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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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CHARACTERISTICS AND MANAGEMENT OF RESPIRATORY AILMENTS IN PAEDIATRICS: A PROSPECTIVE CLINICAL STUDY

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Abstract.

Background: Respiratory diseases are common ailments in infants, increasing the outpatient visits and emergency department admissions. The present study sought to find out the characteristics of children with lower respiratory tract infections (LRTIs), focusing on the clinical spectrum of diagnosis and the right decision of the therapy. **Methods:** This clinical prospective observational study conducted from Mosul, Iraq, during the period January 2025 to November 2025, recruited 60 children presenting with respiratory diseases. Demographics, clinical signs, examination findings, medical history, and treatment protocols were collected in an Excel spreadsheet. **Results:** The total number of children enrolled in the present study was 60, with ages mostly less than one year. The clinical presentation of children is sharing SOB either alone 46 (76.6%), SOB + cough (n=13, 21.7%), and SOB + cyanosis (n=1,1.7%). The duration of symptoms ranged from a day to a week, with most patients showing a duration of 2-4 days. The clinical findings revealed that most participants (98.3%) showed wheezing. The majority (98.3%) were conscious. Fever was presented as 46.7% (28/60) febrile and 53.3% (32/60) afebrile. Hydration recorded that 41.7% (25/60) were well hydrated, while only (5.0%, 3/60) presented with mild dehydration. Laboratory findings revealed that only 3 patients were positive for C-reactive protein testing. The patients' drug records demonstrated that 59 (98.3%) were given oxygen therapy, 91.7% antibiotics, 83.3% corticosteroids (inhaler and or injection), 58.3% bronchodilators alongside antipyretic and IV fluids. **Conclusion:** The central clinical picture of respiratory infection in children was SOB leading to cough, fatigue and reduced breathing, which impedes feeding. The diagnosis confirms that the children were mostly having viral lower respiratory tract infections. The treatment should be directed firstly against infection, replenish oxygenation and manage dehydration due to impaired feeding.

Key words. Respiratory tract infection, shortness of breath, cough, cyanosis.

Introduction.

The respiratory diseases are common illnesses in children, increasing the outpatient visits and emergency department admissions [1,2]. The reasons linked to immature anatomical respiratory development and immature immunological response increase the vulnerability to infectious agents [3]. The impacts are dangerous and include school absence, parents leaving work, health system burdening, and children's morbidity [4-6]. The clinical presentations of viral and bacterial infections are indistinguishable and overlap with other respiratory diseases, leading to misuse of antibiotics and bronchodilators [7,8], this misuse of antibiotics in all cases, irrespective of proper exclusion of viral infection, guarantee and fasten antimicrobial resistance [9,10].

The proper diagnosis, and hence treatment option, is challenging, requiring integrated clinical and microbiological investigations [11,12]. The diagnosis is central for management options and saving the life of the infected child because of a deficit in immunological response and narrow anatomy of the respiratory tract [13], alongside limited physiological and communicative response, resulting in non-specific and diagnostic deficits [14,15]. Therefore, bronchiolitis or cardiac disease symptoms may be confused with LRTIs, especially when cough, fever, and wheeze are absent. Moreover, differentiation between self-limited viral bronchiolitis and serious bacterial pneumonia is obscure in most cases, impeding the therapy selection, which is further compounded by the more common prevalence of viral infection in children.

The LRTI diagnosis in adult based on radiological diagnosis, which is technically limited in infants by subjectivity by interpretation fraught, due to infant distressed respiration can produce motion creating false opacity [16,17], moreover, radiograph is not completely dependable to differentiate between viral and bacterial infections in infants leading to false positive or false positive diagnosis, even though when radiograph tell some information, this might overestimate or underestimate the disease and hence affecting selection of therapy approaches [18,19].

The limitation in microbiological diagnosis lies in the inability to collect lower respiratory samples or expectorated sputum, nasopharyngeal aspirates, or swabs, which are not feasible and contaminated by upper respiratory colonization [20,21]. The bronchoalveolar lavage is restricted only to severe cases and is reserved for the most severe, immunocompromised, or ventilator-dependent cases [22-24]. C-reactive protein (CRP) is non-specific to differentiate between viral and bacterial infections or even non-infectious inflammatory diseases [25,26]. Hence, clinicians should integrate uncertain clinical symptoms, unreliable radiographic findings, and often uncertain biomarkers to guide the proper therapeutic approaches regarding hospital admission, supportive therapy, and antimicrobial prescription. The present study sought to find out the characteristics of children with LRTIs, focusing on the clinical spectrum of diagnosis and the right decision of the therapy.

Patients and Methods.

Study design: A prospective observational study conducted in Mosul, Iraq, during the period Jan 2025 to Nov 2025.

Data collection: The medical records of children with sign

of LRTIs were recruited, and variables were loaded into an Excel spreadsheet, starting with demography, chief complaints and duration, clinical examination, past medical history, past surgical history, treatment used, and laboratory findings

Statistical analysis: The study used a Microsoft Excel spreadsheet and descriptive statistics to characterize the results. Data expressed as mean ± standard deviation for continuous variables, whereas for non-continuous variables, frequency and percentages were used.

Results.

Demographic characteristics: The total number of children enrolled in the present study was 60, with an age range distribution involving less than 1 month (n=7, 11.7%), 1-12 months (n=45, 75%), 1-3 years (n=6, 10%), and >3 years. The weight ranged from 3 to 17 kg based on their age.

Clinical presentation: The clinical presentation of children is sharing SOB either alone 46 (76.6%), SOB + cough (n=13, 21.7%), and SOB + cyanosis (n=1,1.7%), (Table 1).

The duration of symptoms ranged from a day to a week, with most patients showing a duration of 2-4 days (Table 2).

The clinical findings revealed that most participants (98.3%) showed wheezing, demonstrating significant LRTI. The majority (98.3%) were conscious. Fever was presented as 46.7% (28/60) febrile and 53.3% (32/60) afebrile. Hydration recorded that 41.7% (25/60) were well hydrated, while only (5.0%, 3/60) presented with mild dehydration (Table 3).

Table 1. *List of clinical presentation symptoms.*

Clinical symptoms	Complaint	Frequency, n(%)
Chief complaint	SOB alone	46 (76.6%)
	SOB + cough	13 (21.7%)
	SOB + cyanosis	1 (1.7%)
Associated symptoms	Cough	60 (100%)
	Poor feeding	35 (58.3%)
	Vomiting	18 (30%)
	Fever	15 (25%)
	Cyanosis	4 (6.7%)

Table 2. *The duration of the symptoms of the clinical presentation.*

Time, days	Frequency, n(%)
1	8 (13.3%)
2	12 (20.0%)
3	8 (13.3%)
4	10 (16.7%)
5	6 (10.0%)
7	6 (10.0%)
>7	10 (16.7%)

Table 3. *The clinical findings of the associated symptoms in the participants.*

Clinical findings	N(%)	
Wheezing	59/60 (98.3%)	
Conscious state	59/60 conscious (98.3%)	
Fever status	Afebrile	32 (53.3%)
	Febrile	28 (46.7%)
Hydration status	Well hydrated:	25 (41.7%)
	Mild dehydration	3 (5.0%)
	Not specified	32 (53.3%)

Table 4. *List and rate of different medications used by the participants of the study.*

Medications		Frequency, n(%)	
Bronchodilators (Ventolin)		35 (58.3%)	
Corticosteroids (Pulmicort/Decadron)		50 (83.3%)	
Antibiotics	55 (91.7%)	Ceftriaxone	25 (41.7)
		Cefotaxime	15 (25.0)
		Vancomycin	10 (16.7)
		Amoxicillin	5 (8.3)
		Others	15 (25.0)
IV Fluids (G/S)		52 (86.7%)	
Antipyretics (Paracetamol)		40 (66.7%)	

Past medical history of these patients revealed that some of them were asthmatic (n=2, 3.3%), thalassemia (n=1,1.7%), congenital heart disease (n=1, 1.7%), heart problems (n=1, 1.7%), meningocele (n=1, 1.7%), and non-significant past-medical history (n=54, 90%). Furthermore, past surgical history demonstrated that 1 patient had a hernia and 1 patient had a meningocele repair.

Laboratory findings revealed that only 3 patients were positive for C-reactive protein testing. The patients' drug records demonstrated that 59 (98.3%) were given oxygen therapy, 91.7% antibiotics, 83.3% corticosteroids (inhaler and or injection), 58.3% bronchodilators alongside antipyretic and IV fluids. The most commonly effective antibiotics in these patients seem to be cephalosporin injections (66.7%), namely cefotaxime and ceftriaxone.

Discussion.

The present study focused on determining the symptoms and treatment approaches pattern in children presented to the healthcare system, providing insights into management and diagnosis challenges due to insufficient diagnosis and limited differential diagnosis of viral versus bacterial infections; however, treatment initially should be directed against symptoms in either case by replenishing oxygenation and managing dehydration due to impaired feeding.

Three-quarters of the child participants were aged less than a year, indicating the higher vulnerability of the first year of age, and this could be attributed to different causes, including the small size of the infant airway, which predisposes to more severe disease, which means that any simple infection or oedema could cause severe symptoms [27,28]. Another cause is an immature immune system, which has a deficit in immunoglobulin production compared to a more mature individual [29-32]. Moreover, intercostal muscles are not completely mature and strong enough to withstand respiratory distress from forceful coughs and keep open airway tracts [28,33]. The clinical importance of age distribution could be harnessed to extend our understanding that will direct the preventive strategy against this cohort using preventive measures, using vaccination and parent education regarding the rapid deterioration of LRTI in this age group necessitating medical seeks and quick intervention.

The characteristic clinical picture of patients in the present study is SOB, cough, and frequency of poor feeding, reflecting the pathophysiology of LRTI. In the infant and young child, SOB was demonstrated as an observable symptom in 100%

of patients [34-36], reflecting that the disease severity in these patients was not a mild URTI, perhaps compromising lower airway function and gas exchange, triggering the increased loading of breathing. The concurrent association of SOB with cough reflects the presence of bronchiolar inflammation.

The prevalence of poor feeding (58.3%) in the participants potentially reflects the association with respiratory distress because normal feeding requires coordination between sucking, swallowing, and breathing [37,38]. The poor feeding is a result of decreased oxygen intake, which puts pressure on the heart, leading to tachypnea, which impedes the suck-swallow rhythm, eventually leading to child fatigue, cough, and hence refusing feeding [39].

The treatment approaches for LRTI in the present study revolved around oxygen therapy and antibiotic combinations in approximately all patients, perhaps reflecting the severity of the condition [40-42]. Hypoxemia happens due to ventilation-perfusion mismatch of LRTI caused by alveolar distress [43,44].

Most LRTIs are virally induced, requiring no antibacterials [45-48], which contrasts with the malpractice of the present study and also stands against international guidelines, perhaps the use of antibacterial drugs in the present study due to difficulties in differentially diagnosing bacterial from viral infections, even though when radiological and clinical measures were used [49-51]. Moreover, the benefits of using antibacterial outweigh the risk of missing bacteremia pneumonia [52,53]. Hence, the use of antibacterial serves as a prudent shield against this doubtful but devastating risk when it happens [54]. The clinical importance of antibacterial avoidance in the infant age group is related to antibiotics disrupting infant microbiota and development of antimicrobial resistance [55-59], perhaps necessitating the use of advanced techniques to differentiate between viral and bacterial infections, including the polymerase chain reaction technique and cytokine arrays [51,60-62].

The limited data size based on unicentre limited generalizability of the findings. The small sample size related to hospitalized patients being having other diseases, like vomiting and diarrhoea, sickle cell diseases, leukaemia, and thalassemia. The laboratory tests were limited to only using the CRP test, and the lack of sufficient laboratory tests limited the proper diagnosis and hence the decision of therapeutic approach.

Conclusion.

The central clinical picture of respiratory infection in children was SOB leading to cough, fatigue, and reduced breathing, which impedes feeding. The diagnosis confirms that the children were having viral lower respiratory tract infections. The treatment should be directed firstly to replenish oxygenation and manage dehydration due to impaired feeding. The study also found that the use of antibiotics in CRP-negative children with viral infections, is considered as a wrong decision of therapy selection. The study directs recommendations toward standardisation of diagnosis, using more specific laboratory tests, using specific antibiotics, and improving patient follow-up.

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