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## EFFECTIVENESS OF PEDIATRIC RESPIRATORY MEDICINE TRAINING IN CONTINUING MEDICAL EDUCATION

Pneumonia and other respiratory diseases are the leading cause of mortality in children under the age of five years old, pneumonia kills almost 2 million children each year. Other respiratory conditions except pneumonia could be potentially life-threatening in childhood. Debut of the chronic respiratory diseases in children may be accompanied by respiratory manifestations, for which there are special algorithms for diagnosis, differential diagnosis and subsequent management. Thus, respiratory episodes are rather prevalent in pediatric population and can lead to significant mortality, as well as they are the most prevalent causes of hospital admissions, which can deteriorate quickly, that's why it is essential for doctors to be competent at managing pediatric respiratory distress and failure.

Simulation training that started with low realistic models in health education has developed in recent years and is now widely used in medicine. The training course on simulation of respiratory pathology of different pediatric age groups was conducted in a realistic and safe environment of simulation centre using medical high-fidelity mannequins. Simulation training can improve team cooperation and practical skills in communication, physical examination, and clinical reasoning.

Objective was to implement a simulation training in pediatric respiratory pathology in small groups for continuing medical education. Group members completed pre- and post-training questionnaires and answered tests. The simulation was performed at a simulation center and at the pediatric hospital. Learning and assessment objectives were to recognize the disease, summarize signs/symptoms, treatment and demonstrate correct management plan. The goal of the 1-day team training course was to teach the trainees how to manage pediatric respiratory distress and/or syndrome of the five pediatric patients of different age groups (from newborn up to adolescents). All scenarios included standardized distractors designed to elicit and challenge specific teamwork behaviors.

Each case simulation lasted approximately half an hour, instructor used 7 stages of activity. The simulation module was very adaptable. It was created for a pediatric specialists, but might be used with other groups of learners and in other settings. Clinical performance checklists were aimed at each of the scenarios to assess five key areas: clinical assessment, diagnostic workup, management, medical treatment and teamwork skills. Videos of patients in respiratory distress were used to

reinforce the clinical exam even a high fidelity manikin was available. At the conclusion of the scenarios a debriefing with learners using structured feedback was performed. Debriefing plan included group discussion. We have received doctors' feedback based at "Pendleton's rules". Outcome measure was change (before and after training) in adherence to management of respiratory distress pediatric cases, change in teamwork performance. Participation in a simulation-based team training educational intervention significantly improved surrogate measures of clinical performance, time to initiation of key clinical tasks, and teamwork during simulated pediatric training. Positive doctors' feedback stimulated further pediatric scenario creation and work-up.

Conclusion. Postgraduate respiratory training improved doctors' teamwork, their communication and identified trainees' management deficits. Future study is required to better understand the impact on long-term retention of knowledge and skills of the respiratory simulation training course as a part of a continuing medical education at the basis of the Center for Simulation Medicine.

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## ЕМПІРИЧНА СТАРТОВА ТЕРАПІЯ АНТИБІОТИКАМИ ГОСПІТАЛІЗОВАНИХ ВИПАДКІВ ГОСТРИХ РЕСПІРАТОРНИХ ЗАХВОРЮВАНЬ У ДІТЕЙ РАННЬОГО ВІКУ

Щорічно в Україні на гострі респіраторні інфекції (ГРІ) хворіють 10-14 млн осіб, за даними ВООЗ респіраторна патологія займає перше місце серед усіх захворювань та впродовж останніх років спостерігається стала тенденція до її збільшення у всьому світі. 85% випадків ГРІ припадає саме на дитячий вік, зокрема найвищі показники захворюваності на ГРІ фіксують у віці 6 міс. – 3 роки. Тому ГРІ — найпоширеніша проблема клінічної педіатрії. Актуальність проблеми ГРІ в дитячому віці пов'язана не лише з поширеністю, але й із ймовірними тяжким перебігом та ускладненнями, що потребують госпіталізації та більш інтенсивного лікування. Зокрема, на певному етапі залежно від нозології постає спектр питань щодо раціональної антибіотикотерапії ГРІ вибору призначення, емпіричного (доцільності препарату, лікування, деескалації та заміни шляхів введення препарату тощо). Метою дослідження було проаналізувати особливості антибіотикотерапії гострих