

Factors Associated with Emergency Admission of Pertussis Patients in a Tertiary Hospital in Southern Vietnam

Pham Thai Son¹, Omar Mohamed Makram², Do Chau Viet³, Gehad Mohamed Tawfik⁴, Seshini Mahabir⁵, Randi Mahabir⁶, Ahmad Qarawi⁷, Osama Gamal Hassan⁸, Le Quang-Loc⁹, Pham Thi Thuy Dung¹⁰, Nguyen Kim Thuy¹¹, Tran Ngoc Xuan¹², Manmeet Kaur Singh², Trinh Huu Tung¹, Abdelrahman M Makram⁵, Nguyen Tien Huy^{12*}

¹Department of Infectious Diseases, Duy Tan University, Da Nang, Vietnam; ²Department of Cardiology, University of Giza, Giza, Egypt; ³Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, London UK; ⁴Department of Medicine, Ain Shams University, Cairo, Egypt; ⁵Department of Medicine, McMaster University Alumni, Hamilton, Canada; ⁶Department of Medicine, Lower Westchester Medical University, New York, USA; ⁷Department of Cardiology, Ain Shams University, Cairo, Egypt; ⁸Department of Medicine and Pharmacy, Duy Tan University, Da Nang, Vietnam; ⁹Department of Medicine, American University of the Caribbean School of Medicine, Sint Maarten, USA; ¹⁰Department of Medicine, University of Giza, Giza, Egypt; ¹¹Department of Public Health, Imperial College London, London, United Kingdom; ¹²Department of Research and Development, Duy Tan University, Vietnam; ¹²Department of Tropical Medicine and Global Health, Nagasaki University, Nagasaki, Japan

Correspondence to: Nguyen Tien Huy, Department of Tropical Medicine and Global Health, Nagasaki University, Nagasaki, Japan, Tel: 810958197583; E-mail: tienhuy@nagasaki-u.ac.jp

Received: 15-Feb-2023, Manuscript No. PTCR-23-21816; **Editor assigned:** 17-Feb-2023, PreQC No. PTCR-23-21816 (PQ); **Reviewed:** 03-Mar-2023, QC No. PTCR-23-21816; **Revised:** 09-May-2023, Manuscript No. PTCR-23-21816 (R); **Published:** 16-May-2023, DOI: 10.35248/2161-0665.23.13.514
Citation: Son PT, Makram OM, Viet DC, Tawfik GM, Mahabir S, Mahabir R, et al. (2023) Factors Associated with Emergency Admission of Pertussis Patients in a Tertiary Hospital in Southern Vietnam. *Pediatr Ther.* 13:514.

Copyright: © 2023 Son PT, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

SUPPLEMENTRY DATA

Supplementary Table 1: Definition of variables used in the study.

| | Variable | Definition |
|------------------------|-----------------------|---|
| Atopic Characteristics | Premature | Born at gestational age <37 weeks. |
| | Non-vaccination | Never had pertussis vaccination based on a history of immunization. |
| | Age | Age of patient at admission. |
| Clinical | Fever | The temperature was recorded as >38°C in disease progression. |
| Symptoms | Post-tussive Vomiting | Evidence of vomiting (on history or physical examination) after an exacerbation of cough. |
| | Whoop | Inspiratory whoop (by history or physical examination) |

| | | |
|--|------------------------------|--|
| | Apnea | History, or examination of apnea ≥ 15 seconds. |
| | Dyspnea | Physical examination revealed tachypnea with age or chest retraction. |
| | Neurological Manifestations | History, progression notes, or examination records of seizures, convulsions, or cognitive disorders. |
| Subclinical | Leukocytosis | The number of WBCs $>30 \times 10^3/\mu\text{L}$. |
| | Lymphocytosis | Blood lymphocyte count $>20 \times 10^3/\mu\text{L}$. |
| | Increased CRP | CRP >10 mg/mL. |
| | Positive NTA culture | Positive NTA culture results for bacterial pathogens. |
| | Complications on chest x-ray | Having signs of lung collapse or alveolar injury. |
| Note: SD: Standard Deviation; WBCs: White Blood Cells; CRP: C-Reactive Protein; NTA: Nasotracheal Aspiration. | | |

Supplementary Table 2: Doses of pertussis vaccine received according to age (months).

| Doses pertussis vaccine received | <2 months | 2-3 months | 3-12 months | >12 months | TOTAL |
|----------------------------------|-----------|------------|-------------|------------|--------|
| 0 | 64 | 34 | 20 | 1 | 119 |
| 1 | 0 | 3 | 8 | 0 | 11 |
| 2 | 0 | 0 | 3 | 0 | 3 |
| 3 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 |
| Unknown | 0 | 0 | 5 | 1 | 6 |
| % Confirmed unvaccinated | 100.00% | 91.89% | 55.56% | 50% | 85.61% |