 33 cases (10.3%), Bronchiolitis 12 cases (3.8%), Sinusitis 6 cases (1.9%), and Otitis 6 cases (1.9%), and Croup syndrome 3 cases (0.9%) (Figure 4).

Figure 4: percentage of disease



Treatment and Antibiotic Therapy

Findings demonstrated that there were only 29 cases of patient admission (9.1%), including Tonsillitis/Pharyngitis 11 cases (37.9%), Pneumonia 10 cases (34.5%), Bronchiolitis 4 cases (13.8 %), Common cold 2 cases (6.9%) and Croup syndrome 2 cases (6.9%). Among those, 6 cases (28.7%) did not receive antibiotics, 23 cases (79.3%) received antibiotics. The most common antibiotics used was Ampicillin + Gentamycin 9 cases (39.2 %), Azithromycin 5 cases (21.7%), Ceftriaxone 4 cases (17.4 %), Penicillin 3 cases (13 %) and Amoxicillin 2 cases (8.7%). The route of administration of antibiotics was given by an intravenous (IV) injection or infusion, 15 cases (65.2%), and taken orally 8 cases (34.8%). (Table 2)

Table 2: treatment of case who are hospital admission

Dependent variable	N=320	Percentage
Hospital admission		
Admission	29	9.1
Not admission	291	90.9
Diagnosis (n=29)		
Tonsillitis/Pharyngitis	11	37.9
Pneumonia	10	34.5
Bronchiolitis	4	13.8
Common cold	2	6.9
Croup syndrome	2	6.9
Antibiotic therapy (n=28)		
Yes	23	79.3
No	6	20.7
Type of antibiotic (n=23)		
Ampicillin + gentamycin	9	39.2
Azithromycin	5	21.7
Ceftriaxone	4	17.4
Penicillin	3	13
Amoxicillin	2	8.7
Route of administration of antibiotic (n=23)		
Intravenous injection/infusion	15	65.2
Oral	8	34.8

Research findings revealed that among all 320 participants who visit outpatient department, there were 164 cases (51.3%) who did not receive antibiotics, and 156 cases (48.8%) who receive antibiotics. The most common antibiotics used was Amoxicillin 94 cases (60.2%), followed by Penicillin 17 cases (11%) Augmentin 11 cases (7.1%), Azithromycin 11 cases (7.1%), Ceftrixime 10 cases (6.4%), Ampicillin + Gentamycin 9 cases (5.7%) and Ceftriaxone 4 cases (2.5%). The most common route of administration of antibiotics was orally which account for 141 cases (90.4%) and given by an intravenous (IV) injection or infusion for only 15 cases (4.7%). In addition, it is found that drug dosage calculation was 100% accurate. However, the duration of drug administration was not clearly specified for 84 cases (54%), where the number of days for prescribed medicine was clearly stated for 72 cases (46%) (Table 3).

Table 3: Information of antibiotic therapy at OPD ward

Dependent variable	N=320	Percentage
Antibiotics therapy before coming to the hospital		
Yes	156	48.8
No	164	51.2
Type of antibiotic (n= 156)		
Amoxicillin	94	60.2
Penicillin	17	11
Augmentin	11	7.1
Azithromycin	11	7.1
Cefixime	10	6.4
Ampicillin + Gentamycin	9	5.7
Ceftriaxone	4	2.5
Route of antibiotic therapy (n= 156)		
Oral	141	90.4
IV	15	9.6
Drug dosage calculation		
Accurate	156	100
Suggested of duration of antibiotic therapy (n=156)		
Yes	72	46
No	84	54

Evaluation on the Appropriateness of Antibiotic therapy

Research finding revealed that all paediatric patient with pneumonia and otitis have received antibiotic therapy which account for 100%, followed by patient with tonsillitis who receives antibiotic 112 cases (91.8%), Sinusitis 6 cases whom received antibiotic 2 cases (33.3%), Bronchiolitis 12 cases whom received antibiotic 3 cases (25%); Antibiotics were not prescribed for common cold and Croup Syndrome (0%). Furthermore, this study also found that when comparing upper respiratory tract infections (URTIs) and lower respiratory tract infections (LRTIs), among all 320 participants, those who had been diagnosed with URTIs is higher than LRTIs [275(86%) > 45(14%)] Ratio 6.1:1. However, the use of antibiotics in LRTIs was higher comparing to URTIs (80% > 43.6%) (Table 4).

Table 4: Compare URTI, LRTI and antibiotic therapy at OPD ward

Dependent variable	Total 320 persons (%)	Received antibiotic 156 persons (%)
URTI	**275 (86%)**	**120 (43.6%)**
Otitis	6 (1.9)	6 (100)
Tonsillitis/Pharyngitis	122 (38.1)	112 (91.8)
Sinusitis	6 (1.9)	2 (33.3)
Croup syndrome	3 (0.9)	0
Common cold	138 (43.1)	0
LRTI	**45 (14%)**	**36 (80%)**
Pneumonia	33 (10.3)	33 (100)
Bronchiolitis	12 (3.8)	3 (25)

Discussion

The age group of outpatient patients was mostly 6 months to 2 years old, followed by 2-5 years old, where children under 3 years old visit outpatient department more than 60%, persons who brought children to the hospital was mostly parents [19].

Findings showed that the most common causes and symptoms to outpatient visit was coughing, fever, and runny nose, respectively. In general, the duration of the child illness before coming to outpatient visit was 1-3 days [20].

Research findings showed that most of participants did not receive antibiotics before outpatient visit; on the other hand, there was only 30.9% had received antibiotic therapy before outpatient visit. This number is less than those from the research findings from Fiona P. Havers [20].

The type of antibiotics that patients received before outpatient visit was mostly Amoxicillin (oral form) and Augmentin, which is similar to the research findings of Lauri A. Hicks et al., [21]. Where Beta lactamase was the type of antibiotics generally used in patient before outpatient visit.

Findings revealed that the most common signs and symptoms found was runny nose, followed by body temperature > 37.5°C, and the most common illness that has been diagnosed was common cold, followed by Tonsillitis/Pharyngitis, which is similar to many research findings, where most of the pediatric patients who came to outpatient visit were diagnosed with ARTIs (3.68%) [22].

Findings showed that there was only 9.1% of patients admitted at the hospital, where Tonsillitis/ Pharyngitis and Pneumonia was the main causes of admission. For hospitalized patients, most of them received intravenous (IV) antibiotics, where the most commonly used antibiotics Ampicillin + Gentamycin, which did not differ from studies [23].

Findings showed that all 320 patient who had visited outpatient services, had not received antibiotics, and physicians had prescribed antibiotics to only 48.8% patients who had been diagnosed with ARTIs in outpatient ward, which is similar to the research findings of Shan Wang (2015-2017) in China with only 43.8% [24]. This number is considered higher than in European countries with 38.2% [8]. However, this number is lower than in Spain [25]. Antibiotics mostly used was Amoxicillin, followed by Penicillin and Augmentin, respectively, which is similar to many previous research findings, i.e. Nguyen Quynh Hoa, 2014, in Vietnam, found that the most commonly used antibiotics are Beta Lactams (90%) [23]. and Chantal B. van Houten, 2008, in Netherland, also found similar outcomes where Beta Latams is mostly used, followed by Macrolides [26].

100% of Children diagnosed with Pneumonia and Otitis were given antibiotics, followed by children with tonsillitis; however, children with common cold and Croup syndrome were not given antibiotics. This is similar to the research findings of Jessie which found that most of outpatient patients had received antibiotics according to indications (86%) [26]. Where other research found that more than 60% of participants had antibiotic therapy without [26].

Furthermore, this research found out that most of antibiotics used were Beta Lactams, and drug dosage calculation were 100% accurate. However, duration of drug administration was not clearly stated.

Limitation in the study

The number of participants is limited, this study focus on the concept of exit interview, by using a set of questionnaires to gather information from parents as soon as they leave the outpatient room. This may lead to time constraints for the parent in answering the questions completely. Moreover, medical practitioners were more cautious in prescribing antibiotics for patients.

Conclusion

The research findings revealed that paediatric patients who visit outpatient department and had been diagnosed with respiratory tract infection was mostly male compared to female, with ratio 1.1: 1. The age group of outpatient patients mostly was between 6 months to 2 years old (41.6%), and the most common signs and symptoms found was fever, and coughing (81.3%).

Most of the participants did not received antibiotics before outpatient visit (69.1%), and there was only 30.9% who received antibiotics prior to the visit. The primary source where participants get antibiotics from

was mostly prescription at the clinics (32.3%), where the types of antibiotics mostly used was Amoxicillin (55.5%). There was only 9.1% of outpatient patients who were admitted. The most common disease diagnosed was common cold (43.1%), followed by tonsillitis/pharyngitis (38.1%). 48.8% of patients received antibiotics, where antibiotics mostly used was Amoxicillin (60.2%), Penicillin (11%) and Azithromycin (7.1%). 100% of patient diagnosed with pneumonia and otitis had received antibiotics, followed by 91.8% of patient with tonsillitis; however, children with common cold and Croup syndrome were not given antibiotics. The route of drug administration was mostly administered orally (90.4%), and drug dosage calculation was 100% accurate. However, duration of drug administration was not clearly stated, with 54%.

Furthermore, by comparing upper and lower respiratory tract infections, the research findings revealed that among all 320 participants, there were more patients who had been diagnosed with URTIs comparing to LRTIs [275 (86%) > 45 (14%)] Ratio 6.1: 1; and it was also found that the use of antibiotics in LRTIs was higher than in URTIs (80% > 43.6%), which means that most of health practitioners had followed the treatment protocols and antibiotic therapy appropriately. However, the information on the duration of drug administration is still not clearly recorded, in particular for outpatient patients.

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ການໃຊ້ຢາຕ້ານເຊື້ອໃນການຕິດເຊື້ອທາງເດີນຫາຍໃຈຂອງເດັກນ້ອຍ ໃນນະຄອນຫຼວງວຽງຈັນ, ສປປ ລາວ

ສຸລິເດດ ແສງຈັນ[1], ຫົງຄຳ ຈັນສະແຫວງ[1], ມິກ ສຸຂະວົງ[1], ຜາສຸກ ວົງວິຈິດ[1], ອາລົງກອນ ເພັ້ງສະຫວັດ[1]

1. ຄະນະແພດສາດ, ມະຫາວິທະຍາໄລ ວິທະຍາສາດ ສຸຂະພາບ, ນະຄອນຫຼວງວຽງຈັນ, ສປປ ລາວ

ໄດ້ຮັບຕົ້ນສະບັບ ທີ 18 ກໍລະກົດ 2022, ໄດ້ຮັບບົດທີ່ກວດແກ້ຄືນ ທີ 20 ພະຈິກ 2023, ເຫັນດີໃຫ້ຈັດພິມ 25 ພະຈິກ 2023

ບົດຄັດຫຍໍ້

ເຫດຜົນ ແລະ ຄວາມສຳຄັນ: ຂໍ້ມູນກ່ຽວກັບຂໍ້ມູນການລະບາດຂອງພະຍາດຍັງໜ້ອຍ ແລະ ການໃຊ້ຢາຕ້ານເຊື້ອທີ່ສົມເຫດສົມຜົນໃນການຕິດເຊື້ອທາງເດີນຫາຍໃຈຂອງເດັກນ້ອຍໃນລາວ. ດັ່ງນັ້ນ, ພວກເຮົາຈຳເປັນຕ້ອງຮູ້ຈັກການໃຊ້ຢາຕ້ານເຊື້ອສຳລັບເດັກນ້ອຍທີ່ມີການຕິດເຊື້ອທາງເດີນຫາຍໃຈເພື່ອວາງແຜນສຸຂະພາບທີ່ເໝາະສົມ.

ຈຸດປະສົງ: ເພື່ອກຳນົດອັດຕາສ່ວນການໃຊ້ຢາຕ້ານເຊື້ອໃນການຕິດເຊື້ອທາງເດີນຫາຍໃຈຂອງເດັກນ້ອຍ ໃນນະຄອນຫຼວງວຽງຈັນ, ສປປ ລາວ

ວິທີວິທະຍາການຄົ້ນຄວ້າ: ການສຶກສານີ້ ແມ່ນການສຶກສາຮູບແບບພັນລະນາຈຸດເວລາໃດໜຶ່ງ (Cross-sectional descriptive study) ໂດຍສ່ວນໄດ້ດຳເນີນການ 320 ຄົນ ແມ່ ຫຼື ພໍ່ ຂອງເດັກນ້ອຍເຈັບປ່ວຍໄດ້ຖືກສຳພາດ. ຂໍ້ມູນໄດ້ຖືກເກັບກຳຢູ່ໃນໂຮງໝໍເດັກນ້ອຍ ໃນເດືອນພຶດສະພາ 2023, ໂດຍນຳໃຊ້ສະຖິຕິພັນລະນາ.

ຜົນການຄົ້ນຄວ້າ: ເດັກນ້ອຍ 99 (30.3%) ໄດ້ຮັບຢາຕ້ານເຊື້ອກ່ອນໄປພົບແພດ. 55.5% ແມ່ນໄດ້ກິນ amoxicillin. 43.1% ແລະ 38.1% ຖືກບົ່ງມະຕິເປັນໄຂ້ຫວັດທົ່ວໄປ ແລະ tonsillitis ຕາມລຳດັບ. ທ່ານໝໍໄດ້ສັ່ງຢາຕ້ານເຊື້ອ 156 ກໍລະນີ 48.8% ແລະ ຊຸງນຄຳແນະນຳທີ່ບໍ່ຊັດເຈນໃຫ້ກິນຢາ 54%, 275 ກໍລະນີ (86%) ແລະ 45 ກໍລະນີ (14%) ຖືກບົ່ງມະຕິວ່າເປັນການຕິດເຊື້ອທາງເດີນຫາຍໃຈພາກສ່ວນເທິງ ແລະ ລະບົບຫາຍໃຈພາກສ່ວນລຸ່ມ.

ສະຫຼຸບ ແລະ ຂໍ້ສະເໜີແນະ: ການໃຊ້ຢາຕ້ານເຊື້ອທີ່ບໍ່ສົມເຫດສົມຜົນແມ່ນໄດ້ເຮັດໃນການສຶກສານີ້. ດັ່ງນັ້ນ, ແນວທາງການປິ່ນປົວດ້ວຍຢາຕ້ານເຊື້ອທີ່ສົມເຫດສົມຜົນສຳລັບການຕິດເຊື້ອທາງເດີນຫາຍໃຈຕ້ອງໄດ້ຮັບການພັດທະນາ ແລະ ປະຕິບັດຢ່າງຖືກຕ້ອງເພື່ອຫຼີກເວັ້ນຜົນກະທົບທາງລົບທາງດ້ານເສດຖະກິດ - ສັງຄົມ ແລະ ສຸຂະພາບ.

ຄຳສັບຫຼັກ: ການໃຊ້ຢາຕ້ານເຊື້ອ, ການຕິດເຊື້ອທາງລະບົບຫາຍໃຈ, ເດັກນ້ອຍ, ສປປ ລາວ.

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