

<b>MANAGEMENT IN HEALTH CARE PRACTICE</b> A Handbook for Teachers, Researchers and Health Professionals	
<b>Title</b>	<b>EDUCATION AND TRAINING AS PART OF HEALTH PRACTICE</b>
<b>Module: 4.7</b>	<b>ECTS (suggested): 0.5</b>
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<b>Keywords</b>	Development, knowledge society, learning, education, training, human resources development, culture, ethics
<b>Learning objectives</b>	After completing this module students and public health professionals should: <ul style="list-style-type: none"> <li>• aware of complexity of the relation of health care practice and education;</li> <li>• increase knowledge on possible different interpretations of knowledge managements, education, culture, and ethics in health care practice;</li> <li>• understand importance of careful definition of vision and mission before objectives of education and training are chosen; and</li> <li>• improve human resources education and management.</li> </ul>
<b>Abstract</b>	Education, training and permanent learning are essential for health manpower development.
<b>Teaching methods</b>	Teaching methods include individual preparation, case study, interactive small group discussions, and exercises. After individual reading and group discussion about elements of theoretical background and case study, fulfilling tasks given in exercises and summing up what the group has learned.
<b>Specific recommendations for teachers</b>	Work under teacher supervision/individual students' work: 70/30%. Seminar room, computer and internet connection or dictionaries and basic textbooks on health system development, education and ethics.
<b>Assessment of Students</b>	Assessment of written reports on given tasks (seminar paper) and oral examination through defending results of given tasks.

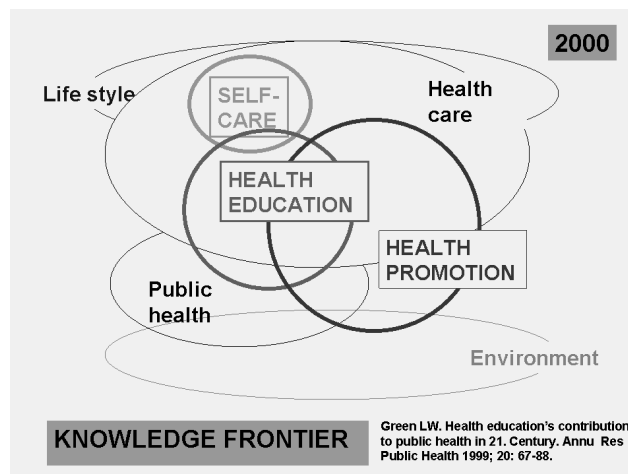
# EDUCATION AND TRAINING AS PART OF HEALTH PRACTICE

Želimir Jakšić, Herman R. Folmer, Luka Kovačić

## THEORETICAL BACKGROUND

### The health system is complex and dynamic

Education and training is a common starting point in most of interventions aiming towards improving health care practice. However, choice of contents, methods and educational technology is part of local health culture, general cultural, social and political conditions. Fragmentary introduction of new element into existing system might be not only inefficient, but also introduce confusion and even damage. Therefore one has to understand essential policies and realities of the whole system. Here are described possible wrong managerial decisions in two directions: acceptance of circumstances as a fixed structure not open to any change (conventional error) and opposite to this assuming that everything is open to change (utopian error).



**Figure 1.** Complexity of the health care system


The right approach is obviously somewhere between these two errors, but it is often hidden by tradition, all kinds of ideologies and direct political utilities. One has also to consider that the system is dynamic and changes may occur unexpectedly because usually not all facts are known, and local circumstances change under influence of broader environment, a changing World.

### “Knowledge society”

The XXIst century is meant to have several essential problems to solve: unequal progress in different countries and in depreciated groups and individuals in countries; growing environmental problems, including shortages of water and energy; ageing of population, double burden of health risks as result of epidemiology in transition, social and cultural changes in an global post-industrial and information World with not yet known health and social consequences.

**"Century of learning"**

Economics & management



**"The next society will be a knowledge society"**

Peter Drucker  
The Economist, Nov 1, 2001.

FACT INFORMATION  
KNOWLEDGE WISDOM

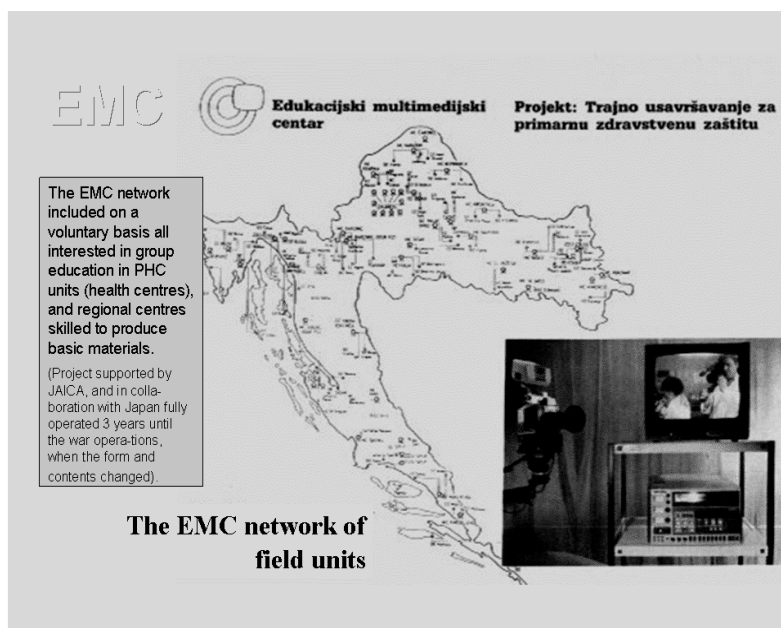
**Figure 2.** The knowledge society

For all of these problems, starting with economy, the solution is found out in creative production and use of knowledge. The problem is how the knowledge is understood and how it could be measured. Is it factual knowledge, an objective truth or proper knowledge presenting individual or group ideology? Do we need scientific knowledge or wisdom? Is heart of the problem recognising true or false results or application of what we know, or both, factual and from experiences? Today dominate measures of rigorous but formal criteria, academic or administrative competitive comparisons, more about production then about use and utilization of knowledge. As P Liessman critically observed the concept of knowledge society was transformed into a postulate of informed society ("Information age"), and consequently a necessity of life-long learning.

## Learning

Learning is by itself not a simple process of acquiring new information and remembering facts, but a complex transformation of personality and development of new ways of behaviour. Because of that it has to be acquired, it is not possible to transfer it. It is an interaction of experience and reflection, abstract conceptualisation and practice (D Kolb's model of learning, 1986). One has to differentiate training (acquiring a skill) and learning (acquiring of knowledge) and education (imparting and accepting of knowledge, but also becoming cultured). First is memorizing facts and know-how, but it needs further reflection and inter-relation with own experience, what is leading to interpretation and understanding of meaning, followed by obtaining proper attitude of mind and finally gain the whole integrity. Oversimplifying that process or interrupting it to early create disappointments. One well known related to health care was in seventies of last century, when functionalists tried to simplify education of front-line health workers, training them what needs to be done in certain conditions without understanding why ("medicina simplificada"). Many textbooks have been printed in form of cook-books. It was shown, however, that such training could be successful only when supplemented with education about rational of processes and significance on the given task for the role of health worker. The other unfortunate example is at present under severe pressure of copious information, when facts are received without context and inter-relation, what is producing a feeling of learning and knowledge, and is quite opposite, producing "half-educated" intellectuals,

insecure or not critical to suggestions, so that marketing messages could be accepted as important new knowledge.



**Figure 3.** The Educational Media Centre Network in Croatia as a support for education in primary health care

Educational goals have often to combine quite opposite capabilities and attitudes: How to become critical and trustful? How to be pro-active and thoughtful? How to collaborate with others, keep own beliefs and tolerate opposite? How to decide in emergencies or under threat of uncertainties without relevant data? How to combine scientific rigor, professional dignity and political skills? How to participate in and lead teams, developing them from hierarchical, to functional, and to interdisciplinary ones?

The content of learning is special item to be considered. New technologies facilitate approach to new information (distance learning, internet etc), but in the same time open an important question: how to escape of an avalanche of information, potentially interesting, but not necessarily useful. How to chose what is (1)valid and credible, (2)important and relevant for practice, (3)applicable and acceptable.

The scientific facts are not sufficient for their interpretation, the cultural and ethical values are necessary.

## Culture

Culture is one of the most complex expressions with many connotations. The term may be understood as just production of arts (cultural industries), or as traditional folklore, or ultimately all manifestations of social life such as customs, religions rituals, habits of association and institutions. The controversies might appear between, for instance, between national and international understandings (in search for identity), among intellectualism, spiritualism and aestheticism (as different approaches or ideologies of expected social progress), between cognitive and emotional reactions (in creation of personal style and manner).

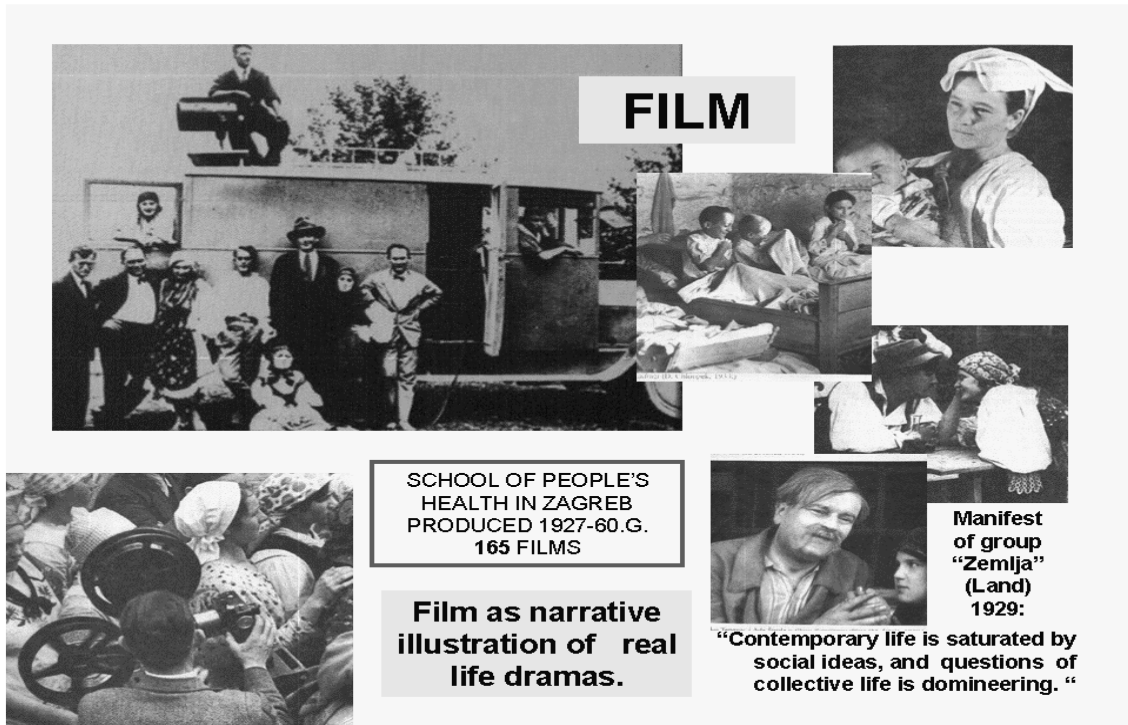


Figure 4. Film as a attractive media used in health education

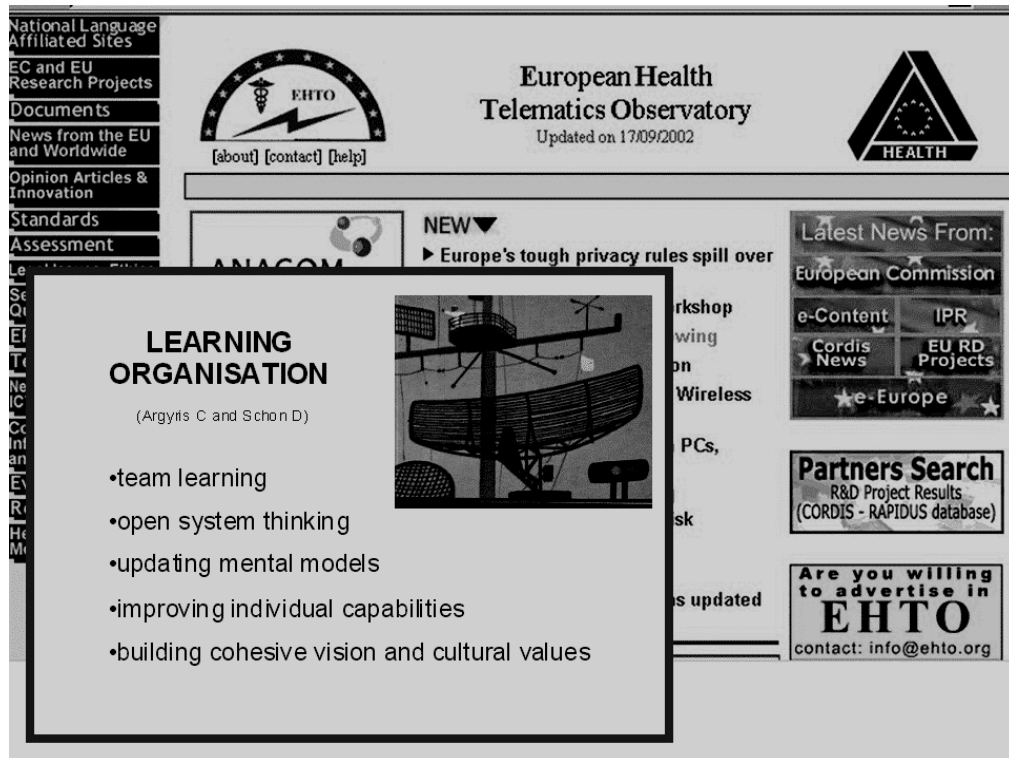


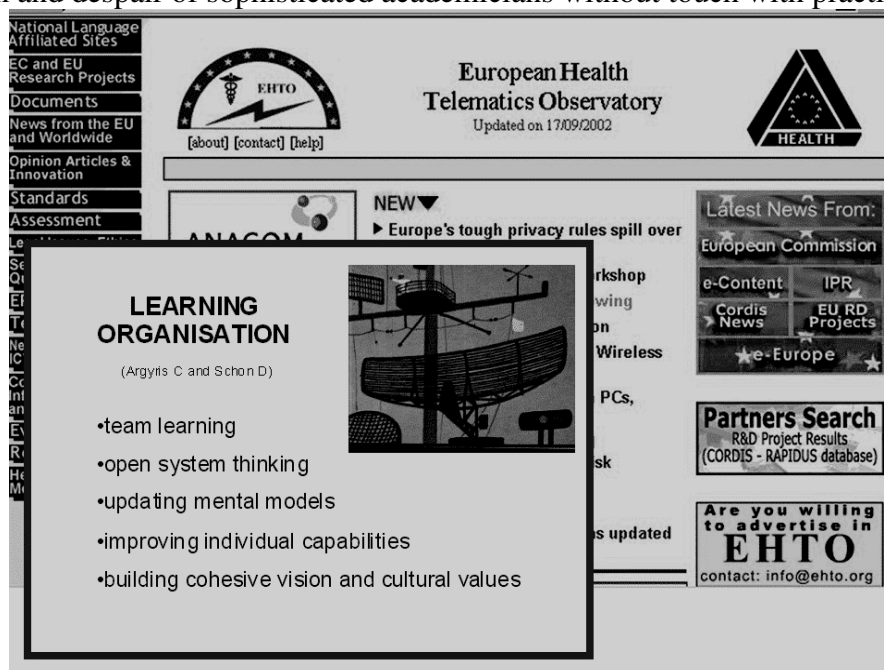
Figure 5. Education for health is important factor contributing to the development

A separate feature is identity of health culture. It is built from many layers of people's experience and beliefs, years of interaction with health and medical professionals, complementary, alternative and anti-medicine, obsolete slogans and commercial messages, lasting, persistent and resistant to change. For countries in transition a widely spread attitude that health may be sacrificed for economic development is difficult to change in believe that, contrary, health is of vital importance for economic development. It is a world-wide problem in many developing countries, collectively, as well as in families, and even individuals.

## Education and development

The different connotations exist in many essential factors connected with the role of education in development. There is not one rule and one truth to be implemented.

Therefore it is wrong to transfer and import solutions, but necessity to harmonize approaches in a tolerant way and most important to analyse not only short living policies and economic suggestion, but also cultural and ethical aspects. Learned people should not only become knowledgeable and aware of new possibilities, but also better understanding the own position, capabilities and interests. Educated personal attitude is decisive: indifference of those who know little is most hazardous, but equally dangerous are utopianism and despair of sophisticated academicians without touch with practice.



**Figure 5.** Education for health is important factor contributing to the development

## CASE STUDY: INTERNATIONAL POSTGRADUATE COURSE “PLANNING AND MANAGEMENT OF PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES”

### Introduction

From 1978 until 1996 at the Andrija Štampar School of Public Health, School of Medicine, University of Zagreb organized 17 international courses of 9 week duration. Each course was attended by between 18 to 25 participants, 358 of them in total, from 62 mostly

developing countries. The participants attended the courses were medical doctors, nurses, environmentalists, economists and other professionals, usually younger than 35, from middle level management. The courses were organized as a joint cooperative program between the governments of Yugoslavia (former) until 1989, and Croatia 1990-1996, and The Netherlands.

The course was designed to link planning and management with specific technical procedures and social functions of health workers more than theoretical considerations of techniques in planning and management.

## Course aim and objectives

The principal **aim of the course** was to train professionals in the field of planning and management of primary health care in developing countries. The course was designed to link planning and management with specific professional contents of primary health care and the understanding of social processes which play an important role in decision-making and cooperation in the field of primary health care. According to the stated aims, participants experienced in management of primary health care were recruited.

The **specific objectives** of the course were:

- To develop and support positive **attitudes** towards primary health care as a part of social development and towards the people as the main active element in the health system; to reinforce positive attitudes to rational methods in the planning and administration of services.
- To develop **skills**:
  - in analyzing and solving technical and organizational problems of health services and techniques in the judgment of alternative solutions;
  - in resource allocation and health planning, particularly development of adequate health manpower;
  - in communication, team work and leadership.
- To increase **knowledge** to be used in:
  - listing and assessment of technological and managerial problems encountered in primary health care;
  - problem-solving methodology;
  - analysis of status of health, trends in community development and health priorities, relation of health to other sectors of development;
  - orientation as to the position and involvement of the community in health care planning and practice;
  - planning and management of integrated comprehensive primary health care services tackling typical problems such as maternal and child health and family planning, prevention and control of epidemic and endemic diseases, nutrition, health education, organization of medical care;
  - health manpower planning, development and leadership;
  - monitoring and evaluation of health services and control of implementation of health plans;
  - training and research in primary health care.

## Course content

The course was organized in blocks which last on the average about one week. Every block combines theoretical parts of teaching, individual reports by participants and working group

results, practical exercises and field visits. Planning and management were linked with the contents of primary health care and actual examples, so that individual programs developed into more complex ones and finally into the whole system. The final choice of contents and order of presentation were adapted according to the needs of participants.

**Block 1 (Introductory block)** dealt with the refreshment of fundamentals of planning and management. It was an opportunity for the participants to get to know each other. Indicators for particular countries are compared and problems of the development of the policy and strategy “Health for All by the Year 2000” and “Primary Health Care” were discussed.

**Block 2** dealt with general social and economic components and conditions for the development of primary health service as well as with general social and economic aspects of planning and management. The process of policy formulation and broad programming was analyzed. The first two blocks include experiences of the health system organization and development including field visits.

**Block 3** covered questions of selecting topics of appropriate technology and development strategy. This part includes certain PHC components such as environmental problems, sanitation and communicable disease control. Field visit were included. Examples of specific programs such as endemic disease control programs were used to discuss the problem of integrating these programs into comprehensive primary health care.

**Block 4** covered the health program formulation and detailed programming. The comparisons were made between programs under different circumstances (rural, urban settings, migratory population, etc.) The relations between PHC and different parts of health services especially hospitals and specialized medical care were analyzed. Field visits and exercises were organized to demonstrate different working conditions.

**Block 5** dealt with maternal and child health, regarding measures and strategies and particularly manpower planning, training and management of PHC practice. Special attention was given to dilemmas of health manpower at the grass-root level, and to the profiles of the middle-level managers at the district and provincial level.

**Block 6** dealt with major resources, such as: (a) community participation; (b) coordination, supervision, communication and leadership; (c) health economics and management of material and financial resources; (d) mental health, health education and operation of health services.

**Block 7** covered planning and management methods as applied on different models. A model province from a developing country was used for studying indicators, problem analysis, assessment of development trends and priorities, resource allocation, organization, supplies and monitoring of services. Based on the knowledge from previous blocks, participants were taking part in a system of managerial games and exercises and evaluate the results and outcomes by real experiences from their own countries.

**Block 8** dealt with a synthetic approach to PHC from the point of view of contents of work and components as well as from the point of view of organization and management. Major problems of PHC implementation, constraints and obstacles were analyzed by working groups of participants.

At the end of the Course a **final conference** was organized during which participants presented their plans in solving actual problems of PHC in their field for the coming year.

### **Teaching/training methods**

Participant’s responsibility during the course was to participate actively in the teaching program in several ways: to conduct joint sessions, working groups and discussions and to describe problems and experiences of their country as well as to give short lectures on topics



they have experience in. According to the assessment of teachers and participants the recruitment of candidates and their active participation in most of cases was very successful. Lecturers were in a position to discuss problems with participants and not to merely give lectures. The main information blocks lasted usually 15-20 minutes and were followed by discussions and further solving of specified problems. Work in small groups of 4-5 participants was a frequent and regular form of teaching. With the aim to elaborate specific primary health care managerial problems in details, the participants were split into 3-4 working groups. Problems were presented in a form of a panel discussion. Very interesting and motivating for the participants were role playing and games (1). The participants also had a task to write the final paper, being a plan of action in PHC management in their position at home for the coming short term period. The Final Conference was held under several topics.

In order to achieve the objectives of the course, on an average, one-day visit to different institutions per week was organized. Every field visit was organized so that participants had specified tasks in observation, surveying and reporting the health care settings and functions.

For the course participants the Course Manual, consisting of ten chapters following in general the structure of the course by blocks, was edited and distributed to the participants as the handbook for the course. The manual has 470 pages and was distributed in the related teaching blocks. The course manual was reedited each year.

The participants were also provided with various materials of the World Health Organization (“WHO: Leadership development for mental health”, “Management Development for Primary Health Care”, “Primary Health Care Towards the Year 2000”, “The Health Centre in District Health System”, “Acute Respiratory Infections in Children”, “Technical Bases for the WHO Recommendation on the Management of Pneumonia in Children”) as well as from almost every institution they visited.

The basic concept and terminology used in the course were in accordance with the terminology of the World Health Organization: “Managerial process for national development within the strategy: Health for all by the year 2000”.

## **Evaluation**

The evaluation process includes a formal evaluation organized at the end of each training block and a more detailed one at the end of the course. Block evaluation consists of anonymous answering to standard questionnaires (based on FAO questionnaire, recommended by a Holland group of experts in 1981 and followed since) followed by oral evaluation in which all participants in turn comment the last block and suggest changes to be made in the blocks to follow. Final evaluation of the course follows the same procedure, only using a more detailed questionnaire.

### **Evaluation of the 1994 course**

As an example of the evaluation regularly used in the International Course “**Planning and management of primary health care in developing countries**” here is presented part of the official 1994 course Report related to evaluation.

#### **Final evaluation questionnaire 1994**

##### *1. The size and the composition of the group*

17 out of 19 participants assessed the size of the group to be just right for the purpose of the course, 1 participant found it to be too small and 1 big. Regarding the composition by

professional qualifications, most answers are also in the category of “just right”, 11 answers, but 5 of them answered the group was “too mixed” and 3 “not mixed enough”.

#### *2. The contacts during the course*

Practically all the answers to the questions on contacts are positive, both regarding professional and informal ones. It is interesting to note that the participants of this year course assessed their contacts (in both categories) as the same positive while in the last year course the contacts within the participants were less positively assessed than the contacts with the staff.

#### *3. The duration of the course*

Most participants evaluated the duration of the course to be just right, both with regard to the program covered (10) and with regard to their own requirements (11).

#### *4. The program of the course*

All the participants assessed the course program to be well balanced, neither too rigid nor too lax. Most of them were satisfied with the balance between free time and amount of homework assignments, but 9 of them assessed to have had not enough free time and only one to have had too much of free time.

#### *5. The relevance of the course*

In this section of the evaluation questionnaire the overall relevance was assessed as well as the relevance of lecture notes and manual, field visits and the equipment used. Most of the participants rated the course as relevant (2 “very high”, 10 “high”, 6 “acceptable” and 1 “low”). The average was 3.7 on the scale from 5 - very high to 1 - low. The answers regarding some specific aspects of the course also fall in the same categories.

Regarding the training topics, the participants most frequently mentioned the following subjects as the ones most useful for their future work: comprehensive diagnosis, community participation, management techniques, resource allocation, health manpower development and health education. It should be noted that, in answering this question, they listed as much as 19 subjects. 9 subjects were mentioned as not so useful for their future work, but almost all of them only by one participant. This indicates that the choice of topics was very well balanced and matches the interests of the group members.

#### *6. Lectures and practical*

10 participants evaluated the theoretical level to be just right, 7 too high and 2 too low. 17 of them also judged the practical level to be right (neither too complicated nor too simple). For 2 practical were too complicated. The share of both theoretical lectures and practical work was assessed as appropriate, and accordingly, the time available for each of these training forms was perceived as balanced.

#### *7. The teaching methods/techniques*

The participants, when asked to assess to what extent had individual teaching techniques/aids been effective in contributing to increase knowledge, insights and ideas, ranked the following ones as the most effective: field trips, discussions, case studies, practical work.

Most or all of the lecturers were perceived as responsive, stimulating participants' initiative, using their experiences and prepared to discuss about what they said.

#### *8. Organization and facilities*

The administrative and secretarial support was assessed as very good (5) good (7) and satisfactory (6) and, with only one participant assessing it as unsatisfactory.

The average rating for the lecture/meeting rooms was 4.1, i.e. between very good and good; the average rating for the quality of accommodation was 3.3.

Lunch was organized in the School restaurant, as well as dinner in the first week upon arrival. After that, money for dinner was given to participants in order to give them more choice to prepare it according to their own wishes.

The organizers provided the participants with all the relevant information on cultural and sporting events in the city. A guided city tour was organized as well as the visit to the Croatian National Theatre. Participants had the opportunity to play table tennis at the School premises. Various other forms of social activities were also going on, such as the international dinner, dances, parties, etc. as usual, but most of participants expected more.

### **Experiences and proposals for the 1994**

A general observation for this year's Course was that the course corresponds to the needs formulated by candidates and, on the other side, the group composition is responding to the policies, objectives and methods of work announced in the course.

1. The main orientation of the course to the middle level management is internationally recognized as one of the most important strategies for the implementation of policies of Health for All and strengthening of Primary Health Care. The World Health Assembly has stressed the district action programming as one of the essential elements in national health development, and this is exactly the policy followed by the course in Zagreb. This is well reflected in the criteria for the selection of candidates, course objectives and type of training activities during the course.

2. The essential influence of the type and kind of candidates was evaluated several times before. This year the candidates were on a good professional level and were a very motivated group. All the group members were participating very actively, which was achieved through different types of active assignment, field and group work, exercises and structured round table discussions, as well as through individual contacts with teachers and institutions of interest.

3. The general schedule of the course seems to be adequate. The course is very concentrated and requires maximal effort from every participant. The printed manual has proved to be of great help.

4. The participation of foreign resource persons has again proved to be very satisfactory (J. Eshuis, from the Royal Tropical Institute in Amsterdam, N. Sartorius from the World Health Organization, Zuhai Amato from Turkey, and P. Reitmaier from the University of Heidelberg, Germany). A tradition of inviting guest teacher and resource person from developing countries was continued also this year. This practice to have the firsthand experienced expert from developing world as well as to continue the practice to inform and activate the World Health Organization and other international organizations to support the course in proposing candidates, following them, helping in evaluating the course, and actively participating in course performance and cooperation among similar training institutions is viewed as very useful. For that reason, a proposal for further participation of teachers from developing countries is forwarded (Annex 4).

5. The World Health Organization, The Royal Tropical Institute in Amsterdam, the Ministry of Science and Technology and the Ministry of Foreign Affairs of the Republic of Croatia were of great help in informing and recruiting potential course participants. With their help the number of applicants was bigger than expected due to political situation in this part of Europe. The Ministry of Health of the Republic of Croatia was very ready to take the sponsorship of the course.

6. This year close cooperation with the Zagreb International Fair continued with organization of panels and practical at their premises and this was a great opportunity to practice the assessment of world medical technology.

7. Missing participants from Americas, which probably happened mostly due to shortage of time between announcement and the beginning of the course, was regarded by other participants as failure of the course organizers.

### **List of final papers, 1994 Course**

#### **Group A: *Organization and management of primary health care* (Wednesday, July 20, 1994, 9.00)**

1. Adeolu Oluseun Olufowobi, Nigeria: Development of an efficient village health system in Nigeria
2. Ismail Ndifuna, Uganda: Improving PHC activities in Para-village, Mpigi District
3. Kevser Vatansever, Turkey: Strategies for chronic diseases management at health unit level in an urban area
4. Yandie Samuel Kanu, Sierra Leone: Improvement of the district health team
5. Nikita Bulka, Albania: Actualities on rehabilitation of PHC in Korca District

#### **Group B: *Environment and nutrition* (Wednesday, July 20, 1994, 11.30)**

1. Avirmed Buzmaa, Mongolia: Improvement in water supply and sanitation in Mongolia (1994-1995)
2. Bunchuai Siriliang, Thailand: Nutrition in PHC of Thailand
3. Barbara Naomi Zimba, Zambia: Malnutrition and pregnancy wastage in Zambia

#### **Group C: *Community participation and health education* (Thursday, 21 July, 9.00)**

1. Lina Cabel, Philippines: Partnership approach for women's health in region VIII, Eastern Visayas
2. Rosefita Padilla, Philippines: Community health through participatory action research
3. Helen Rivera, Philippines: People empowerment and participation through household health education
4. Riadi, Indonesia: Community action for health in Indonesia
5. Leyla Karaoglu, Turkey: A research proposal for evaluation of existing school health education and its related effect on high school children

#### **Group D: *Special programmes in primary health care* (Thursday, July 21, 1994, 11.30)**

1. Zaddy H.M. Kibao, Tanzania: Evaluation of malaria in Dar-Es-Salaam
2. Angelina Kakooza-Mwesige, Uganda: Report on the CDD/ARI support supervision of Eastern region - B-Uganda
3. Betty Gonza Ntende, Uganda: Family planning services in Uganda Grain Milling Company
4. Omur Cinar Elci, Turkey: Evaluation of the benefits of occupational health units in garment industry
5. Zoe Antoniou, Cyprus: Caring for the elderly - A case study and proposals
6. Bishnu Prasad Bhandari, Nepal: The Britain-Nepal medical trust - its role as NGO in Nepal

### **Block evaluation (1994 course - weighted averages of answers to questions by training blocks)**

After each block the course participants were asked to evaluate the teaching/training process: what experiences they gained, how a new knowledge could be relevant to their practice and how much the training material was useful for them. They firstly answered anonymously to 8 questions and than they presented, what they wish, their comments in plenary (it was usually used the round technique). Their answers could be from 1 (the worse) to 5 (the best). In Table 1 the results of the 1994 course as group averages are presented. 1994 course was attended by 19 participants.

**Table 1.** 1994 course block evaluation (weighted averages of answers to questions by training blocks)

<b>QUESTIONS /TEACHING BLOCK</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1. How do you rate the amount of time made available for this block?	2.9	2.5	3.4	2.9	2.7	2.9	3.1	3.0	3.2
2. How do you rate the instructional level of the sessions for this block?	3.2	3.3	3.0	3.1	3.5	3.1	3.3	3.0	3.2
3. How do you rate the balance between lectures and discussions/practical?	3.3	3.6	3.4	3.7	3.8	4.0	3.8	3.8	3.3
4. How do you rate the quality of the presentation of the sessions for this block?	3.5	3.6	3.4	3.7	3.8	4.0	3.8	3.8	3.3
5. How do you rate the value of the discussions for deepening your understanding of this subject matter?	4.3	3.9	3.9	3.8	3.7	3.9	3.9	3.7	3.7
6. How do you rate the importance of this subject matter for your own work?	3.9	4.0	3.9	4.3	4.2	3.9	3.8	4.0	3.9
7. How do you rate the relevance of the background material to the subject matter treated?	3.7	3.6	3.5	3.4	4.0	3.6	3.4	3.6	3.4
8. How much, in your opinion, did the sessions on this block improve your knowledge and skills?	3.4	4.0	3.9	4.0	4.1	3.7	3.8	3.9	3.8

### **International consequences of the Course**

The International postgraduate course “Planning and management of primary health care in developing countries” was organized for 17 consecutive years (from 1978 to 1996) and attended by 358 participants (Table 2). Some countries were very well represented. Ethiopia systematically sends almost each year one participants from health province and one middle level manager from the Ministry of Health (22 participants in total) (3). Very good influence of the Zagreb course to the development of health services could be seen in the case of Iran. 20 participants trained in Zagreb after return home organized several training courses of the same curricula for middle level managers in Iranian provinces and districts. 2008 Mojgan Tavassoli reported the success story of the Iranian primary health care in the Bulletin of the WHO (4).

**Table 2.** Participants in the international postgraduate course “Planning and Management of Primary Health Care in Developing Countries by countries 1978-1996

County	Number of participants per country	Total number of participants
Ethiopia	22	22
Tanzania, Thailand	20	40
Iran	19	19
Turkey	18	18
Philippines	17	17
Indonesia, Uganda	15	30
China	13	13
Nigeria	11	11
Ghana, Kenya, Zambia	10	30
Bolivia, Ecuador, Iraq	8	24
Egypt	7	7
Bangladesh, Sri Lanka	6	18
India, Yemen, Zimbabwe	5	15
Cyprus, Gambia, Liberia, Mongolia, Sierra Leone, Somalia	4	24
Afghanistan, Albania, Cameroon, Colombia, Jordan, Lybia, Mali, Mauricius, Pakistan, Panama, Vietnam	3	33
Chile, Croatia, Cuba, Djibouti, Eritrea, Lesotho, Nepal, Nicaragua, Sudan, Syria	2	20
Argentina, Burma, Burundi, Bosnia and Herzegovina, Guatemala, Guinea, Jamaica, Malaysia, Mexico, Mozambique, Nive Island (New Zeeland), Papua New Guinea, Peru, Seychelles, St. Vincent, Tunisia, Zaire	1	17
Total number of countries: 66		Total number of participants: 358

Appropriate representation we had in the cases of Tanzania (20 participants), Thailand (20 participants), Turkey (18 participants) and Uganda (15 participants). For some countries (China – 13 participants; Nigeria – 11; Indonesia - 15), in spite of large number of participants we can not expect bigger influence because of their relative under representation. From some countries only 1-3 participants attended the Zagreb course (Argentina, Burma, Burundi, Guatemala, Chile, Panama, Mauritius, Nicaragua, Malaysia and others).

## EXERCISES

### Task 1. The “learning society”: what and how? Problem solving and learning on experience

#### *THE NEXT SOCIETY WILL BE A KNOWLEDGE SOCIETY*

(P. Drucker, The Economist, Nov 1, 2001) (2).

#### **Your task: start or improve work in your “learning organization”.**

“Learning organization” is a more or less stable group of small number of colleagues, who regularly meet to reflect on the experience in practice or data from other, steady and carefully chosen sources (better not directly from well known experts, but from documents, journals and also through new technologies such as kinematics, distance learning, tele-education, Internet (Web-based training). Besides, important is horizontal communication and partnership with users (patients, students) and public media. They should know what you are working and you should reflect on their experiences.

Organizational learning is based on the team learning, open system thinking, stimulating individual capabilities, building cohesive vision and cultural values (see D. Schön, C. Argyris) (5,6,7).

#### **Consider attitudes the group should accept:**

- People need to understand the purpose and meaning of what they learn. Enrich functionalist Task analysis of the group: deliberate role, functions, and tasks without further elaboration. If it is difficult to start, recommend that reviewing daily professional activities of group members;
- Recognize intellectual (expert, cognitive) capital and discuss the road from facts to wisdom. Accept that knowledge could be an object of management (Knowledge Management, KM);
- Admit the importance of capability in performing health care, because knowledge alone is not sufficient. The capabilities of group members might be different and this is beneficial for group learning. All capabilities like also all factors of intelligence might be of equal value. Capability is as intelligence a balanced ability in solving problems at work and in life. However, the importance of emotional and social intelligence is particularly large for health professionals;
- Agree to survive the flood of information, escape playing around with vague and ambiguous terms and “interesting” but not relevant information. For critical choice of readings one may use EBM (Evidence Based Medicine) criteria: the content should be (1) valid and credible, (2) important and relevant for practice, (3) applicable and acceptable.

#### **It might be useful to refresh understanding of learning processes:**

- Differentiate Factual knowledge (what: consciously reproducible), Procedural knowledge (how: largely unconscious, “instinctive”, forgotten experience), Personal knowledge (assimilated into own cognitive processes);
- Case analysis and problem solving (**PS**): definition and analysis of the chosen problem, generation and comparison of several alternative solutions, application and evaluation of consequence, and finally most important: recapitulating what we have learned;
- Experiential learning (**EL**): especially important in postgraduate and continuous learning. Major dysfunction is separating “theory” and “experience”.

**Effective learning** is not just memorizing facts. Other important conditions are:

- involvement in practice and group reflection about cases and experiences;
- choosing *multum* instead *multa*, especially when learning skills;
- stimulating creativity (e.g. by trying out suggested new techniques, actively participating in research, playing problem-solving games, by writing articles etc.);
- besides technical, reading and other books (not only newspapers, and not only journals);
- practicing physical activity and regular relaxation;

The criteria for assessment of your plans to improve the “Learning organisation”

**You have to include:**

Regular work, at least one hour each month;

Involvement a small group of 4-6 (8) members with similar interests and possible different experiences;

Securing steady input of technical information;

Stress on essential process of group reflection on specified actual cases;

Implementation of new knowledge into practice is decisive criterion in evaluation.

What you have learned during this exercise?

Reflect on your experience and discuss it with colleagues.

## **Task 2. Development of a teaching/learning module**

A teaching/learning module is an element of teaching and learning treating a defined problem in health practice and aiming to solve it by increasing knowledge and experience of involved (health) professionals, stimulate modification of their attitudes and changing their behaviour. It is usually a part of a larger educational program or of continuing learning.

**Your task: Design a one-week seminar to improve management of primary health care teams.**

Consider format for constructing the teaching/learning module:

- Identify what you should change: choose a concrete problem out of actual practice in a setting members of the working group know. Use individual reports or “brain storming” of participants;
- Estimate possible improvements feasible under given conditions (one week of organized teaching/learning);
- Define educational objectives: overall and specific regarding knowledge, skills and attitudes;
- Choose title of the module (it is best to be in form of a question and easy remembered) –it will be probably later revised several times;
- Write short introduction describing rationale;
- Choose the target group of participants (students), particularly those from whom one may expect to implement what was taught;
- List tentative subject contents;
- Discuss appropriate teaching/learning methodology: it should be regarded as a whole dynamic way, not just a list of teaching/learning forms. Learning should be active and task-oriented, a kind of learning by doing. The seminar itself should demonstrate what is recommended as methodological approach. Sometimes a short lecture or description of a case is a good starter. The most important is to be realistic and



available time has to be considered. It is not recommendable to cover by information a vast territory without planning time to for “digestion” and reflection about relevant issues;

- Think over how will be assessed what students have learned and how they could demonstrate their capacity to implement it in practice;
- Allow time for evaluation and answer of the group to the question: What we have learned.

#### **Solve logistics and organizational problem:**

- Estimate costs and find the way they are covered;
- Find premises and places for field work;
- Provide and check necessary equipment;
- Make certain that teaching materials are ready and available;
- Think about accommodation and provisions, entertainment and free time of participants;
- Solve formalities: invitations and information of those concerned, invitation of celebrities, publicity, catering etc.

#### **Format of presentation**

- Written rationale and title
- List of specific objective and how they will be assessed
- Schedule of teaching activities by contents, form and time
- Oral explanations, comments and justifications

#### **Criteria for assessment of your result**

- Are the objectives relevant to the identified problem and do the solution follow contemporary tendencies in human resources development?
- Is the way of assessment related to objectives?
- Do contents and methods of teaching/learning correspond to objectives?
- Is the teaching/learning schedule realistic and feasible?

#### **What you have learned during this exercise?**

Reflect on your experience and discuss it with colleagues.

### **Task 3. Supervision and control are important parts of teaching and learning**

**Your task: Read the description of an event from practice, answer and discuss the following questions and others you guess as important.**

*The young health technician has come back from his first supervisory tour. He complained to the medical officer that community is very unhappy with the way in which field workers are collecting data and advising people how to improve hygienic conditions in their households and preserve food. Their behaviour will have repercussion on the whole programme of rural sanitation in this region, he states. Several people complained that damage was done to smoked meat and other food conserved for winter. Sometimes quite large "samples" have been taken and some rotten parts have been destroyed instead used to feed animals. He asked the medical officer to intervene.*

*One of experienced field workers meets the doctor in charge the next day. He is a mature person and works in that locality a long time. He is well-known to everybody, people like him and give him sometimes small gifts consisting of their home products. He*

*states that some of people do not yet understand the meaning of new sanitary measures, but are following all requests because they are nervous and afraid due to recent outbreaks of food poisoning and trichinellosis. He complains that the young supervisor, although coming from the higher schooling, does not know how to communicate with people. He has seen several families and apologised for bad work of field workers who do not only explain what has to be done, but also inspect, take samples and destroy immediately rotten food. He asked medical officer against the new supervisor who is not only inexperienced, but also arrogant.*

*Doctor promised to organise a meeting to discuss situation.*

**Discuss in the group the following and other relevant questions:**

- Is such case an exception or a typical case?
- What is the essential cause of described tension?
- Whose side you think doctor should take?
- Is a general meeting the best way to solve the problem?
- Who is actually responsible for described conflict?
- How you would solve a similar case?

**The criteria for assessment of your result:**

1. Answers to questions, explanation and justification of conclusions;
2. Special attention and weight will be given to the last two questions.

**What you have learned during this exercise?**

Reflect on your experience and discuss it with colleagues.

## REFERENCES

1. Folmer HR. Simulation game in health resource allocation. Health Policy Plan. 1987 2(2):189-90.
2. Drucker P. The next society will be a knowledge society. The Economist, Nov 1, 2001.
3. Zebec M, Vuletić S, Budak A (editors). Škola narodnog zdravlja „Andrija Štampar”:70 godina rada na promicanju zdravlja hrvatskog puka (Andrija Stampar School of Public Health: 70 years of promoting health of Croatian people). Zagreb: Ganadalf d.o.o. 1997.
4. Tavassoli M. Iranian health houses open the door to primary care. Bulletin of the WHO. 2008, 86(8):585-6.
5. Argyris, C. and Schön, D. (1974) Theory in practice: Increasing professional effectiveness, San Francisco: Jossey-Bass.
6. Argyris, C., & Schön, D. (1978) Organizational learning: A theory of action perspective, Reading, Mass: Addison Wesley.
7. Argyris, C. and Schön, D. (1996) Organizational learning II: Theory, method and practice, Reading, Mass: Addison Wesley.

## RECOMMENDED READINGS

1. WHO. The World Health Report. Shaping the Future. Geneva, WHO, 2003.
2. Winch Ch. The philosophy of human learning. London; Routledge, 1998.

3. Morin E. Seven complex lessons in education for the future. Paris; UNESCO, 2001.
4. Liessman KP. Theorie der Unbildung. Die Irrtümer der Wissensgesellschaft. Wien; P Zsolnay Verlag, 2006.
5. Eagleton T. The idea of culture. London, Blackwell Publ, 2000.