MANAGEMENT IN HEALTH CARE PRACTICE A Handbook for Teachers, Researchers and Health Professionals	
Title	**HOSPITAL IN MEETING COMPREHENSIVE HEALTH GOALS**
Module: 5.7	**ECTS: 0.2**
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Keywords	Health promotion, health promoting hospitals, health promoting management of chronic disease, Golnik
Learning objectives	After completing this module students and public health professionals should: • understand the idea of settings approach to health promotion; • be aware of four areas of Health Promoting Hospitals (HPH) strategy; • recognize the benefits of health promotion (HP) in hospitals; • understand the purpose, structure and functioning of International Network of HPH; • be familiar with standards and core strategies for HPH; • acknowledge the importance of new HP and disease prevention services in HPH; • recognize the importance of patients' empowerment for health promoting management of chronic disease.
Abstract	The Ottawa Charter for Health Promotion put forward the idea that health is created and lived by people within the settings of their everyday life. This settings approach to HP led to a number of initiatives, among them HPH. The HPH strategy focuses on four areas: promoting the health of patients, promoting the health of staff, changing the organization to a health promoting setting, and promoting the health of the community in the catchments area of the hospital. The need for and the relevance of setting standards for HP in hospitals was realized in the International Network of HPH, which acts as a network of networks linking all national and/or regional networks. It supports the exchange of ideas and strategies implemented in different cultures and health care systems, developing knowledge on strategic issues and enlarging the vision. Nowadays, the International Network of HPH comprises 30 member states, 33 national and/or regional networks and more than 650 hospitals. There is international consensus that patients should be given recommendations, guidance, and support with regard to HP in hospitals. An important element is the activation of the patient's individual resources and competences in coping with disease. Example of effective intervention of this type of services is the case of Golnik hospital, where introducing specific type of treatment for specific group of patients has developed from hospital vision to national clinical pathway implementation.

Teaching methods	Teaching methods include introductory lectures, exercises, and interactive methods such as small group discussions. After introductory lectures students should choose one of the HPH and try to find out if activities are carried out on all four areas of HPH strategy. Afterwards they should carefully read the case study and try to develop their own program for empowerment of patients for health promoting management of specific chronic disease.
Specific recommendations for teachers	• work under teacher supervision/individual students' work proportion: 30%/70%; • facilities: a computer room; • equipment: computers (1 computer on 2-3 students), LCD projection equipment, internet connection, access to the bibliographic data-bases; • training materials: recommended readings or other related readings; • target audience: master degree students according to Bologna scheme.
Assessment of students	Assessment is based on seminar paper and oral exam.

HOSPITAL IN MEETING COMPREHENSIVE HEALTH GOALS

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THEORETICAL BACKGROUND

Basics of health promotion

Health promotion is defined as the process of enabling people to increase control over, and improve their health (1). Health promotion goes beyond health education and disease prevention in as far as it is based on the concept of salutogenesis and stresses the analysis and development of the health potential of individuals (2). Health in this context not only refers to the traditional, objective and biomedical view of the absence of infirmity or disease but to a holistic view that adds mental resources and social well-being to physical health (3, 4). The statement of principles known as the Ottawa Charter for Health Promotion (1), developed by the World Health Organization (WHO) in 1986, is internationally accepted as the guiding framework for health promotion activity.

Settings approach to health promotion

Based on the notion of health as a positive concept, the Ottawa Charter for Health Promotion put forward the idea that health is created and lived by people within the settings of their everyday life. This settings approach to health promotion, founded on the experience of community and organizational development, led to a number of initiatives such as Healthy Cities, Health Promoting Schools, Health Promoting Workplaces, Health Promoting Hospitals (HPH), etc. in order to improve people's health where they spend most of their time (5). The settings approach acknowledges that behavioural changes are only possible and stable if they are integrated into everyday life and correspond with concurrent habits and existing cultures (6).

Development of the Health Promoting Hospitals concept

Twenty years ago, WHO initiated HPH movement in order to support hospitals towards placing greater emphasis on health promotion and disease prevention, rather than on diagnostic and curative services alone. The HPH strategy focuses on four areas: promoting the health of patients, promoting the health of staff, changing the organization to a health promoting setting, and promoting the health of the community in the catchments area of the hospital (7). These four areas are reflected in the definition of a HPH, which states that HPH does not only provide high quality comprehensive medical and nursing services, but also develops a corporate identity that embraces the aims of health promotion, develops a health promoting organizational structure and culture, including active, participatory roles for patients and all members of staff, develops itself into a health promoting physical environment, and actively cooperates with its community (4).

Promoting the health of patients

Health professionals in hospitals can have a lasting impact on influencing the behaviour of patients and relatives, who are more responsive to health advice in situations of

experienced disease (8). This is of particular importance for two reasons: firstly, the prevalence of chronic diseases is increasing in Europe and throughout the world (9); secondly, many hospital
treatments today not only prevent premature death but improve the quality of life of patients (10). In order to maintain this quality, the patient's own behaviour after discharge and effective support from relatives are important variables. Therefore, one of the HPH's priorities is to encourage healthy behaviour, prevent readmissions and maintain quality of life of patients (7).

Promoting the health of staff

Paradoxically, in hospitals – organizations that aim to restore health – the acknowledgement of factors that endanger the health of their staff is poorly developed (11). These working places, most of which are occupied by women, are characterized by certain physical, chemical, biological and psychosocial risk factors. With the increasing lack and migration of health professionals, hospitals have to compete for the best staff. Hospitals that offer a safe and health promoting working environment and that involve staff in creating such an environment will be more successful to attract, recruit and retain staff (12). Health promotion programmes can improve the health of staff, reduce costly short-term absenteeism rates, and improve productivity and quality (13).

Changing the organization to a health promoting setting and promoting the health of the local community

Hospitals also typically produce high amounts of waste and hazardous substances. Introducing health promotion strategies in hospitals can help reduce the pollution of the environment and the cooperation with other institutions and professionals can help achieve the highest possible coordination of care. Furthermore, as research and teaching institutions hospital produce, accumulate and disseminate a lot of knowledge and they can have an impact on the local health structures and influence professional practice elsewhere (7). In this context, hospitals are expected to expand their role beyond the curative services to a pro-acting vehicle for health improvement. Towards this aim, HPH target the health of individuals (staff, patients, local community population) but they promote the health of their organization as well, by creating a sustainable organization, capable of confronting today's challenges (14).

Evolution of the International Network of Health Promoting Hospitals

A first connection between hospitals and health promotion appeared at the end of the 1970s when health promotion and disease prevention came up in the United States as additional professional services provided by the hospital (15). In order to support the introduction of health promotion programmes in hospitals, the WHO Regional Office for Europe started the first international consultations in 1988. In the subsequent year, the WHO model project »Health and Hospital« was initiated with the Rudolfstiftung Hospital in Vienna, as a partner institution (13). After this phase of consultation and experimenting the HPH movement went into its developmental phase, being marked by the initiation of the European Pilot Hospital Project by the WHO Regional Office for Europe in 1993. This phase, which lasted from 1993 to 1997, involved intensive monitoring of the development of projects in 20 partner hospitals from 11 European countries (Austria, Czech Republic,

France, Germany, United Kingdom, Greece, Hungary, Ireland, Italy, Poland, and Sweden) (16).

Subsequent to the closing of this pilot phase, national and regional networks were developed and the network reached its consolidation phase. Since then, national and regional networks take an important role in encouraging the cooperation and exchange of experience between hospitals of a region or a country, including the identification of areas of common interest, the sharing of resources and the development of common evaluation systems. The International Network of HPH acts as a network of networks linking all national and/or regional networks. It supports the exchange of ideas and strategies implemented in different cultures and health care systems, developing knowledge on strategic issues and enlarging the vision. Nowadays, the International Network of HPH comprises 30 member states, 33 national and/or regional networks and more than 650 hospitals (17).

Many more countries and hospitals are regularly participating in the annual international HPH conferences which have been organized since 1993 in Warsaw, Padova, Linköping, Londonderry, Vienna, Darmstadt, Swansea, Athens, Copenhagen, Bratislava, Florence, Moscow, Dublin, Lithuania, Vienna and - in 2008 - Berlin. A semi-annual HPH Newsletter has been issued also since 1993.

In addition to the national and/or regional networks, specific HPH task forces put efforts into further developing the HPH concept for specific thematic areas or for specific hospital types (e.g. Health promoting psychiatric health care services, Health promotion for children and adolescents in the hospital, Migrant friendly and culturally competent hospitals, Putting HPH policy into action (18 HPH core strategies), Standards for HPH and quality-based reimbursement) (16).

The HPH network is currently developing into an international association. It is governed by an elected international governance board and has a general assembly meeting once a year. The secretariat is based at the WHO Collaborating Centre for Evidence Based Health Promotion in Hospitals in Copenhagen (18). The international HPH conferences, the international HPH Newsletter and other scientific and technical functions are supported by the WHO Collaborating Centre for Health Promotion in Hospitals and Health Care, which is situated in Vienna (19).

Subsequently, the progress of HPH has resulted in a series of influential reports that include The Budapest Declaration on Health Promoting Hospitals, The Ljubljana Charter on Reforming Health Care, and The Vienna Recommendations on Health Promoting Hospitals (20-22). The latest document forms the set of principles on which the HPH concept is based. According to them a HPH should:

1. promote human dignity, equity, solidarity, and professional ethics, acknowledging differences in needs, values and culture of different population groups;
2. be oriented towards quality improvement, the well-being of patients, relatives and staff, protection of the environment and realization of the potential to become a learning organization;
3. focus on health with a holistic approach and not only on curative services;
4. be centred on people providing health services in the best way possible for patients and relatives to facilitate the healing process and contribute to the empowerment of patients;
5. use resources efficiently, cost-effectively and allocate resources on the basis of contribution to health improvement;
6. form as close link as possible with other levels of the health care system and the community (22).

Standards and core strategies for Health Promoting Hospitals

The need for and the relevance of setting standards for health promotion in hospitals was realized in the International Network of HPH. Over a 2-year period a set of standards was developed in order to make the standards applicable and acceptable in all hospitals and in order to make it possible to integrate the standards in existing quality standards for hospitals as established by several international and national quality and accreditation organizations (7). The standards have now been through a pilot test, which has confirmed that they are understandable, meaningful, relevant and applicable. International quality organizations are encouraged to integrate the standards in their already established sets of standards and in the future use of the standards. The final set of five standards concern: Management Policy, Patient Assessment, Patient Information and Intervention, Promoting a Healthy Workplace, and Continuity and Cooperation (23). The standards relate to patient pathways and define responsibilities and activities concerning health promotion as an integrated part of all services offered to patients in every hospital. Each standard consists of a standard formulation, objective and definition of sub standards (24).

In 2001, WHO launched a working group to develop an up-to-date strategic framework for HPH since the situation of hospitals is characterized by a permanent and increasing pressure of their dynamic environments to adapt to changing political and economic, professional and consumer expectations concerning the process and content of hospital services. Two general tendencies can be distinguished within the trend of hospital reforms:

1. strategic re-positioning of the hospital with the need to redefine the range and mix of services (i.e. the distinction between core business and other services, balancing inpatient/outpatient services or acute/chronic/rehabilitative services, inclusion of educative elements, specialization of types of hospitals and departments, and integration with primary care and social services and intersectoral collaboration);
2. assuring and improving quality of services (i.e. to improve the safety, appropriateness, effectiveness and efficiency of services and improve satisfaction of stakeholders, introducing different quality approaches, accreditation and put a stronger emphasis on evidence based medicine and patient's rights) (7).

To be able to identify the specific contributions of health promotion to such strategic re-positioning and quality improvement in hospitals, six general strategies for the three target groups (patients, staff and the community) were introduced (Table 1).

Table 1. Six general health promotion strategies for each group of stakeholders (patients, staff, and the community).

Health promotion strategies
1. Health promotion quality development of treatment and care, by empowerment of stakeholders for health promoting self-care/self-reproduction
2. Health promotion quality development of treatment and care, by empowerment of stakeholders for health promoting co-production
3. Health promotion quality development for health promoting and empowering hospital setting for stakeholders
4. Provision of specific health promotion services – empowering illness management (patient education) for stakeholders
5. Provision of specific health promotion services – empowering lifestyle development (health education) for stakeholders
6. Provision of specific health promotion activities – participation in health promoting and empowering community development for stakeholders

Service oriented strategies include quality improvement of already existing clinical and hotel services (strategies 1, 2) or strategies introducing new, primarily educative services with mid-term or long-term health effects (strategies 4, 5). Strategies can be distinguished according to their orientation of treating or managing specific diseases (strategies 2, 4) and strategies oriented at services for maintaining or improving positive health (strategies 1, 5). Concerning settings, strategies developing the hospital setting itself (strategy 3) can be distinguished from strategies of participation of the hospital in developing the community setting (strategy 6) or other settings within the community (e.g. workplaces or schools). By being oriented at improving health gain and not just clinical outcome, these six strategies do not only apply to patients (and their relatives), but in a somewhat modified way also to staff and members of the community the hospital serves and is situated in, resulting in eighteen core strategies for health promotion in hospitals (7, 12).

Dilemmas facing Health Promoting Hospitals

The main perceived barriers faced in the development of HPH are shortages of funds, personnel, time management and professional skills. The WHO refers to the fact that most health professionals in the hospital setting do not readily associate health promotion as part of their role (25). In the past, the projects carried out within the HPH network were characterized by a more traditional focus on health education interventions for patients and to a lesser extent for staff (10). Similar problems to those stated above can be found throughout the HPH movement in the HPH Network Progress Reports (26). Nearly all of the European member states report commonly encountered problems. This is not surprising, however, and perhaps inevitable given that many European countries stress the lack of government-related policy support, lack of individual organizational management commitment and lack of resources set aside for health promotion in hospitals (27). Perhaps the main driver for HPH reform in Europe is the capacity for hospitals to affect and influence public health reform and therefore directly influence the health of their surrounding communities. Hospitals and their leaders are being held increasingly

accountable for the health status of local populations (28). This represents the greatest challenge for the HPH movement and perhaps its biggest failure to date. A broader vision would see the development of not just what could be termed as HPH, but institutions that could be classified as Public Health Hospitals. A Public Health Hospital is one that develops its staff to move away from increasing medicalized subspecialization to an increasing understanding of the wider health agenda (29). It does this as part of a health promoting capacity-building process that leads to an organization's overall structural development, as well as offering a support structure for wider community health promotion initiatives through collaboration with public health agencies (30).

Tountas and colleagues reported that effective planning of hospital health promotion activities is required so that the daily routine is not interrupted. Besides of personnel shortage and lack of funding, lack of health promotion background was found to be perceived as a significant problem (14). On the other hand, Polluste and colleagues compared the implementation of health promoting and quality-related activities in HPH and those hospitals which have not joined the HPH network (non-HPH) in Estonia. In the beginning of 2005, they conducted a postal survey among the top managers of fifty-four Estonian hospitals. The questionnaire was based on the WHO standards for HPH and on the set of the national quality assurance (QA) requirements for health services. The study demonstrated some significant differences in the uptake of health promotion and QA activities between HPH and non-HPH. For example, regular patient satisfaction studies were conducted in 83% of HPH and 46% of non-HPH ($p<0.03$) and 65% of HPH and 46% of non-HPH cooperated with various patient organizations ($p<0.03$). Systems for reporting and analysis of complications were implemented in 71% of HPH and 33% of non-HPH ($p<0.03$); also, the implementation of various guidelines was more developed in HPH. All HPH have carried out a risk analysis on the workplace and staff job satisfaction studies were conducted in 89% of HPH and 41% non-HPH ($p<0.05$). They concluded that the concepts of HPH and QA are closely related. Making progress in health promotion is accompanied with QA and vice versa. Implementation of health-promoting activities in hospitals promote the well-being and health of patients and hospital staff, and creates a supportive environment to provide safe and high-quality health services (31). To further develop HPH, effort needs to be made to ensure that hospital leaders and management are considered first. If managerial staff have an appropriate understanding of the concept and principles of HPH, then it is more likely that health promotion activities can be introduced into the daily workings of hospitals, and the necessary funds, personnel and training on health promotion skills be provided (32).

It does appear, however, that the HPH movement is spreading rather than diminishing. The focus of the HPH projects is now enlarging, addressing also organizational and community issues such as a change of organizational culture and environmental issues. A future challenge of HPH is still to link organizational health promoting activities with continuous quality improvement programmes, making use of the apparent similarities such as the focus on continuous process and development, involvement and ownership, monitoring and measurement, and to incorporate the principle of health promotion into the organizational structure and culture (12).

CASE STUDY: MEETING THE COMPREHENSIVE HEALTH GOALS: THE CASE OF GOLNIK HOSPITAL, SLOVENIA

New health promotion and disease prevention services

The initial idea of HPH was focused on placing greater emphasis on health promotion and disease prevention, rather than on diagnostic and curative services alone. In public health, disease prevention is usually defined as primary disease prevention which prevents diseases from occurring, secondary prevention which detects disease at an early stage and prevents disease from developing, and tertiary prevention which prevents aggravation or recurrence of disease and secures maintenance of functional level (7). Traditionally, hospitals primarily take care of tasks that relate to secondary or tertiary prevention whereas the primary sector and other social institutions take care of primary prevention. It is, however, increasingly recognized that hospitals can play a significant role in linking all three levels of prevention in order to gain patients' satisfactory outcome (33). The focus stays on effective treatment, but in order to optimize health gain, the outcome concept of hospitals has widened to include, in addition to clinical outcomes, also patient satisfaction, health-related quality of life, and health literacy. All of these aspects have to get the attention within the treatment process.

There is international consensus that patients should be given recommendations, guidance, and support with regard to health promotion in hospitals (23). Health promotion secures that risk conditions are identified and that the patient has knowledge of the significance of these conditions, recommendations for changes, and active support for carrying out these changes. From this perspective follows that it makes sense to invest not only in clinical interventions, but also in other interventions to improve health, like educating patients for self-management and developing situations to make the »healthy choice the easy choice«. An important element is the activation of the patient's individual resources and competences in coping with disease (28). A practical example for empowering patients for co-production would be diagnosis and treatment related patient information, training and counselling (e.g. by informing patients about how they can contribute to the recuperation process, by describing alternatives and side effects), in order to enable patients to participate in the diagnostic process (e.g. by providing all information needed); participate in treatment-related decision-making; actively participate in treatment and care processes (e.g. by complying with the prescriptions). Thus, health promotion and specific disease prevention form a continuum.

Empowerment of patients for health promoting management of chronic disease

Expert interventions in hospitals provide in general only a turning point in disease process, and a basis for recuperation or the successful management of chronic disease. Every contact with hospital based physicians either during hospitalization or ambulatory visit represents an ample opportunity to involve patients in diagnostic and therapeutic management of their medical condition. Personal experience of disease deterioration, even to a slight degree, generally makes patients susceptible to non-pharmacological and pharmacological interventions in which their active role is indispensable. The main part of recuperation or of the day-to-day disease management has to be performed primarily by the patients themselves, with specific professional support by the hospital, specialized services, or other health care services. This phase of the disease career lasts much longer

and is out of direct control of the hospital, but is crucial for the outcome of regaining health and quality of life.

Hospitals have to take this perspective on the disease career into account by either providing necessary disease specific support by themselves or by referring patients to other, specialized providers in the health care system. The more complex and the more rare the disease and its treatment gets, the more likely it remains a task of the hospital itself, but this of course requires adequate legal and financial regulation which allows to provide these services systematically. One example of effective intervention of this type of services is the case of Golnik hospital, where introducing specific type of treatment for specific group of patients has developed from hospital vision to national clinical pathway implementation.

Specific immunotherapy: concepts and principles

Introduction

Specific immunotherapy is a well established form of treatment of patients with some allergic diseases. Among main indications is allergic rhinitis. The goal of specific immunotherapy is to diminish the allergic response to allergens. The outcome of immunotherapy is a decrease in symptoms during allergen exposure, better response to medical therapy and decreased risk of new allergen sensitizations. In very few patients complete disappearance of the disease may be achieved as well.

Selection of patients

Immunotherapy is only effective in carefully selected patients. IgE mediated allergy has to be proven. Appropriate patients are those in whom:

1. allergic symptoms are due to only one allergen or a group of cross reactive allergens;
2. for symptomatic relief high and regular doses of systemic and local drugs are necessary;
3. duration of the allergen exposure season is long.

Clinical studies have shown that patients with multiple allergies do not benefit from immunotherapy. Other diseases which might be the predominant cause of patients' symptoms should be excluded, like structural diseases of the nose and nonallergic rhinitis. Immunotherapy is effective only in patients, where allergy is the only/predominant mechanism of symptoms.

Burden of immunotherapy for the health care system

As immunotherapy is time consuming and requires excellent compliance by the patients in order to get an effect, immunotherapy is not suitable for patients with mild and short lasting allergic diseases, which are easily controlled with medications. It is important also to consider the costs of allergen extracts for immunotherapy which are substantial and the same for patient with severe as for the patient with mild disease.

Immunotherapy has also unpleasant and even dangerous side effects. Local reactions at the site of allergen application (swelling, itching) are quite common; fortunately systemic allergic reactions are extremely rare in pollen and dust mite immunotherapy. Life threatening reactions are particularly common in patients with unstable asthma and patients with anaphylaxis.

Medical and pharmaceutical approach to organization of immunotherapy

Immunotherapy should be offered only to those patients in whom high efficacy and low risk of side effects of the treatment is expected. However, the main interest of the producers and traders of allergen extracts is a widespread use of immunotherapy concerning safety more than efficacy of the treatment. In order to reach their goal, they run a promotion which is not always based on evidence derived from clinical studies. Sadly enough, many practicing medical doctors are not updated with the results of evidence based medicine, but get most medical information from pharmaceutical representatives and promotion leaflets (34).

Introduction of sublingual immunotherapy in Slovenia

In Slovenia subcutaneous immunotherapy (SCIT) has been used for decades. SCIT applications were mostly limited to the hospital based allergologists. Beside safety aspects the main reason for the limited use of immunotherapy was the way of reimbursement. Allergen extracts were not registered in Slovenia and were only purchased by the health institution on their own expense. Doctors were not able to make a prescription for the allergen extract for the pharmacy. For that reason private and community based allergologists were discouraged to prescribe immunotherapy and consequently didn't get experience in selection and follow up of the patients on immunotherapy.

In 2007 sublingual immunotherapy (SLIT) was registered in Slovenia and reimbursed by health insurance. That form of immunotherapy is suitable also for allergologists with only outpatient practice. As patients don't need to visit doctor for monthly injections and the cost of allergen is reimbursed, we expected much higher interest in prescribing that form of immunotherapy.

Clinical studies of SLIT showed comparable efficacy to SCIT when performed in carefully selected groups of mono/oligosensitized patients. In all clinical trials SLIT was performed with a single allergen or a combination of two allergens in full dose of each allergen. Moreover, studies showed marked dose response. Reducing the dose of allergen to one third, the effect of SLIT was undistinguishable from placebo. However, producers of allergen extracts offered and promoted using:

1. many allergens, whose efficacy was not studied in clinical trials;
2. non-standardized allergen extracts in low dose;
3. mixtures of unrelated allergens.

Expected negative effects of introduction of sublingual immunotherapy on health

Allergologists in Golnik hospital, who are very experienced in immunotherapy, using it for years not only in respiratory allergy, but also in venom allergy, recognized the threat for health care system due to inefficient use of health care resources. Namely we expected:

1. prescriptions of SLIT to patients, in whom there is only a weak indication;
2. insufficient performance of SLIT, namely only prescribing of allergen and not guiding the patient through the process of SLIT;
3. predominant prescribing of mixtures of allergens and even allergens with no clinical relevance.

For that reason we prepared a program for education of allergologists willing to prescribe SLIT and set up a national clinical pathway for SLIT.

Activities for setting up a national clinical pathway for sublingual immunotherapy

Activity 1

First step was to negotiate the conditions for reimbursement of allergen extract with health care insurance company. It was decided, that a patient gets a fully reimbursed SLIT extract after agreement of allergy counsel that predefined criteria for SLIT are fulfilled.

Activity 2

Next step was the selection of the criteria for immunotherapy. We followed European guidelines for immunotherapy (35). We prepared a check-list where the allergologist marked the indication and the selection of the allergen for SLIT. Only allergens which were shown in randomized clinical trials to be effective were put on the list. Only one allergen could be selected for SLIT or in the case of two important non-cross reactive allergens, two separate SLIT were performed. The check list in fact offered the allergologist to become familiar with the standard for appropriate selection of patient and allergen for immunotherapy (Appendix).

Activity 3

Next step was a development of a document, which would guide the allergologist and the patient through the process of SLIT. Prescription of allergen extract must be made on time as the treatment has to begin 2 months before the pollen season. Patient should be instructed how to take the drug, familiar with the local side effect of the therapy, and adherent to therapy. For that reason a check list for the patient was prepared, where all important dates are put (date for the beginning of the therapy, dates of follow up visits, and a table where the patient confirms the use of allergen drops and reports possible side effects). In the beginning of the SLIT patients are offered a phone contact with the allergy nurse to clarify possible misunderstandings. Follow up visits are planned before the pollen season to provide the patient with the medications and at the top of the season to evaluate the efficacy of the SLIT.

All the documents were put in a form of a booklet, which is owned by a patient but the copies of each filled page are put into the patient's medical documentation file in the allergologist's office. The cover of the booklet was used for the detailed explanation of SLIT to the patient, including the instruction for treatment of side effects.

Activity 4

Activities were undertaken to obtain a consensus of the members of the Slovenian Association of Allergy and Clinical Immunology on the content and the aim of the clinical pathway. The same approach was used for adult and paediatric patients.

To facilitate the adherence of doctors with the clinical pathway, it was decided that the data on the first year of the immunotherapy would be analyzed and presented as a Slovenian study of introduction of the SLIT. We obtained some sponsorship for the analysis form the producer of the allergen extracts.

In the first year 90 adult patients were recruited by 12 allergologists. Forty-three patients were treated at Golnik hospital and 47 by other allergologists. Indications for SLIT were allergic rhinitis (seasonal 70, perennial 21) and asthma (31). In 2 patients SLIT was started after SCIT discontinuation because of side effects. Majority of patients (73) were treated with a singled allergen, 16 with a full dose of two allergens and only 1 with a mixture of allergens (Table 2).

Table 2. Slovenian study of sublingual immunotherapy.

ALLERGEN	**house dust mite**	**grasses**	**birch**	**hazel**	**ambrosia**	**SUM**
MONOTHERAPY	**16**	**31**	**17**	**1**	**8**	**73**
COMBINATION WITH:						
house dust mite	-	-	-	-	-	
Grasses	3	-	-	-	-	3
Birch	1	4	-	-	-	5
Hazel	0	1	7	-	-	8
ambrosia	0	0	0	0	-	0
SUM	20	36	24	1	8	89

* 1 patient was treated with a combination of grass, birch and hazel pollen.

Conclusion

SLIT was effectively introduced in accordance with evidence based medicine and European guidelines for immunotherapy (35). We believe that our approach reached the following goals:

1. optimal clinical outcome of the treatment, namely the minimal possible symptoms of the allergic rhinitis during the period of allergen exposure;
2. optimal patient-related outcome. With the empowerment of the patients we probably achieved a positive perception of the treatment by the patients and improved their satisfaction in spite of long lasting therapy. Finally, by well selected patients, well performed SLIT and appropriate follow up during the pollen season patients had better quality of life in spite of the long lasting difficult therapy and bothersome chronic disease;
3. optimal health care system-related outcome, namely the best ratio between the cost and the outcome of the treatment. The health care resources were directed toward the patients, who were optimally selected and care was taken, that resources were used optimally.

Proposal for introduction of sublingual immunotherapy is presented in Appendix.

EXERCISE

Task 1

From the selection of European HPH member states' website addresses choose one and look at HPH activities. Try to find out if activities are carried out on all four areas of HPH strategy and discuss findings with your colleagues.

European HPH member states' website addresses:

http://www.helse-stavanger.no (Norway)
http://www.mfn.sk (Slovakia)
http://www.elisabeth-essen.de (Germany)
http://itk.ee (Estonia)
http://www.vsshp.fi (Finland)

Task 2

After carefully reading the case study, try to develop your own programme for empowerment of patients for health promoting management of specific chronic disease. Compare your programme with ideas of your colleagues.

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RECOMMENDED READINGS

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APPENDIX

Proposal for introduction of sublingual immunotherapy (SLIT)*

Patient's name and surname:	Date of birth:
Allergologist's name and surname:	Registry number:
General practitioner's name and surname:	Registry number:

Clinical indications for SLIT (one or more):

- ❑ perennial allergic rhinitis
- ❑ seasonal allergic rhinitis
- ❑ moderate asthma

Reason for SLIT introduction:

- ❑ insufficient response on pharmacotherapy prescribed according to guidelines
- ❑ complications with SCIT
- ❑ patient doesn't want SCIT

Intensity of rhinoconjunctivitis in last season/last year (fill in together with patient)**:**

	no problem 0	**some problem 1**	**moderate problem 2**	**a lot of problem 3**	**extreme problem 4**
Sneezing					
Nasal congestion					
Runny nose					
Itching of the eyes					
Lachrymation					
Itching in oral cavity					
Itching in ear tubes					
Cough					
Dispnea					
Urticaria					
Fatigue					

* Send to: Allergy Council
ADULTS: Bolnišnica Golnik KOPA, 4204 Golnik
CHILDREN: UKC Pediatrična klinika, Vrazov trg 1, 1000 Ljubljana or UKC Maribor, Klinika za pediatrijo, Ljubljanska ul. 5, 2000 Maribor

Medications used in the last year due to allergy:

	as needed	during season	regularly
systemic antihistaminic			
nasal antihistaminic			
antihistaminic eye drops			
nasal glucocorticoid			
inhalational glucocorticoid			
antileucotriene			
bronchodilator			
systemic glucocorticoid			
other:			

Allergic senzibilization:

Senzibilization with allergens:

- ❑ house dust mite
- ❑ grass pollen
- ❑ hazel pollen
- ❑ birch pollen
- ❑ weed pollen
- ❑ other:

Clinically the most important allergen (one or more):

- ❑ house dust mite
- ❑ grass pollen
- ❑ hazel pollen
- ❑ birch pollen
- ❑ weed pollen
- ❑ other:

Senzibilization confirmed date_____

When are the problems with allergy most intensive:

- ❑ throughout the year, without seasonal worsening
- ❑ throughout the year, with relevant seasonal worsening, the worst in (months)_____
- ❑ predominantly seasonal, the worst in (months)_____

Pulmonary function testing

- ❑ not performed
- ❑ performed, last test date: _____
  VC % :_____
  FEV1% :_____

Metacholin test

- ❑ not performed
- ❑ performed, last test date: _____
  - ❑ positive
  - ❑ negative

How many years does the patient have symptoms of allergic rhinitis or asthma?

- ❑ up to 2 years
- ❑ 2 to 5 years
- ❑ 5 to 10 years
- ❑ more than 10 years

Selection of allergen for SLIT:

- ❑ house dust mite
- ❑ grass pollen
- ❑ hazel pollen
- ❑ birch pollen
- ❑ other (argumentation)_____

Allergologist who proposed introduction of SLIT DATE

_____ _____

Patient case presented at the Allergy Council, date _____

Allergy counsel agrees with proposal: YES NO

COMMENTARY_____

Proposed initiation of SLIT: allergen 1 date _____,

allergen 2 date _____

Head of the allergy counsel DATE