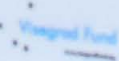
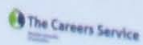


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INNOVATION AND PARTNERSHIP IN THE PULMONARY CARE SYSTEM IN HUNGARY

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ABSTRACT

Authors analyse how to make any innovation and changes in a static operation system like the pulmonary care system in Hungary. The operating system is the pulmonary care system, which is examined through two pulmonary diseases as allergic rhinitis and asthma. These diseases affect an increasing number of patients, of which life quality should be ensured by prevention, treatment, education and caring for. Currently this system does not exist in Hungary and a breaking solution can not be expected in the future as well. The only one solution is the innovation of creativity and partnership of several specialists and interdisciplinary among sciences. Authors share their creative ideas for treating the problems of the pulmonary care system to bring improvement in quality of life for respiratory patients.

Keywords: partnership, innovation, pulmonary care system, quality of life, treatment in matrix system, virtual consultancy, interdisciplinary

„Life is like riding a bike. It is impossible to maintain your balance while standing still “

Linda Brakeall

1. INTRODUCTION

It is true for the whole world that it needs continuous new solutions to avoid destruction. Nowadays in case of disciplines, industry, service you can see a rapid decline unless the new, the better one gets into the system. The new and improved methods are innovative techniques, which definitely do not fit into our common, habitual life [1].

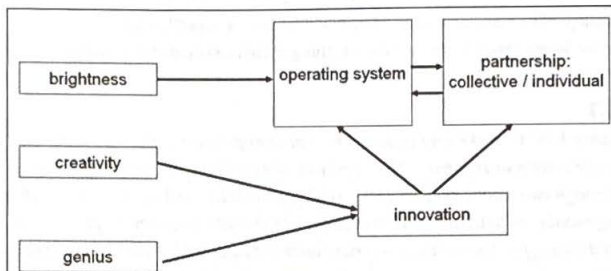
2. OPERATING SYSTEM, PARTNERSHIP AND INNOVATION

The partnership can exist on group and individual levels. Both exist in the operating system, but on different level. The mutual outcome of the operating system and the partnership is the operation of an organization. Any changes in the operating system or in the partnership have an impact on the whole operation. What can bring positive changes for the operating system and the partnership? What can lead to higher level of operation, higher quality, and greater outcome?

It is the innovation. Innovation is essential to development. Without innovation there is stagnation or decline. Recognizing the importance of innovation, a great

number of analyses were published. The most extensive summary of this issue was published as Oslo Manual. This third edition in 1997 has extended the analysis for the service industry and achieved the measurement of innovation including the different concept of marketing innovation, organizational innovation, and emphasizes the importance of innovation in less R&D intensive industries, such as services.³

FIGURE 1. Innovation in operating system and partnership



What can create innovation? How can different human thinking create innovative values? There are 3 different human thinking: brightness, creativity and genius. Innovation is the result of creative thinking or genius.

Brightness always thinks on the existing level. Hereby it affects directly the operating system and the partnership. Though it has a static feature, that is why on long-term it triggers stagnation. The intelligence (generally known as brightness) was suspected behind exceptional intellectual, but in recent research it was found that it is not intelligence, which is behind the very significant intellectual human accomplishments [2].

Creative thinking means another way of thinking. Creative people create new products from several, different ideas. Creativity is based on an “abnormal”, divergent thinking, which ensure individual, independent way of seeing the world. That is why originality is provided. Creativity is the basis for the main character of genius, the „new world” creator. They have a specific individual thinking and are able to show new passages for other people [2].

The genius makes innovation from all novel elements. Genius is called special, unique human performance. The origin of the word dates back to Greek times, when it was believed that in thanks to Gods the Genius was transferred to the artist helping him/her to exceptional performance. The genius was considered to be superhuman origin. Nowadays genius has been derived from specific combination of genes. God, luck, or the fate decides on who become genius [2].

3. THE PULMONARY CARE SYSTEM TREATING ALLERGIC RHINITIS AND ASTHMA IN HUNGARY

The pulmonary outpatient care network was established in Hungary against tuberculosis disease, and has deserved rightly fame and effective operation. From the twenties several pulmonary outpatient care centruns started to operate, which were

responsible for screening the population by moving X-ray machines [4]. Later, by the Ministry of Health regulation no. 30060/1960 the Chief Medical Officer instructed pulmonary screening nationwide [5]. From 1968 the focus of screening was diagnosing lung cancer [6]. The compulsory nationwide screening was a revolutionary step, of which methods has not changed till now. Though the X-ray technique developed some but the care network stagnated. The radical change should come by using digital technology for X-ray equipments in the future.

Currently the respiratory medicine cures tuberculosis, asthma, allergic rhinitis, COPD, pneumonia, lung cancer etc. That is why the pulmonary care network has an important role in screening of population. By nowadays the system has become insufficient though specialists persist that this pulmonary care system is necessary for preventing, screening, treating and caring respiratory diseases. The system certainly needs to be improved, since there are doctor and nurse shortfalls, the specialists inequality by regions, out-of-date equipments in caring clinics, and inadequacy of current funding. Few pulmonologists are in inpatient care and this profession is getting older as less young specialists apply for health services management education. We should not only bother about number of beds, but also the actual work to be done on pulmonary hospital wards [9].

How can the current system cope with the increasing number of patients with allergic rhinitis and asthma? How can this system treat these patients since prevention, management of the pulmonary network nationwide, and educating public is equally important? Allergic rhinitis is the largest allergic population affecting one billion people worldwide. In 150 years its prevalence reached 20% in developed countries [7]. We can even talk about allergy “epidemic”. These patients with allergic rhinitis need to be diagnosed, treated, and cared for [9]. It should be noted that the condition of the disease can occur in a variety symptoms, so the patients visit not only pulmonologists, but ear, nose and throat specialists (ENT), ophthalmologists, dermatologists, sometimes GPs, and pharmacists and more and more patients seek for alternative medicine.

The non-treated allergic rhinitis can lead to asthma in high percentage. Epidemiological data show that same patient often has rhinitis and asthma. The asthmatic rhinitis occurs 20% of the population, but 28-90% in asthma patients [8]. Allergic rhinitis can affect the course of asthma. Treatment of allergic inflammation of the nose may reduce the severity of asthma symptoms and improve lung function [9]. No exact data are available for allergic rhinitis, or asthma worldwide. The reason for it is the diversity of test methods and inaccuracy. The data are unreliable and incompatible and not representative. Even there are different criteria of diseases in each country. Nevertheless the prevalence of asthma is 3-15% while allergic rhinitis is 8-15% [10].

It is essential to change pulmonary care system through supplying appropriate the allergic rhinitis and asthma patients. The question is how to make it? It might be a creative method, which harmonizing with the current pulmonary outpatient care system.

4. THE QUALITY OF LIFE OF RESPIRATORY PATIENTS

The allergic rhinitis is the inflammation of the mucous membrane lesions, of which symptoms are sneezing, running nose, nasal congestion. If two of the symptoms appears for longer than one hour every day is called allergic rhinitis [11]. Though the symptoms do not appear to be serious, but patients have very bad quality of life. Recently the quality of life issue is in the focus and has a significant impact on the patient's psychosocial status [12]. Symptoms such as nasal congestion, runny nose, sneezing, sore throat, and eye problems cause reduction in concentration and reduce work and school performance. Despite the treatment may never cause significant barrier for 30% of patients in everyday life, while 50% of them have performance and concentration problems [12].

The quality of life is not appropriate for asthma patients [14]. In recent years, drastic change occurred in asthma treatment. The main objective is to achieve asthma control, maintenance and monitoring. The new recommendation puts patients into 3 levels: controlled, partly controlled and uncontrolled conditions. The treatment depends on the control level of the patients. By Asthma Control Test, the level of asthma control for 50% of the patients is not appropriate. The quality of life of 78% of asthma patients decreased significantly leading to unable working performance of 16%. Even 12% is unable to do housework. Based on studies in Hungary the control level of asthma patients is also lagging behind [13].

5. THE THERAPY OF RESPIRATORY DISEASE

The continuous increasing of occurrence of allergic type of illnesses is one of the biggest public health problem during the last 30 years, in addition it is an important economical burden for the society. The most effective form of the prevention is the so called primer prevention, and the prevention of the development of the allergic sensitisation [15]. Neither the trial taking place in front of our eyes of regulation of ragweed eradication being like moments from a soup opera means a real prevention, nor the burning out players of the health care educate the allergic and asthmatic patients about the first step of the therapy: the prevention.

The milestones of rhinitis and asthma therapy are the local and systemic therapy. Base elements of them are effective in symptom relief and antiinflammatory method too. Antihistamins and local steroids are the base therapy of allergic rhinitis. Benefits of them are symptom relief and increasing patients' quality of life. They can be used in a systemic and local way. All of the medical products are not effective for all allergic symptoms, the per os antihistamins are effective solutions for the following symptoms: conjunctivitis allergica, itching of nose, gullet, skin, sneeze. But these products are not effective in snuffle and cough, other therapy is needed for them.

It is necessary to draw the attention to the experiences of the last years. They can cause a basic change in the therapy of allergic diseases. They are able to prevent the severity of the chronic inflammation and reduce the development of remodelling. [10] It is currently accepted that the treatment of seasonal allergy symptoms start, the late

appearance of symptoms, the patient's quality of life preserving treatment for about two weeks before the expected allergic contact appeared before the start.

There is a widespread practice, which was up to medical error, also called malpractice. In spite of the professional rejection, severe allergic rhinitis patients with bad compliance get prolonged release injectable steroid. After a few pollen season, some steroid injection may increase the late-specific side effects (especially osteoporosis, hypertension, diabetes.) incidence. There can be decades between the fast effectiveness of injectable steroid and its long term side effects. Neither the physicians nor the patients does not take it seriously, the abuses of this practice is almost hopeless.

It should be mentioned that the specific immunotherapy (vaccination-specific antigen, a new name), was previously known only in injectable form. Currently, local (nasal-sublingual) shape gives a more simple application with similar efficacy and mild side effects.

We could have some insight into pulmonary care system, which is one slice of the Hungarian health care system. The fundamental purpose of the system should ensure the quality of life of patients. As stated above, it may be felt how complex thinking and operation it requires. The reality is that the Hungarian health care system has incapable structure, specialist shortfalls, insufficient financial system, political battle. Typically, the only way out of the current situation is the creative mind and applying and expanding innovation.

6. CASE STUDY

The health care system in Hungary is currently in some aspects stagnating or declining. A radical new way of thinking, creative methods, innovative partnership and new operating model are needed in order to create high-quality outcomes.

Currently there is confusion about the health care system restructuring, and about ambivalence financing process. At the same time on partnership level we can see specialists shortfalls, lack of service oriented and of interdisciplinary approach leading to unsatisfied distrustful patients, who are open to alternative medicine, OTC products and private medical services.

The solution can be unique, patient oriented, complex, matrix system services with high medical and technical quality, which can be expended and improved further. A first pilot private practice can give solution for the currently inadequate caring for allergic patients in the Hungarian health care system.

In the private practice all professions are represented virtually around the atopic patients with innovative tools since the first visit. The participating specialists (pulmonologists, allergologists, ENTs, dermatologists, psychiatrists) define the patient route together in presence of the patient. The next visit occurs with one of the previous virtual doctor. Each visit is administrated and recorded by regulations, of which document is available to the patient and doctors at any time.

On operating system level, the matrix outpatient care system, the usage of new alternative technology, the perfectly coordinated complex system means innovation.

On partnership level the innovation is the treatment of the patients in quality with service level care. This model will hopefully contribute to innovative and effective functioning of the whole health care system.

7. CONCLUSIONS

If a system can not function appropriate and we can not expect any radical change in the future, it is necessary to adopt creative solutions in the health care system. Only innovation can push the system to further development and give any opportunity for survival.

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