ejpmr, 2020,7(3), 93-95

SJIF Impact Factor 6.222

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Research Article

ISSN 2394-3211

EJPMR

PREVALENCE OF CHILDHOOD PNEUMONIA DURING 5 YEARS IN BAGHDAD

Dr. Yasir Khudhair Abbas*

MBCHB, High Diploma in Pediatric. MOH. Iraq.

***Corresponding Author: Dr. Yasir Khudhair Abbas**

MBCHB, High Diploma in Pediatric. MOH. Iraq.

Article Received on 03/01/2020 **Article Revised on 24/01/2020** **Article Accepted on 13/02/2020**

ABSTRACT

Background: Pneumonia is one of the respiratory diseases caused by exposure to both lungs, or one of them for infection, or inflammation. **Aim:** To identify the prevalence of pneumonia during the study period among childhood. **Method:** A retrospective cross sectional study was carried out at the Life Statistics Center of the Iraqi Ministry of Health within 3 months. Data was entered to Excel sheet and the STATA software program was used to analyze this data and make tables and graphs. **Results:** We found the highest percentage of pneumonia cases were (31.5%) in the 2015, followed by (25.5%), (15.6%), (14.5%) and (12.9%) in 2014, 2017, 2018 and in 2016, respectively. **Conclusion:** We conclude that the higher percentage of pneumonia cases occurs during 2014 and the low percentage was in 2018. There is a highly significant relation found between the patient condition and years at the p. value less than 0.05. Children should also be vaccinated against other potential causes of pneumonia, including influenza, H. influenza type b, pertussis, varicella, and measles.

KEYWORD: Pneumonia, Child, Condition, Baghdad, Vaccine.

INTRODUCTION

Pneumonia is one of the respiratory diseases caused by exposure to both lungs, or one of them for infection, or inflammation, although most of the children's bodies are resistant to infection, but they may develop, and they get worse if their immune system is weakened, and in fact, sometimes it is observed, this type of disease develops in children after being exposed to influenza or a cold.[1, 2] On the other hand, viral pneumonia often affects children aged 4-5 years, and it is a symptom of moderate severity that may appear in the child in this case.[3] According to world health organization reported pneumonia accounts for 15% of all deaths among children under the age of five, and it is estimated that it killed 92,036 children in 2013.[4] This disease affects children and their families in all regions of the world, but it is spread mainly in South Asia and sub-Saharan Africa.[5] It can be prevented by immunization, proper nutrition and addressing environmental factors.[6] This study aimed to identify the prevalence of pneumonia during the study period among childhood.

METHODS

A retrospective cross sectional study was carried out at the Life Statistics Center of the Iraqi Ministry of Health within 3 months. During this period, the study samples were collected for 5 years, starting from 2014, 2015 2016, 2017 and 2018. Data was entered to Excel sheet and the STATA software program was used to analyze this data and make tables and graphs.

RESULTS

Out of 57556, there is 26108/57656 (45.3%) among inpatient case with pneumonia and 31548/57556 (54.7%) among outpatient case. In table 1: shows the highest percentage of pneumonia cases were 18146/ 57656 (31.5%) in the 2015, followed by 14709/57656 (25.5%), 9014/57656 (15.6%), 8350/57656 (14.5%) and 7437/57656 (12.9%) in 2014, 2017, 2018 and in 2016, respectively. Regard to table 2: shows in 2015, the highest percentage of pneumonia 24.3% among inpatient cases, followed by 23% in 2014 and less percentage 15% in 2016. Also, among the outpatient cases, the highest percentage of pneumonia was 37.4% in 2015 and 27.6% in 2014. There is significant association had been found between the patient condition and years at the p. value less than 0.05.

Table 1: Distributed of cases with pneumonia according to years.

Years	Frequency	Percent
2014	14709	25.5
2015	18146	31.5
2016	7437	12.9
2017	9014	15.6
2018	8350	14.5
Total	57656	100

Table 2: Distributed of studied samples according to years and condition.

Years	Patients Condition				P. value
	Inpatient		Outpatient		
	Frequency	Percent	Frequency	Percent	
2014	6007	23.0	8702	27.6	
2015	6343	24.3	11803	37.4	0.0001
2016	3916	15.0	3521	11.2	
2017	4964	19.0	4050	12.8	
2018	4878	18.7	3472	11.0	
Total	26108	100	31548	100	

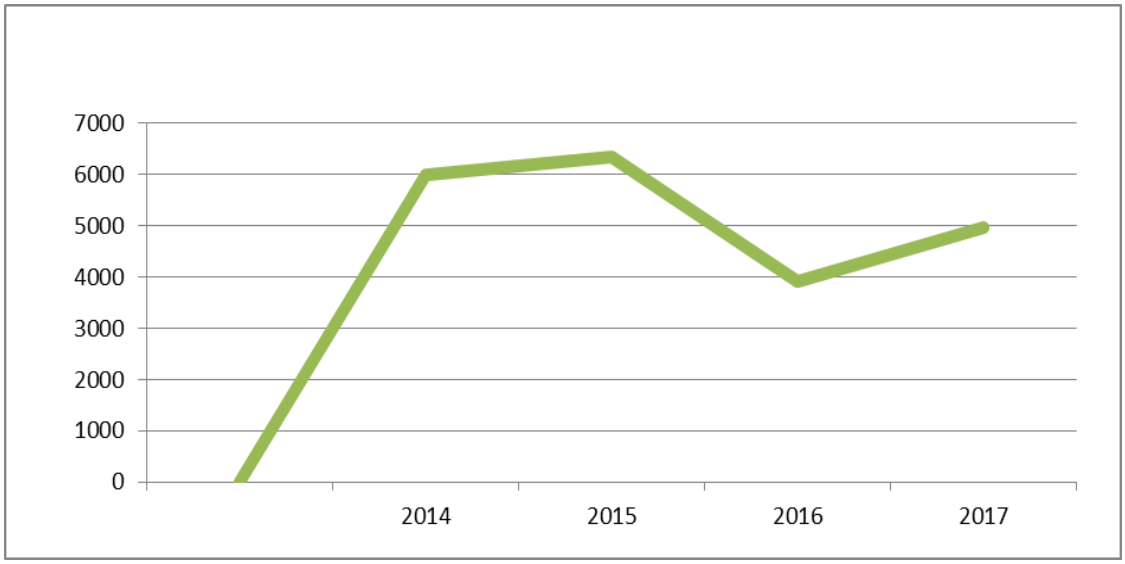

Figure 1: Frequency of pneumonia cases during 5 years.

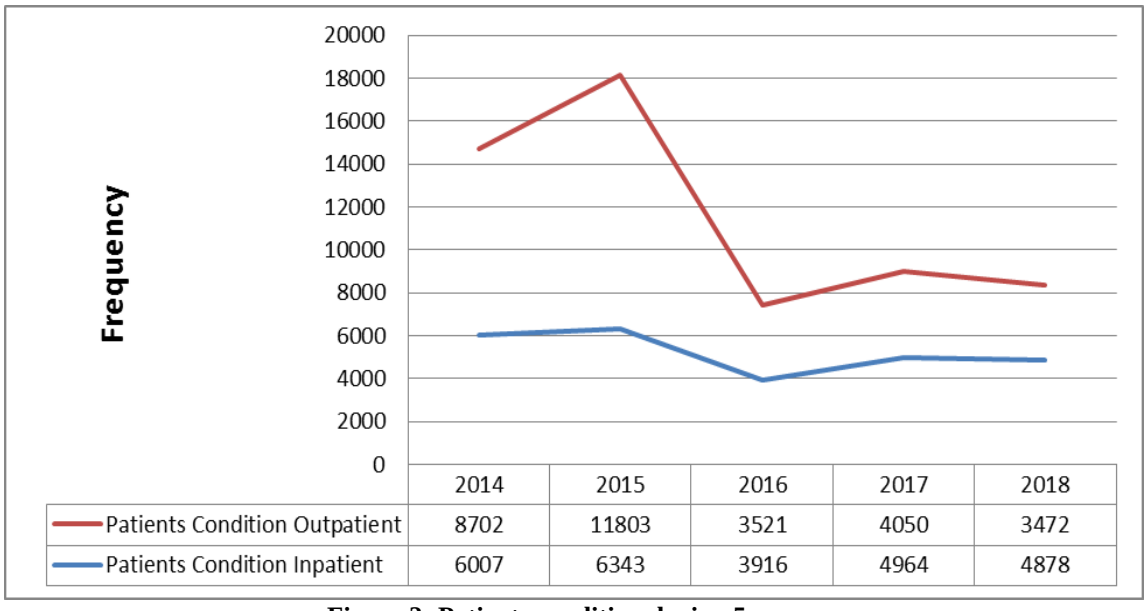

Figure 2: Patients condition during 5 years.

DISCUSSION

About more than million hundred of pneumonia cases occur annually throughout the world of which 1.7 million die.[7] Pneumonia and tuberculosis contribute to more than three quarters of all deaths due to respiratory diseases.[8] Since most major respiratory illnesses are avoidable, it is important to strengthen the capacity of the health delivery system in managing cases of respiratory diseases.[9] In our study found the highest percentage of pneumonia case was visited the outpatient clinic in the hospital (54.7%) more than other reasons. Similarity this results with other study done it in Tanzania[10], India[11] and Pakistan.[12] This refers the same culture and behavior between countries. In present

study found the highest percentage of pneumonia cases were (31.5%) in the 2015, followed by (25.5%), (15.6%), (14.5%) and (12.9%) in 2014, 2017, 2018 and in 2016, respectively. Other results in Africa[13], the authors reported the rate of disease was higher during 2016-2019. This refers to lack of education and the health system was poor and the most of them are suffering from poverty and they exposed to disease. Mostly, they don't has money to treat them. Also, in this study found the highest percentage of pneumonia cases had a history of admission to hospital 24.3% more than other cause of respiratory disease, other results in Nigeria[14], hey reported the highly admission to hospital due to respiratory infection. Because the health system is weak and there is no awareness of mothers about the risks of respiratory disease and this leads to an increased incidence of pneumonia among children.

CONCLUSION

We conclude that the higher percentage of pneumonia cases occurs during 2014 and the low percentage was in 2018. There is a highly significant relation found between the patient condition and years at the p. value less than 0.05. Children should also be vaccinated against other potential causes of pneumonia, including influenza, H. influenza type b, pertussis, varicella, and measles.

Competing interests

The authors declare that they have no competing interests.

Financial disclosure statement

No funding.

REFERENCES

1. Rudan I, Boschi-Pinto C, Biloglav Z, et al. Epidemiology and etiology of childhood pneumonia. Bull World Health Organ, 2008; 86: 408.
2. Glezen P, Denny FW. Epidemiology of acute lower respiratory disease in children. N Engl J Med, 1973; 288: 498.
3. Grijalva CG, Nuorti JP, Arbogast PG, et al. Decline in pneumonia admissions after routine childhood immunisation with pneumococcal conjugate vaccine in the USA: a time-series analysis. Lancet, 2007; 369: 1179.
4. World Health Organization. Pneumonia. Fact sheet No. 331. April 2013. http://www.who.int/mediacentre/factsheets/fs331/en/
5. Iroh Tam PY[1], Sadoh AE[2], Obaro SK[2]. A meta-analysis of antimicrobial susceptibility profiles for pneumococcal pneumonia in sub-Saharan Africa. Paediatr Int Child Health, 2018 Feb; 38(1): 7-15.
6. Duke T. Neonatal pneumonia in developing countries. Arch Dis Child Fetal Neonatal Ed, 2005; 90: F211-9.
7. Gothankar J, Doke P, Dhumale G, et al. Reported incidence and risk factors of childhood pneumonia in India: a community-based cross-sectional study. *BMC Public Health*, 2018; 18(1): 1111. Published 2018 Sep 11. doi:10.1186/s12889-018-5996-2
8. Ghimire M, Bhattacharya SK, Narain JP. Pneumonia in South-East Asia region: a public health perspective. Indian J Med Res [Internet], 2012; 135(4): 459–68.
9. Kalata NL, Nyazika TK, Swarthout TD, Everett D, French N, Heyderman RS, Gordon SB, Jambo KC. Pneumococcal pneumonia and carriage in Africa before and after introduction of pneumococcal conjugate vaccines, 2000-2019: protocol for systematic review. BMJ Open, 2019 Nov 13; 9(11): e030981.
10. Kishamawe C[1], Rumisha SF[2], Mremi IR[2,3], Bwana VM[4], Chiduo MG[5], Massawe IS[5], Mboera LEG. Trends, patterns and causes of respiratory disease mortality among inpatients in Tanzania, 2006-2015. Trop Med Int Health, 2019 Jan; 24(1): 91-100.
11. Mahajan T, Gangurde S.Epidemiological Study of Pneumonia Patients Admitted in MICU of Tertiary Care Hospital in Mumbai from January 2017 to April 2019. J Assoc Physicians India, 2020 Jan; 68(1): 96.
12. Kerai S et al. A Community-Based Survey on Health-Care Utilization for Pneumonia in Children in Peri-Urban Slums of Karachi, Pakistan.. Am J Trop Med Hyg, 2019.
13. Dano ID, Ousmane S, Moumouni K, Lagare A, Issa I, Testa J. Risk factors associated with *Streptococcus pneumonia* carriage in children under five years old with acute respiratory infection in Niger. Pan Afr Med J, 2019 Jul 19; 33: 239.
14. Anaba U, Hutchinson PL, Abegunde D, White Johansson E. Pneumonia-related ideations, care-seeking, and treatment behaviors among children under 2 years with pneumonia symptoms in northwestern Nigeria. Pediatr Pulmonol, 2020 Jan 28.