

ABSTRACT

Of the thesis presented for attainment of the scientific degree of Doctor of Philosophy (PhD) in the specialty 6D110100 – Medicine

Abdushukurova Gulzada Zafarovna

«Clinical and epidemiological features of the management of asthma in South Kazakhstan in terms of modern international guidelines»

Research actuality:

During the last century of asthma from rarely observed clinical disease has become one of the most common, representing a significant social problem for both children and adults. According to medical statistics, a paradoxical situation: one of the lowest incidence rates of asthma in the world combined with a high level of temporary incapacity, disability, hospitalization, mortality (GINA Global Burden Report, 2014; Nurpeisov T.T., 2015). The reasons for such situation are often the wrong patient behavior, the inability to control the course of the disease, the inability to get timely diagnostic or therapeutic interventions. Thus, it is important to study this issue in order to optimize the clinical management of asthma at all stages of medical care.

The aim of the study:

To study the clinical and epidemiological features of asthma management in South Kazakhstan in terms of modern international clinical guidelines (ICG).

Research objectives:

1. To study the epidemiology of bronchial asthma in the Republic of Kazakhstan (RK) and South Kazakhstan for 2008 - 2012 years.
2. To analyze the clinical and epidemiological features of asthma management from the perspective of the use of the guidelines of the Global Initiative for asthma (the GINA) in medical practice by the example South Kazakhstan Region (SKR) of the Republic of Kazakhstan.
3. To determine the clinical and diagnostic value of spirometry and peak flow in the diagnosis and clinical management of asthma.
4. To develop the algorithm of asthma management based on the adaptation of ICG and to evaluate its clinical efficacy.

Study Design.

As part of the I Phase of study was conducted a descriptive retrospective study included all cases of "Asthma" in the Republic of Kazakhstan and South-Kazakhstan region. In stage II was held a cross retro and prospective study that included asthma patients in the South Kazakhstan region from 2008 to 2012. Total 594 patients were examined with using analytical, epidemiological, clinical, instrumental and statistical methods. Phase III contained the randomized clinical trial that included spirometry efficiency and peak flow with serial control, in patients with asthma in the South Kazakhstan region from 2008 to 2012. In 495 randomized patients was used the analytical, instrumental and statistical methods. Stage IV was presented with a

randomized clinical trial that included patients with moderate-severe uncontrolled (or partially controlled) asthma (a random sample of 80 cases) with using analytical, epidemiological, clinical, instrumental and statistical methods.

Scientific novelty of the research:

1. Was provided the analysis of epidemiological trends in asthma in South Kazakhstan region and Kazakhstan for 2008 - 2012.

2. For the first time were studied the clinical and epidemiological features of asthma management in Kazakhstan and South Kazakhstan in terms of ICG. In the study was provided a detailed description of the asthma patients' clinical profile.

3. For the first time was carried out a comparative determination of the sensitivity, specificity and clinical validity of spirometry and peak flow in management of asthma with analysis of therapeutic and diagnostic thresholds, depending on the studied population.

4. For the first time, based on the results of the randomized clinical trial was designed, implemented and evaluated asthma management algorithm based on the adaptation of modern MCG.

Preposition of the research:

1. The analysis of asthma epidemiological picture in the RK for 2008 - 2012 shows an upward trend in the overall incidence and a stable pattern of hospital morbidity that is a signal violation of continuity between primary and secondary/tertiary medical care to patients with asthma.

2. The data of clinical and epidemiological features of asthma management in the RK on the example of SKR in terms of ICG demonstrate the fact of insufficient use of modern diagnostic approaches in the management of asthma in the medical practice.

3. The results of the study on the comparative analysis of the diagnostic value of spirometry and peak flow in the clinical management of asthma in the conditions of Kazakhstan prove the validity and clinical applicability of peak flow instead spirometry.

4. The proposed algorithm of asthma management based on the ICG is able to ensure the effectiveness of asthma management in Kazakhstan.

Theoretical and practical significance of the study:

The work was performed as part of the Research-technical program in Research Institute of Cardiology and Internal Diseases in 2012-2014.

According to the results of the research were developed and implemented at the national level:

1. Guidelines "Modern approaches to the management of major therapeutic diseases in rural health conditions".

2. Guidelines "Asthma patient self-monitoring diary", "Bronchial asthma in adults", "Self-control asthma".

3. Clinical protocols "Bronchial asthma in adults", "Allergic rhinitis".

4. Completed the list of the minimum equipment of health facilities in the form of obtaining peak flow meters.

The research results have been tested and used in the activities of health care institutions.

Research results publication:

On the topic of the research were published 16 scientific papers, 3 of them in journals recommended by the Committee for Control of Education and Science of the Republic of Kazakhstan, 2 articles in national journals, 1 article in a foreign journal, that part of the SCOPUS database, 5 thesis in the collections and materials conferences (European Respiratory Journal, IF 7,6 - 1 thesis; Allergy Journal, IF 6,0 - 2 thesis; Clinical and Translational Allergy Journal, IF 3,4 - 2 thesis), 2 thesis in national conferences, 2 posters on international Congress (The European Academy of Allergy and Clinical Immunology Congress, 11-14 November 2014 Copenhagen), 1 poster paper at an international congress (The European Academy of Allergy and Clinical Immunology Congress, 6-10 June 2015, Barcelona, Spain).

Field of application:

Allergology, immunology, pulmonology, therapy and general practice.