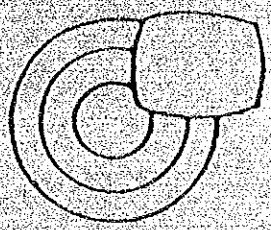

Project: "CONTINUING EDUCATION FOR PRIMARY HEALTH CARE"

EDUCATIONAL MULTIMEDICAL CENTRE

V I D E O J O U R N A L, No. 1-2/87

T r a n s c r i p t i o n

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T R A N S C R I P T I O N

A U D I O	V I D E O
Ž. Jakšić	Želimir Jakšić
This is the first issue of the video monthly for continuing education for primary health care. It is a part of the new system of informing, education and professional education, which is supposed to be active, so that the first part of it has been entitled FORUM. Any questions or opinions you may wish to express are very welcome.	EMC premises
As a system, EMC has been founded within the project of continuing education for primary health care, resulting from cooperation of our and Japanese government.	
The project is operatively headed by the SECRETARIAT, in which all the organisational and financial problems are being dealt with.	members of the SECRETARIAT
EMC also has a video and a computer centre.	
Now you can see the group which created this issue.	EMC members
Contact us for all the problems you may be having as regards the equipment you are using. All the details and names you may please find on the cover of this tape. Please, do not forget that all of us are parts of the same system - write to us and contact the following address :	EMC premises

EDUCATION MULTIMEDIA CENTRE
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A U D I O

V I D E O

CURRENT ITEMS

Mladen Radmilović, Chairman of the Republic Committee for Labour, Health and Social Care :

Mladen Radmilović
studio

There have been questions referring to the position of health, health care and health insurance in the next year. It is difficult to give a precise reply at the very moment, because a number of measures have not been adopted yet and also their implications and effects in the economic sense are not completely clear yet. However, taking into consideration the significant ecenomy system and economic measures, we can say that the position of health care and other social services - including what is usually referred to as general and community consumption - is expected to be more difficult than in 1986. The position of economy will be more difficult and it is therefore understood that also the position of social services leaning on it will be more difficult.

First and the basic is the fact, that the Federal Rezolution plans for the social services' resources to increase by the 10 % lower rate. It is somewhat more severe than we had last year and than we have expected to have in our Republic. The Act on Total Income on the other hand changes the basic income from which funds for social services (including health care) are raised. The Act on Sanation and Liquidation of firms changes the position of health institutions, because they are now losing

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some of the advantages they used to have.

Finally, we must point out that the application of real depreciation and reappraisal will influence the deterioration of funds that health institutions have at their disposal.

All this means that both in the following year and in the years to come, we shall have to think about rationalization within health institutions (and among them) and also act rationally towards the expenditures and society possibilities, including the rights of our insured persons. Generally speaking, these are the elements which deserve to be taken into consideration more carefully, if we wish to prevent the possible deeper deterioration of the whole situation (than that caused by economy measures).

THE ANNOUNCER :

The explanation of the new statement-of-account system is given by Mr Drago Mlinarević at the end of this video monthly.

EXPERIENCES

ANNOUNCER :

the village of ŽMINJ

In every video monthly issue, we shall present an example from the practice. This time

A U D I O V I D E O

we have chosen an example of programmed continuing home treatment of chronically ill patients which move with difficulties. All you are about to see has been shot on an amateur basis in Žminj health care station (in the central part of Istria, SR Croatia) at the beginning of this year. The Žminj local community is inhabited by 3282 people who live in 1180 families in 105 hamlets. 17% of people are older than 65. There are about 300 patients moving with great difficulties, or not being able to move at all.

In GP dispensaries of the Žminj health care station, there are 2 GP teams and a dentist' s team, providing complete health care for all the inhabitants of the local community.

The personnel has succeeded in developing an institution which makes it possible for them to carry out curative and preventive health care forms every day. All the basic laboratory equipment and staff is at their disposal. Their daily and weekly activities are carefully planned throughout the whole year.

Let us see short outlines of the organized treatment carried out in that health care station for a number of years already.

Bruno Mazzi, M.D., specialist in general practice : Presentation of the work with patients

The treatment fo chronically ill patients is organized in such a way that they are invited for a check-up in the outpatient unit once a month. Two times a year they undergo a complete medical examination. The ones who cannot move (120 in my outpatient unit and 180 in

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second outpatient unit) are included into the home treatment system. In my outpatient unit, the home treatment schedule is done on Wednesdays and my colleague in the second outpatient unit does it on Thursdays. Home treatment is a programmed treatment system. The physician visits the patient at least once in three months, whereas a nurse visits him every month. The physician mainly revises the previously estimated therapy, but he also examines new developments in the course of the disease and undertakes the necessary measures. The nurse does the regular control, measures blood pressure and informs the physician on any change that may occur. The patients' family - or the ones living with him - are educated to come to the outpatient unit to take the prescription (which is already there, waiting for them) in case they run out of medications. Every month, the nurse sees to it that the physician should not forget to write prescriptions for all such patients. The prescriptions are then sorted out into the patients ' files.

Marija Zec, high-school educated nurse :

Here you can see the files of home visits and home treatment. Every visit is registered in special forms. Every family has its own file, including the social and health registry. There is a registry for every sort of health care, so that we have evidence of everyting that is done within home treatment programmes.

in the outpatient unit, by the files

A U D I O	V I D E O
The village of GRŽINI	
B. Mazzi, M.D.	At the patient's home
This patient lives on her own. She was born in 1909. She suffers from myocardiopathy, atherosclerosis, obesity...she has no diabetes. Please, give me a pencil (talking to the nurse). This is higher than the last time, isn't it... last time your blood pressure was much better. Take the medicines reguleryl, please...those are for circulation, in bottles...take one in the mornings and one in the evenings. Those for blood pressure should be taken three times a day.	
The patient :	
Well, I have been taking them, really I have. I really cannot take so many of them in a single day.	
Mazzi :	
Well, my lovely, it is too little, that's why your pressure is so high. You have a really high pressure. You ought to be taking a bit more of this stuff.	
The patient :	
Two a day, indeed, I am taking them, mornings and evenings.	
Mazzi :	
It is too little. You have to be taking them in the morning, at noon and at 6 o'clock in the evening. Not before you go to bed. It's no use taking them before you go to bed, you should be	

A U D I O	V I D E O
taking them while you are still on your feet, while you are moving. The pressure is higher then, you know.	
The patient :	
Indeed, I take it at 5.	At the patient's home
Mazzi :	
Exactly, that is the time when you must take the last one. At noon - the second one.	
Nurse :	
Be careful about your food. You should not eat pork, no salt...	
The patient :	
Oh no, no pork at all...	
Nurse :	
No bread, no "pasta", so that your weight should reduce a bit.	
Mazzi :	
Take the second at noon and the third at 6 o'clock in the evening. These here - take one in the morning, one in the evening... after breakfast and supper, for circulation, but they also decrease the pressures. These are for your heart. These should be taken in the morning. You mustn't forget that!	
The village of ROJNIĆI	the village of Rojnići
Mazzi :	
Our oldest patient lives here. He was born in 1892. A month ago, he had bronchopneumonia, with severe bronchitis. After overcoming the	at the patient's home

crisis, he is getting on quite well.

The patient :

I have pains in my back...

Mazzi :

You still feel the pain?...It' s O.K., it's getting better...and it was almost a matter of departing from this world... but this time, we did quite nicely, haven't we?

The patient :

I would have never got better in a hospital.

Mazzi :

You say, not in a hospital?

The patient :

Here, I had a completely different care than I would have had there.

Mazzi :

Of course. That is why we have left you to stay at home.

Nurse :

Your pressure is high today. You have 310.

Mazzi :

It is very high. You will have to take drugs against high pressure. Your pressure got to high after pneumonia. You ought to be careful to avoid stroke. You must take the medicine regularly. Hav you got any of

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these at home? Have you run out of them? Not any left?

Member of the household :

We have no more capsules. We still have the thing against cough.

Nurse :

You will have to take the medicines, for the heart and for the pressure, 3 times... take care of yourself.

The patient :

Won't it get me down? I will take them if they are any good for me, but if it happens?

Nurse :

Those won't get you down. See how nicely you recovered this time. If it were not for medicine, it would have been "Adio, Martin!"

The patient :

Sure, if it were not for the medicine... those little white ones, they helped me recover...

THE ANNOUNCER :

As the conclusion to this item, we may quote the data presented in the *Proceedings* of the Days of Primary Health Care in Labin in 1983 :

the cover of the Proceedings

Owing to the dispensary methods of work being carried out in the past 10 years in Žminj,

the map of Istria

A U D I O

have contributed to the decrease of the number of hospital admittances in chronically ill patients (from 280 to 60 in a single year). The number of emergency calls for home visits has decreased from 700 to 200 yearly. The number of patients coming to the outpatient unit daily has decreased from 65 to 35, but the number of programmed visits has increased from 60 to 750.

Is it possible for the primary health care teams in other parts of the country to accept this kind of treatment of patients who are difficult to move?

V I D E O

AN ISSUE

by Mladenka Vrcić-Keglević

HYPERTENSION

1. First examination
2. Procedure
3. Treatment
4. Health Care Programmes

Procedure of solving the problem :

VIDEO Presentation of the problem
Questionnaire
Discussion
VIDEO Discussion of Specialists
S T O P Your Comments
VIDEO Round table
NEW TAPE Conclusions

A U D I O

V I D E O

HYPERTENSION I

First examination
Presentation of the problem

THE ANNOUNCER :

Although the example has been taken from the practice, any resemblance to any person is merely coincidental.

You will see three different approaches at the first examination of the person suffering from high blood pressure. Please answer these questions :

1. Hypertension type
2. Approach to the patient
3. Examination
4. Pressure measurement 3 times
5. Therapy
6. Scaring the patient
7. Consulting the specialist

APPROACH A

outpatient unit

PHYSICIAN

Good morning. Are we seeing each other for the first time?

PATIENT :

Yes. We have moved to this part of the town recently. A visiting nurse comes to see my grandson. I haven't been feeling well, so I

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asked her to measure my blood pressure.
It was high and she directed me to you.

PHSYCIAN :

We shall measure it now. Put your sleeve
a bit up. Have you controlled your blood
pressure earlier ?

PATIENT :

No, not in the last 10 years.

PHYSICIAN :

Have you got any complaints?

PATIENT :

Yes, it is the headache.

PHYSICIAN :

You say headache...Is it any different now?

PATIENT :

It hurts very badly, here at the back of
my head.

PHYSICIAN :

Anything else?

PATIENT :

I have problems wirh my bladder.

PHYSICIAN :

For how long have you been having them?

PATIENT :

Oh, for years already, since I delivered my
first baby. I delivered it in a village. I don't
know whether it was a cold... I haven't paid much

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attention to it. I wore warmer clothes and drank teas.

PHYSICIAN :

So that means, there was no therapy.

PATIENT :

No. Now I urinate a lot and very frequently.

PHYSICIAN :

Tell me, did anyone from your family have increased blood pressure? Yours is rather high.

PATIENT :

I don't remember that.

PHYSICIAN :

Has anyone had a stroke or heart attack?

PATIENT :

No.

PHYSICIAN :

You say you urinate a lot. How frequently?

PATIENT :

Every 2 to 3 hours, if I can make it for so long.

PHYSICIAN :

Do you feel thirst?

PATIENT :

Yes, very much.

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PHYSICIAN :

Do you smoke?

PATIENT :

No.

PHYSICIAN :

What about your appetite?

PATIENT :

It is poor, very poor.

PHYSICIAN :

Have you got difficulties with your going to the toilette?

PATIENT :

Yes, sometimes I don't go to the toilet for 5 to 6 days.

PHYSICIAN :

Could we measure blood pressure once again? Then I shall examine you.

THE ANNOUNCER :

During the examination it turned out that body weight of the patient was 57 kg, blood pressure 220/120 mmHg, i.e. 29/17 kPa, pale conjuctives, ictus in the 6th intercostal space 1 cm out of the medioclavicular line, II tone above the aorta emphasized, no murmurs. Puls 86/min, lumbal succussion positive, pulmo-abdominal auscultation of carotide and femoral venes and perifpheral pulsation palpation normal.

A U D I O	V I D E O
PHYSICIAN : Please, sit down a bit closer to me now. That's fine. I am going to examine your eyes now, please look still, in the direction towards my ear. I will examine one eye at a time...be still...once again...O.K. Let us go to the nurse now. She will take your ECG and examine your urine.	at the outpatient unit
Urine proteins ++ ECG, hypertony and left ventricle strain FUNDUS, hypertonic retinopathy II/III degree	
PHYSICIAN : Your blood pressure is considerably high. You will now proceed to the laboratory for some tests. Besides, you will start taking this medicine 2 times one pill daily. After that, come again for a check-up. Here you are. Good bye.	
The patient was directed to the following laboratory tests : sedimentation, complete blood count, urine, blood glucose, creatinine, sodium, potassium.	
APPROACH B	
PHYSICIAN : Good morning. Sit down, please. Tell me what is your problem.	at the outpatient unit

A U D I O V I D E O

PATIENT :

It is... I have high blood pressure. A nurse used to come to see.my grandson and she measured my blood pressure and told me to go and see you.

PHYSICIAN :

Put your sleeve up and we shall measure it. It is 220/120. IT is rather high. Have you measured it earlier?

PATIENT :

No, not for about last 10 years.

PHYSICIAN ;

Did you have high blood pressure before that time?

PATIENT :

No, no.

PHYSICIAN :

Did you have anything else to complain about?

PATIENT :

Headaches...

PHYSICIAN :

Headaches... since when?

PATIENT :

Since I was young.

PHYSICIAN :

Since you were young - it means that they are nothing new to you.

PATIENT :

No, nothing new.

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PHYSICIAN :

Is there anything else?

PATIENT :

Yes, with my bladder.

PHYSICIAN :

What kind of complaints do you have about your bladder?

PATIENT :

I urinate a lot, and frequently. Besides, I feel as if somethings stings me while I am urinating.

PHYSICIAN :

O.K. Now I will give you an injection so as to decrease your blood pressure. From tomorrow on, you will take these tablets 2 times a day - they are also supposed to decrease your blood pressure. As regards stinging when you urinate, I will prescribe tablets which you will be taking 10 days, two in the mornings, two in the evenings and the stinging sensation should disappear afterwards. As for the blood pressure itself, you will se a specialist in internal medicine, who will find out the origin of it. Here is the filled and signed form you will give him. Here you are. After that, please come here again with the findings,

APPROACH C

at the outpatient unit

PHYSICIAN :

Good morning. Sit down please. Is this the first time I see you?

A U D I O V I D E O

PATIENT :

Yes, the first time. We haved moved in to this part of the town recently. A visiting nurse comes to see my grandson ... I haven't been feeling very well lately, so I asked her to measure my blood pressure. It was high and she told me to go and see you.

PHYSICIAN :

What exactly is the matter? What do you mean you haven't been feeling well?

PATIENT :

Headache...and dizziness.

PHYSICIAN :

Since when?

PATIENT :

Since my young days. I did not pay much attention to it then...I would take some pills and it would go away for a while... and so on...

PHYSICIAN :

Are the headaches more frequent and different now?

PATIENT :

Yes.

PHYSICIAN :

Since when are they more frequent?

PATIENT :

Since my son and daughter-in-law came to live with us. My husband was very much

against that, he is so nervous. I had hard times trying to talk him into it. What could I have done? They were subtenants. I have problems with him anyway. He is a sick man, a diabetic, so that he is even more nervous... and so, we keep on quarreling all the time. That is probably where my headache comes from.

PHYSICIAN :

So you suggested that your son should join you?

PATIENT :

Yes, it was my idea.

PHYSICIAN :

And you think that it is the reason for him being even more nervous than he used to be earlier?

PATIENT :

YEs.

PHYSICIAN :

Is the flat small?

PATIENT :

Yes. One room and a half. Small indeed... and the child cries at night...

PHYSICIAN :

Tell me, is it difficult for you to keep the things tidy and to cook?

PATIENT :

No, I don't.

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PHYSICIAN :

Do your feet swell before you go to bed?

PATIENT :

No, I haven't noticed that.

PHYSICIAN :

You haven't noticed...hm... we shall measure the blood pressure now. O.K. Lean your arm here... Now I shall listen to your heart, you do not need to take any clothes off.

THE ANNOUNCER :

It was found out that the patient looks depressive, pale, heart aucacultatorily normal, no oedema beneath the knees, pressure 220/120 mmHg, i.e. 29/17 kPa

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PHYSICIAN :

Your heart is O.K., but your heart pressure is too high.

PATIENT :

I get quite nervous at times, it seems to be caused by that...

PHYSICIAN :

Is there any chance that the situation might change at your home?

PATIENT :

Yes. It looks as if my son will get a flat from the firm where he works.

PHYSICIAN :

Hav you told that your husband?

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PATIENT :

Yes, I have.

PHYSICIAN :

What was his reaction?

PATIENT :

Well, he gets quiet for a while, but then again... he is terribly nervous, he is a diabetic, so it all influences him even more.

PHYSICIAN :

Does he like his grandson?

PATIENT :

Yes, although he is not the person to show it. When nobody sees him, he looks at the child, smiles...only, he would never show it...he likes boys more, but doesn't show it.

PHYSICIAN :

He might get to love the baby after all...

PATIENT :

I hope so....

PHYSICIAN :

He might get sad when they move away.

PHYSICIAN :

Oh, that... we shall see...

PHYSICIAN :

Have you tried talking to him about it?

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PATIENT :

NOt yet, but I shall. I intend to... one day when he is really in a good mood...we shall talk about that....

PHYSICIAN :

The next time you come here,please let me know whether you have talked to him or not... Now please proceed to the laboratory for some tests and have your heart scanned. Next time you come here, please take the findings along. Good bye.

THE ANNOUNCER :

Status : age 57, body weight 57 kg. Depressive, pale conjuctives. Ictus in the 6th intercostal space 1 cm above the medioclavicular line, II tone above the aorta emphasized, lumbal succusison positive, pressure 220/120 mmHg, i.e. 19/17 kPa.

Urine : proteins ++
ECG : Hypertrophy and left ventricle strain.
Fundus : hypertonic retinopathy II/III degree.

You have seen three different approaches to a person with increased blood pressure. Please answer the following questions :

1. Hypertension type - primary, secondary or reactive?
2. The physician's procedure and his relationship towards the patient
3. The examination, tests and interventions

A U D I O

V I D E O

4. Is it necessary to measure blood pressure three times ?
5. Therapy choice - what and when?
6. Is it wise to scare the patient?
7. When should the specialist be consulted?

DISCUSSION OF SPECIALISTS

Discussion in the studio

A group of recognized specialists outside primary health care (a clinical pharmacologist, psychiatrist and a specialist in social medicine) discussed the first examination of a woman suffering from increased blood pressure on the basis of the same video presentation and under the same conditions as you.

You will now see the shortened version of that discussion.

Gordana Pavleković, M.D., coordinator :

According to your opinion, which type of hypertension is present in this person : primary, secondary, or reactive? We have pointed out the reactive, no matter whether it is a psychogenous superstructure upon the primary and secondary hypertension.

Prof. Božidar Vrhovac, M.D., clinical pharmacologist :

I think this a difficult question to answer,

because there are elements of long-term hypertension and elements of chronic pyelonephritis. It could be also renal hypertension, but since we know that most of the hypertensions are essential-primary, it is probable that this is a primary one, although the second possibility cannot be excluded either. I don't think that every physician had a different diagnosis - they all agreed about hypertension. It's just that their procedures differed.

Prof. Muradif Kulenović, M.D., psychiatrist :

As for her age, and taking into consideration the depressed look and some other displayed symptoms, we can say that primary hypertension is more probable. She should be given the hope that all would get settled down in a while, gradually, but that she is generally O.K., so that the depressed look should disappear from her face.

Zvonko Šošić, M.Sc., M.D., specialist in social medicine :

Taking into consideration the patient's age, the essential hypertension is more probable, although there is a possibility... there are elements of the secondary hypertension...my colleagues tried to find that out... The procedure somewhere between A and C is the real one for such patients. It must be estimated whether it is a true hypertension, or is it just a coincidental finding resulting from the given psycho-social situation, etc...

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G. Pavleković :

If you have observed it very carefully, you might have noticed that the three physicians did not act in the same way when it came to telling the patient that her blood pressure was increased, i.e. how high it was. What do you think, which one did calm down the patient in the most appropriate way?

M. Kulenović:

I feel the first one was a very cold personality, an example of technicism in medicine - coldness, corectness, balance in everything. The patient came and went with her depression. There was no smile and no kind word allowing her to loosen up a little bit, to get rid of the tension, to talk a bit. This is essential. She left in the same manner in which she arrived. The third colleague offered her hope. It is very important for the patient - all the stuff about the flat and the child, all at the same time, giving her prescriptions and directing her to a specialist. Very seriously she explained the cause of the patient's situation, but also told her, that all would go on by itself. The patient is 57, her examination is a routine, but... here is a hope - a grandson growing. This is the beautiful part of our role of primary health care physicians. The first example in my opinion represents technicism in medicine; tallented people, but lacking the dimension of being someone who heals - and that's exactly what our vocation is!

That is why alternative medicine becomes more and more attractive.

B. Vrhovac :

I absolutely agree with my colleague Kulenović. I wasn't actually aware that the three procedures were of the same length. I had the impression that the third was the longest - and I think it is very important. We must admit that physicians nowadays talk too little. But, at the same time, it is impossible to talk to a patient for 15 minutes, if there are 50 more people in the waiting room. These things come between the theory and the real situation.

Z. Šošić :

We have anti-technicistic attitude towards too much diagnostics and too much medications and other products of technology revolution, which is something that our health care suffers from, anyway. However, some elements must be preserved. The technicistic attitude is something I would vote for, but only to this extent, by no means completely. The third approach looks the nicest, but also the first one has some valuable elements, such as fundus examination, which is very important in hypertension. One can find out for how long has the hypertension been existing, has it left any marks, etc. A correct procedure can help overcome that phenomenon, that shock for the

patient, because he suddenly becomes a patient - he used to be a healthy person until that moment.

G. Pavleković :

Allow me to remind you that we had more than two approaches. How come that nobody has any comments regarding the approach B ?

B. Vrhovac :

The approach of the physician B is completely wrong and so is his attitude towards the patient, not mentioning the therapy which is almost a disaster. Prescribing the obsolent "SERPASIL" parenterally to someone who is not in a hypertension crisis is not justifiable. Also, continuation of the therapy with combined antihypertensive agent is another mistake. The third mistake is prescribing an anti-microbe agent before actually proving that we are dealing with a urinary tract infection. The second approach is a caricature, this does not happen in practice, although, I must admit, many primary health care physicians observe fundus. This is something unusual indeed - even in hospitals, this is done by ophtalmologists only. We can find the good things in these three approaches, but, it is rather sad, that we must put together no less than three physicians in order to get together an ideal diagnostic, psychological and therapeutical approach.

A U D I O V I D E O

M. Kulenović :

We arrived at a completely different level now, the level of character structure of the physician. The second approach shows the most dangerous character structure, because the physician has the most courage to waste medications and irresponsibility. We can indeed observe him as a caricature, seeing his procedure and the therapy he applied. I have no doubts regarding the question whether he ought to be avoided or not. It is necessary to warn about this kind of physicians. Primary ehalth care physician is not someone who knows everything, but someone who should think about the laboratory and all other participants in the pathologic process.

Z, Šošić :

Can we add something to the issue of his courage? That is courage on someone else's account. The patient can suffer because of it.

M. Kulenović :

Someone mentioned 60 years, descensus uteri, thirst, these are the things that attratct the physician's attention, but has anyone thought of glucose?

G. Pavleković :

What about ECG?

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V I D E O

B. Vrhovac :

I don't think it's necessary.

M. Kulenović :

It can wait.

Z. Šošić :

As for other tests, I think they depend upon the practitioner's free estimation, upon case history, complaints and age, but it is not recommendable to start with the tests immediately. It is wise to wait and see whether the patient is indeed a hypertonic - if yes, then the tests are indicated. Otherwise, we send a person to s number of tests which cost money and the patient himself is exposed in various ways.

G. Pavleković :

The question is, whether the physician ought to measure blood pressure in someone whom he sees for the first time three times, or not?

B. Vrhovac :

I think it should be measured on the right and on the left arm, taking into consideration the higher value only. Then ,the patient should be told to wait in the waiting room until 2 or 3 more patients are examined. The third measurement should be performed after that short period of waiting.

Z. Šošić :

Two times is necessary, three times is recommendable.

B. Vrhovac :

I would like to comment on the therapy a bit more. The first therapy is not ideal, because it is not wise to start with beta-blocking when treating hypertension in an elderly person. Here one should give either a diuretic, or a Ca-ions blocking agent. It should be emphasized that the patient must come again in a few days. Repeated blood pressure control measurements would lead to a conclusion whether the pressure remains high, although ECG finding shows left ventricle hypertrophy, hypertension is a long-term one and therapy is required. To start a therapy would not be a mistake, but "INDERAL" is not the best choice. The second physician's therapy is by all means the worst.

Z. Šošić :

I would like to comment on the application of a diuretic. Maybe this was not the best choice in this patient. Ca-inhibiting agent would be better.

B. Vrhovac :

The colleague is right. Diuretic agent may not be ideal. Other complaints would need a gynecologist, who would find out whether there is a descensus uteri, because the patient tended to connect her

complaints with the childbirth years ago. So, the patient who is not aware of his potential illness and who can afford not to come to control check-ups, who does not take antihypertensive therapy regularly... what does the psychiatrist think, are we allowed to scare him? On the basis of my long-term experience, I am deeply convinced, that the patient ought to be scared, because such patients, when the blood vessel complications occur in them, you can be sure that the complications are in their late phase. If we don't tell them what could happen, they simply disappear, avoiding therapy or taking medicines only when they feel that their blood pressure is high. This is something you often hear from the patients - although the mere "feeling" doesn't allow any conclusions. I personally point out to every younger patient, that certain complaints linked with therapy may occur, but that the blood pressure should be treated without delay, instead of waiting for the onset of more serious impairments. Various persons accept this in various ways.

M. Kulenović :

As regards the things that Prof. Vrhovac said, I think that the matter of "scaring" the patient depends on how strong the personality is. I am the one whom they never managed to scare and I had an infarction.

Z. Šošić

Further care of the patient should be taken into

consideration as well as therapy.
Diet is missing, although it plays an
important role in the ethiology and
among the risk factors. It is also important
for interventions - salt... the patient is
not obese, so it will be much easier, but
diet will be changed in her life from that
moment on (or will be paid attention to)
and this is something they failed to
emphasize.

G. Pavleković :

What is your opinion about directing the
patient to the specialist in internal medicine,
or any other specialist? The physicians we saw
acted differently. Should she be sent to a spe-
cialist, if yes, should it be immediately or
later... or not at all...This includes the
psychiatrist, too.

B. Vrhovac :

I am sure that the treatment of such hypertension
is a task of the primary health care physician.
He should be the one to decide whether the therapy
is necessary, to start it and then, if the effects
are not the ones expected, or if there are any side-
effects, to direct her further to a specialist in in-
ternal medicine or secondary health care.

Z. Šošić :

In general, my opinion would be the same...

M. Kulenović :

In this case, the patient should be followed up by a

A U D I O

V I D E O

primary health care physician. The colleague opened the way towards solving the problem, what should actually be done by a psychiatrist. She also found the way towards estimating the patient's physical condition. The situation is fine here - I will follow you up as a general practitioner. In my opinion, this is a good outcome.

G. Pavleković :

Thank you.

THE ANNOUNCER :

You have heard the opinion of specialists. If your opinion differs from theirs, comment on it and pose questions which remained unclear.

BASICS OF THE NEW ACCOUNTING SYSTEM

D. Mlinarević
studio

Mr. D. Mlinarević :

The most appropriate way to explain the possibilities offered by the new system of stating the accounts is the following :

First, the total income is estimated on the basis of collected income defined precisely by the regulations. The income which could not be reappraised on the market is excluded. The

total income covers the institution's expenses, as well as depreciation and bussiness expenses. According to the new system, this will be carried out in terms of real proportions, not by rules of depreciation. The rest is the income which serves for widening of the material basis of labour.

The part of income which is intended for development, gets separated, too.

A part of the income is given for the so-called "fixed" obligations, i.e. sallaries, no matter how high the income is, and obligations depending on how high the income is. The rest is the so-called pure income.

The pure income is divided into gross sallaries. A part of it is given for the improvement and widening of the material basis of labour, for reserves and for mutual needs of the workers employed in an institution.

Resources for health care needs

The question how does the new system of stating the accounts plan covering of needs in health care and resources required, may be answered in the following way :

Part of the resources for the specific health care is ensured from the total income of the institution, as a material expense. This has been clearly stated in item 22 of the Act.

Part of the resources for basic protection (although it is not yet clear what it actually is) comes from the gross income of workers, as

stated in the item 88 of the Act. The rest of the resources comes from the income as the obligation depending on the size of realized income. These resources are distributed among the providers of ehalth services according to the given criteria and under the conditions of free exchange of labour.

The impact of new measures

It can be expected that the users of health services will state the real income a bit lower, due to real stating of depreciation expenses. Accordingly, lower income from the users - in the conditions of unchanged basics and measures - means lower total income in the field of health care.

The institutions will be in the situation to cover the increased business expenses and depreciation from the total income, which is expected to be lower.

The question about the effect of these two influences is not easy to answer, not even to experts.

There are estimations, according to which this is expected to be some 10 %, but nothing can be said in detail until the complete implementation of the Act begins, i.e. July 1, this year.

What should be done?

What can be recommended to health institutions?

It is necessary that everyone gets acquainted with the new system and try to find out what they could do not to allow their position (in the economic, i.e. material sense) to get worse.

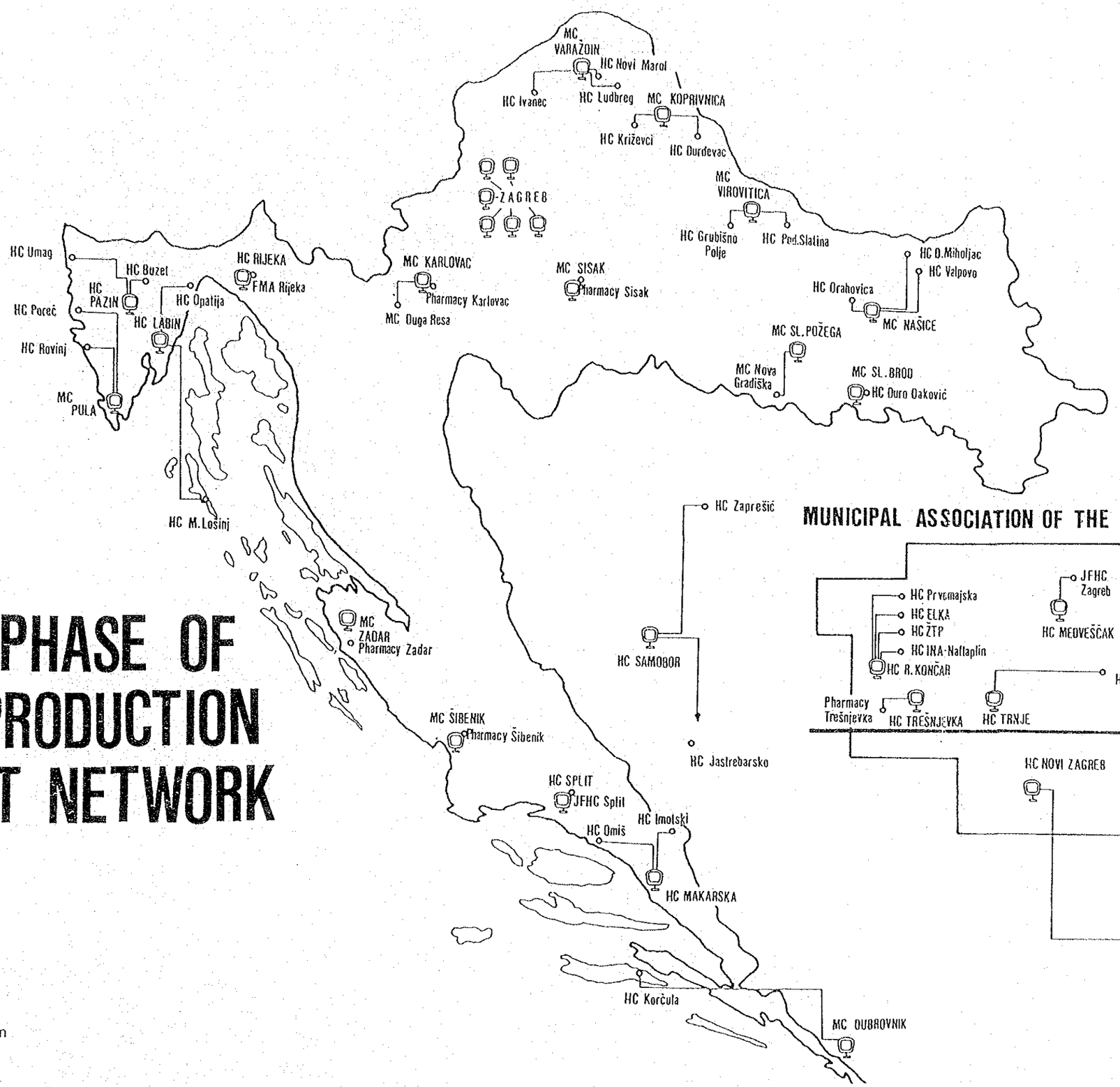
A U D I O

V I D E O

I am obliged to say, what is our Association - the general association of health institutions - recommending.

First of all, to make all the employed acquainted with the innovations in detail. We intend to follow up the real - not technical - consequences of it and the real reflection of it on income and on the position of health professionals and those employed in health care.

1st PHASE OF REPRODUCTION UNIT NETWORK



MUNICIPAL ASSOCIATION OF THE COMMUNES OF ZAGREB

design. Drużeta Ivan

資料 3

業　務　報　告　書

赤　塚　孝　雄

1．業務の目的

技術的な観点から，計算機利用技術がＰＨＣ教育プロジェクトではたすべき課題，時にＣＡＩシステム開発の方向づけと，具体的なプログラムの作成の開始をめざして議論を進め実行準備をすることが主目的であった。needs と seeds の整合が効果的な成果には不可欠で，このためには良いプログラムを見せること，具体的なニーズを持った人とのチーム作りが大切であることを強調した。また，計算機技術が急速な展開をしていることから，柔軟なシステムの建設が必要で，同時に具体的な成果を出しつつ進まなければならないことを強調してユーゴスラヴィア側の各担当者との議論を進めた。

大半の議論は昨年の堀－Dezelić相談の確認と補強であったが，Bozikov の日本での経験も生されつつあり，この期間中の議論で開発の方向づけができ，２人の具体的プログラム試作協力者も得ることができた。ユーゴ側体勢についての感想を含め，以下にその詳細を報告する。なお，非常な短期間の作業で，緊密なスケジュールになってしまい，日頃の作業ペースを大巾に狂わせてまで協力くださったユーゴチーム諸氏，そのなかでも特にＣＡＩ担当の諸氏に感謝を表したい。

2．プロジェクト推進の方略

非常な短期間の交流で十分な感想になり得るか疑問な点もあるが，感じたことを２～３そのまま述べる。

２－１　意　　欲

計算機利用技術に対する積極的姿勢は，導入間もないＩＢＭＰＣ上にいくつかのソフトウエアツールを入れ，ＷＨＯのデータベースＣＡＰを導入して教育用に利用しつつある様子からも伺えた。経験さえ積めばＣＡＩシステムの開発も軌道に乗るであろう。実際，筑波で我々が開発した患者シミュレーションＣＡＩプログラムと酷似した米国製のプログラムを入手し検討を進めていた。

２－２　計算機利用経験

Prof. Dezelić は 1972 に創設された Zagreb 大学の計算センターの研究・教育開発部門の責任者を経験しているだけあって，計算機技術の発展方向には明るい。同センターは１００台余の端末を分散した各キャンパスに配置し，ＵＮＩＶＡ　１００とＩＢＭ4341の２台で運用しており，能力の限度に達したことからレベルアップを考慮中という。最新のソフトウェアも用意されており，医学部の入試や成績処理なども始めようとしている。医学利用に関しては，統計パッケージの利用や疫学モデルの計算機シミュレーションなどの実績もあり，これらの経験をＣＡＩにいかし，特色あるＣＡＩプログラム開発の可能性も持っているといえよう。

２－３　教育のアルゴリズム

Prof. Jaksić は目下計画中のＡＶの教育プログラム構想は次のようなものだと話していた。問題となるシーンを与え，これに対するいくつかの解決法を示し，これらを見せた後にグループ討議を行わせる。この考え方は，個人とグループの違いはあるにしても，現在我々の考えているＣＡＩプログラム構成に近いものといえる。ビデオディスク技術が身近なものになりつつあり，ＡＶでの教育技法の経験と計算機利用技術の結合によって新しいＣＡＩシステムの開発の可能性も考えられる。計算機のなかに学習の手順を組み込んで利用するといった経験は，これまでほとんどなかったようであるが，たとえば患者シミュレーションプログラムについての理解も，ＣＡＩ担当者だけでなく医師の協力者の理解も速いようである。

２－４　開発組織

システマティックに戦略を決めて実行する組織を持っているようには見えなかったが，これは反面，固定した枠に閉じ込められない良さを持っているように思える。ＣＡＩの実現方法にも種々の方式が考えられるわけで，needs と seeds を調和させた最適なものといっても一定の型に固定する必要はない。しかし，試行の場合はさておき，実用的な場面となると大極的に判断し計画する人とか組織が必要となろう。このとき，ＣＡＩ用の機器でプロジェクトの情報整理を行うことは，容易であり有効なことである。

ＣＡＩ開発の将来指向性は常に考慮しておきたいものである。また，その力は，実際的なプログラム開発と新しい方式の開発にどのような割合で配分すべきかなどは今後議論すべき点でもあろう。

２－５　システム構成

計算機利用技術の急速な展開に遅れないシステム構成が要求される。利用のための種々のソフトウェアトールが利用できることや他の研究開発との情報交換が開発の効率を上げ，その意欲を維持する上で重要なものとなる。この意味でＩＢＭＰＣの選択は，当を得ていたといえよう。しかし，開発作業が軌道に乗ったときには，ザクレブ地域用の標準システムと２台になるとはいえ，プログラム開発には試用実験による改良等の作業も欠かせないことから，センターシステムの不自由さが問題となる可能性はあるように思える。これは，もう少し進行した状態で見直す点と思われる。

ＣＡＩプログラムの開発において，大型計算機の持つ機能は便利な点が少なくない。特にシミュレーションやデータベースを利用したＣＡＩ，ＣＡＩシステムの開発などでは有効である。これは，サグレブの計算センターの利用はマイクロコンピュータに通信機能を持たせることで可能になる。また，ＣＡＩシステム自体の開発を目指したり，Expert システムをＣＡＩに導入するときにはこの機能が生かせることになる。

サグレブのＣＡＩ担当者達は，特に Expert システムの導入に興味を持っているが，これはこれからのＣＡＩシステムという面から当然といえよう。日－ユの共同開発ということなら，日

本に於ても対応した研究を単に応用例の作成以上に実施できる体勢も必要かも知れない。また，グループ学習にも興味があるようで，センタ機を多端末機に将来向上させたい希望を持っているが，この場合にはマイクロコンピュータ製品との互換性などの配慮が不可欠となる。あるいは，これ以上に早く実現できて効果的なものは，ビデオディスクの利用とも思える。

２－６　そ の 他

すでに，ＪＩＣＡで対応している要望事項に関連した細かな要請があった。機器マニュアルの不足等であるが，今後導入予定ならば少し仕様を変更した方が良いところもみられ，少し検討した。

システムとして便利勝手を良くしておくことは重要であろう。機器の供与においても，同じ製造者なら，できれば近くの供給センターを介して導入してもらい，アフターケアを受けたいという希望もあるようである。

３．共同作業の要約

作業期間中に技術的な観点から議論した結果をまとめたのが下記である。これは，作業最終日に主としてProf. Dezilić, Mrs. Bozikovとで要約した結果に基づくものである。

Ⅰ．システム開発のストラテジー

以下のサブテーマを順次解決していく。

① マイクロコンピュータシステムの改善とこれを用いたＣＡＩプログラムの導入（ある程度達成）。

② 基本マイクロコンピュータシステムを５カ所に設置し，新たな２～３のプログラム開発，２～３のプログラム交換を進める。第２年度内に十分達成。

③ mutti－user ＣＡＩシステムの検討

④ Expert system のＣＡＩでの利用方法の開発

⑤ ＣＡＩシステムのネットワークの検討。頭はディスケット交換を手段とするが，大型計算機の利用，センター内でのローカルエリアネットワークの利用方法を検討する。

⑥ 光ビデオディスクを導入し，ビデオ情報を活用したＣＡＩを開発する。ＡＶ教育システムとの結合も考え得る。

⑦ プロジェクト進行のための情報マネイジメントシステム。早い時期からマイクロコンピュータを利用して，受講者，プログラム等の管理を実施しておいた方がよい。

Ⅱ．ハードウェア及びソフトウェアの構成

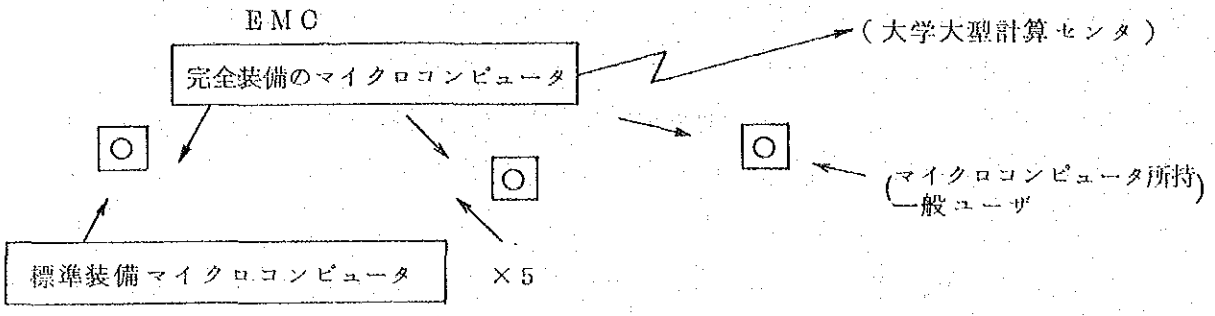
Ａ　ハードウェア：

＜第Ⅰ期＞

Ⅱ．ハードウェア及びソフトウェアの構成

A　ハードウェア：

＜第Ⅰ期＞



（地域センタ及びCenter for Health cooreration）

マイクロコンピュータの所持は，一般医師でも始まっている。フロッピーで教材を与える方式での教育システムがかなり期待できる。

＜第Ⅱ期(a)＞

上記システムで主センターの機器として１０人のuserに同時に教育可能な主メモリ２MB，200MBディスク程度のmutti－userシステムを考える。ネットワークの利用。

＜第Ⅱ期(b)＞

光ビデオディスクを利用した，動画像等も利用できるＣＡＩの開発。ネットワークの利用。

B　ソフトウェア：

① ＩＢＭ　Instruction system等現在のソフトウェアーツールを用いて個々にプログラムを開発。

② プログラム開発に大学のセンター機器を利用し効率を上げる。→コミュニケーション用のソフトウェアを直ちに追加

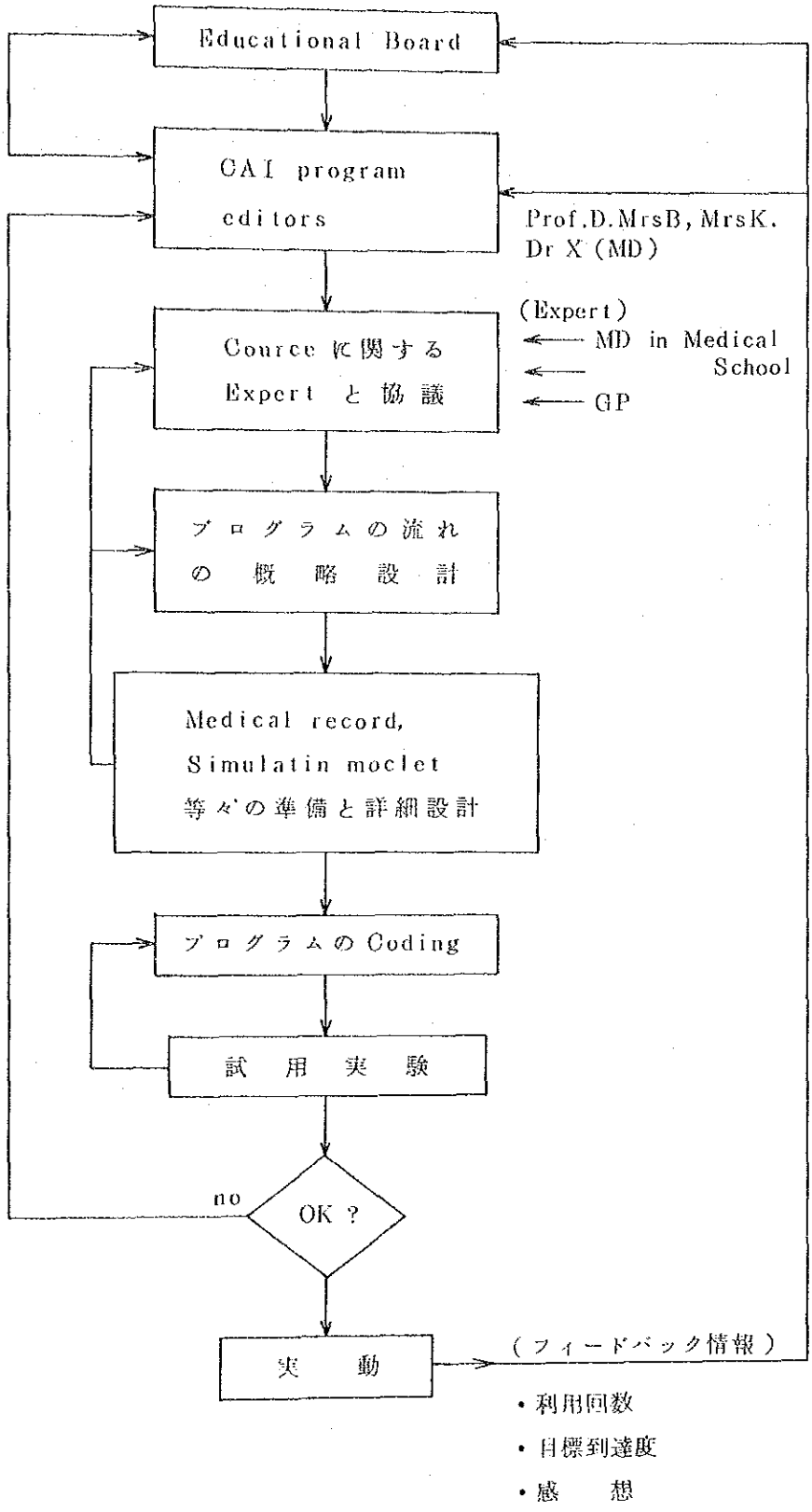
③ データベース，統計パッケージ等を活用したＣＡＩコースの開発を進める。→上記コミュニケーションシステムが有用

④ Expert systemの活用。“prolog”言語を修得すると共にＣＡＩコースとするためのいい例題を準備する。

⑤ ＣＡＩ開発用ソフトウェアシステムの開発。言語“C”を修得するとともに，ＣＡＩプログラム開発経験を積む。

Ⅲ．次期導入機器について

地域センター用５台を準備するなら，そのうち１台を最近開発されたＩＢMPC－ＡＴに置き換えてセンターに置き，周辺機器は現有のものを利用し，現有のＰＣを地域センターに移すのが望ましい。地域センターのうちサグレブセンターは同一場所に置けるのでＰＣで現有のＬＡ


Educational Board
CAI program
editors
Prof.D.MrsB, MrsK.
Dr X (MD)
(Expert)
MD in Medical School
GP
Cource に関する
Expert と協議
プログラムの流れ
の概略設計
Medical record,
Simulatin moclet
等々の準備と詳細設計
プログラムの Coding
試用実験
no
OK ?
実動
(フィードバック情報)
• 利用回数
• 目標到達度
• 感想

Nを設置し開発・利用の効率を上げるのが望ましい。具体的仕様は，

(i) IBMPC−AT 1台

・主メモリ（1～2MB） ・補助メモリ（20～60MB，可能なら41.2MB）

・5″ディスク2ドライブ ・プリンタ1台（160cps）現有と同一

・Tablet digitizer （A3まで分解能0.5㎜）

・ディスプレイ（カラー及びモノクロ）

・通信インターフェイス（大型機用及びLAN用）

・現有のプリンター・プロッターへのインターフェイス（現有機のものがそのまま利用できれば不要）

(ii) 標準仕様PC：4台

・主メモリ 512KB

・5″ フロッピー1ドライブ，10～20MBハードディスク1ドライブ

・プリンター（160cps）

・ディスプレイ（カラーグラフィック）

・通信インターフェイス（大型機用但しZagreb設置用の1台についてはLAN用も）

Ⅳ. CAIコースウェア開発手順

① 開発の手順は次図のフローチャートによる。

② CAIのプログラムeditorはコースごとの専門家を探し，コースウェアの構成を協議し，専門家の用意した資料によりプログラムを作製する。Codiryはアルバイターでもよい。

③ プログラム作製時の注意

(i) 学習者の意欲を保持する工夫。

(ii) 学習の要点をどのようにプログラムで実現するか。

(iii) 学習者の修得度をいかに学習者に確認させるか。

(iv) 学習者から製作者へのフィードバック情報をどう取出すか。

これらのためには，コース中に評価システムを入れ，アンケート的な質問等も組み込む工夫が必要となる。

④ いかに良いプログラム作製協力者を得るか。

(i) 何をしてもらい，作製者にもどんな利点があるかをよく説明する。

(ii) 説明の最良の方法は，良いプログラムを見せることである。

(iii) そのためにも，種々な型式の良いCAIプログラムをまずいくつか開発しておくことが第1歩である。

Ⅴ. CAIコースウェアの開発

以下の優先順位でプログラム開発を進める。

① 筑波より移殖のプログラムの完成。

② 緊急患者取扱い学習プログラム（Dr. Mihajlov Virag（Head & Neck Sargery）をExpertとするコース） 交通事故

イ. 患者を病院に運ぶまでの取扱いを，時間経過と取扱いによって生理的な状態が変化する簡単なシミュレイションを用いて学習。

ロ. 種々の初期状態の患者とそれに対応したシミュレイションモデルとを用意し，シミュレイションモデルには確率的な変動ももっともらしい範囲で与え，学習過程を統一した形成で種々の場合についての学習を進める。イ.のプログラムを発展させたもの。

③ 家族計画についての学習プログラム（Dr. D. Stamper（In St. of mother and child protection）をExpertとしたコース）

Dr. Stamperの考えにしたがい，２人の若い同僚が資料を用意する手順で進めることにし，次の２つのコースを考える。

イ. 子供達のためと自習コース。

ロ. ＧＰや大学医学生を対象とする症例シミュレイション用にしたもの。

④ Stamper Schoolで開発した疫学シミュレイションモデルを用いたＣＡＩコースを検討する。

⑤ ある地域における helth care organization のシミュレイションによるＣＡＩコースを検討する。

⑥ WHOのCAPのようなデータベースを利用するＣＡＩコースを検討する。

⑦ 統計パッケージを利用したＣＡＩコースの開発を検討する（Dr. Vuletićが協力）。

⑧ 筑波大学ＣＡＩコースの英語版の移入。

⑨ UCLAのFLUIDMOD ＣＡＩプログラムの移殖。

赤塚がUCLAのDr. Delandと連絡をとる。

⑩ ＩＢＭ－ＰＣで利用されうる他のＣＡＩプログラムの移殖。

ここで，単にマイクロコンピュータのみのＣＡＩだけでなく，大型機をプログラム開発に利用する手法，大型データベースやプログラムパッケージの利用もマイクロコンピュータと大型機との通信機能を利用して検討し実用とする。

Ⅵ. 本プログラムの自動的情報整理，特にフィードバック情報を得る統計量などの獲得システムの整備

ＣＡＩ用のマイクロコンピュータシステムに用意されているワードプロセッサや集計計算等のソフトウェアを用いることで，プロジェクトのＯＡ化が容易に行える。プロジェクトの効果を上げるに有効である。具体的には下記のような項目から考える。

① ＧＰや関連した helth worker のデータベース作製。

通知用のmailing adress，教育学習のschedulingなどに用いる。

② ＣＡＩプログラムのデータベース

プログラムの保守及び使用ごとの統計データの収集。

③ ＡＶプログラムのデータベース

ＡＶプログラムのdirectoryを作り，保守，有効利用に供す。利用頻度等の統計量も容易に得られる。

④ 主センターと地域センターの情報交換は，とりあえずディスケットで行うことにし，これを処理するための２～３の簡単なプログラムは用意する。これらのデータをプロジェクト推進の有効なフィドバック情報として活用することにする。

4．現有システムについての細かな注文

注文項目のなかには，今後の効率に関するような部分もあるが，すでにＪＩＣＡで対応中の項目や今後の計画のなかで直ちに対応がとれるものなども含まれている。細部に渡るが一応列挙しておく。

① メモリ増設 → ＡＴ導入で解決

② タブレットディジタイザ（Ａ３，0.5㎜）とそのソフトウェア

③ ターミナルエミュレイタ，コネクションカード，ケーブル SNA／SDLC emulator

④ Technical reference manual （ＩＢＭ－NO652）

⑤ Dos 3.1 level up version suppl ment （CATE MO352）

⑥ HP plotter 英文マニュアル（0745－90013，0745－90006）

⑦ Basic Compiler

⑧ Instruction system（5875－EFA）

9173E，9177E，9175E

⑨ C－Compiler （Lattic C ？）

⑩ Prolog－１ （前回はprologを要求したがprolog－1の方が良さそうである。）

⑪ Pata base soft：CA executive

⑫ x－y plotter用のグラフィックパッケージ（HP plotter使用可のこと）

ＩＢＭ－DC VCN execution graphics libraries.

⑬ NECプリンタシンボル Fokus10，Tech／Math－courier72

⑭ プリンタリボル NEC，EPSON 各10

⑮ NEC，EPSON クロアチア語のcharacter generation

チップは押入可かどうかの確認。key boadについてはＩＢＭに用意があるとのこと。

⑯ NEC，EPSOのシートフィーダ

⑰ HP plotter用ペン

イ．OHP用セット

ロ. OHP用ペン　黒，赤，0.3，0.5各10本

ハ. ディジタイザーサイト

ニ. OHP用ペン（紙記録）

黒，赤，0.3（0.5），0.7　各10本

なお，random acces slide projectorとの結合は，どうしても高品質の画像を必要とする場合には，必要となるが結合してもひっかかり等のトラブルが少なくない装置であるので，強い必要がなければ使用しない方がよい。大量の画像を必要とする場合には，マイクロフィッシュ装置との結合も考えられるが画質の点からもビデオディスクの使用を考えた方がよい。

スライド装置とIBMPCとの結合自体は，市販名はないと思われるが比較的容易である。インターフェイスとドライバーソフトを誰が作製するかだけの問題である。

これらの点を検討するためにもアセンブラを一応用意しておく方がよい。

さらに，機器納入の際にできればIBMROECE，Vienaより送ってもらうようにすると便利であるという注文。発送品の宛名は大学宛Skupnjak気付の方が便利であるという注文もあった。

以　上

業　務　報　告　書

久保武士

以下に記載する如く，ユーゴースラビアにおけるＣＡＩプロジェクトの実施状況についての実態調査及び打ち合わせを行なった。

場　所　　Yugo-Slavia Zagreb 大学　　Stampar 公衆衛生大学

期　間　　11月18日（月曜日）～11月26日（火曜日）

上記期間のうち Zagreb 着任の18日（月曜日）及び土，日曜日及び25日（月曜日）の午前7時より9時半までを除き，26日（火曜日）の午後5時に至るまで，全期間を Stampar 公衆衛生学群において過ごし，ＣＡＩプロジェクトに関する種々の打ち合わせを行なった。Yugo 側における全面的な我々に対する応対者は，Dezelic 教授及び Bozikov氏の両人で，今回の打ち合わせ作業に2，3時間の範囲内で関与したのは Jakic 教授，Vuletic 教授，Dr.Stampar 及び Dr.Virag である。打ち合わせあるいは討議は，主として Dezelic 教授と赤塚班員の間できわめて精力的かつ熱心に，ＣＡＩシステムのハードウエアやシステム構成に関する問題を中心として行なわれた。（詳細は赤塚班員の業務報告書参照）

赤塚班員の報告は，Yugo 側，特に Dezelie 教授を十分満足させる答申になっているはずである。先方の本プロジェクトに関する熱意も十分に汲みとられ，生涯教育の為の良いＣＡＩシステムを彼らが構築する可能性は十分あると思われる。ただし今回の打ち合わせで，多少懸念されるべき点を1，2以下に記す。

本プロジェクトの実質的な推進者は，Dezelic 教授であり，M.Dが今回の打ち合わせを通して積極的に関与したことが，ほとんどない。Skupnjak 教授や Jaksic 教授，あるいは Vuletic 教授等はMDではあるものの，本プロジェクトを大所，高所から指導する立場にある人達でＣＡＩコースウエアを実際に作成する臨床医の関与が強く要望される。生涯教育用のＣＡＩシステム作成には，単にコンピュータの専門家と専門医を集めただけでは，不十分で，両者の仲立ちをすべき Keypersonの存在が不可決である。現実的には計算機に関心と興味を持つ，若い臨床医が，これに相当するものと思われるが，この様な人物を早く見いだし，かつ養成することが，本プロジェクトを成功に導く大きな必要条件であると思われる。

本プロジェクトを推進していく上での次のステップは，ハードウエアの整備，充実以上にまず具体的に，いくつかのＣＡＩコースウエアを作成し，その結果に対するユーザー側からの反能をみながら，コースウエア作成上の問題点について Yugo側が，種々経験を積むことであると思われる。

業　務　日　誌

60年11月30日

氏名　赤塚孝雄・久保武士

月　日	曜日	内　容	
11月18日	月	2:00pm	Mrs. Y. Bozikov とMr. M. Mastilica が空港に出迎え，ホテルEsplanade まで送ってくれる。
		8:00pm	Prof. Degelic, Bozikov, Mastijica と滞在中の日程及び作業についての打合わせ。
19	火	9:00am	医学部スタンパ校のProf. Luka Kova　(　　diretor) に挨拶，プロジェクトメンバーに紹介され，同校見学。
		12:00	昼　食
		13:00	Prof. Jaksić, Dezelić, Bozikov, Dr. V. Bjelajal と全体システム，AV，CAI学習プログラム方式等について討議，作業のためのシステムオーガニゼイションが大切なことを強調。
		14:00 ～18:00	Dezelic, BozikovとCAIシステムについての検討，プログラム作製手順について議論。
20	水	9:00	Dezelic, Bozikov, Bjelajal に筑波でのCAI方式プログラムの作製手順，シミュレーションの意味等について説明。
		13:30 ～18:00	火曜朝，Dr. K. Krleza-Jerić より要請のCAIに関するメモを伝達。Dezelic, BozikovとIBM-PCを用いて筑波より転換したものと米国より入手したCAIプログラムの試用テスト。CAI具体的テーマを持っている若い医師Dr. Virag と25日に会うことになる。
21	木	9:00	Bozikov より疫学のシミュレーションモデルを用いた研究の説明。その計算機プログラムのCAIでの利用の可能性について議論。
		11:00	Dr. B. Skupniak の事務所でDr. K. Krleza 等と会談。過日のメモに対して，母児病院のDr. Stamper を紹介され25日早朝に会うことになる。一同と会食 (Dr. Skupniak の招待)。
		15:30 ～17:00	Bozikov と今後のスケジュール等について協議。

月　日	曜日		内　　容
11月22日	金	9:00～	Bozikov, Mrs.Visnja Roca−Bors (Skupnjakグループ), CAIプログラムのデモ, WHOのデータベース, CAPのCAIでの利用方法の検討。11:00よりDezeljcも合流。 作製プログラムの評価方法についての検討。
		13:00～	Bozikov, Dezelić と下記の諸点について説明・討議 1. CAIにおけるscoringシステムとフィードバック技法。 2. CAIのモード, スタイルとその特長。 3. エキスパートシステムのCAIへの導入について。 4. 日本における医学教育での計算機利用の現状。 5. IBMPCのクロアチア語での利用
23	土	15:00 ～18:00	Bozikovと案内人によるZajreb市内案内。
24	日	10:00 ～16:00	DezelicとBozikovによるチトーの生家案内と昼食。
25	月	7:30	母児病院でDr. Stamperと会談Family PlanningのCAIプログラムについてBojikov, Rocaを交えて協議, Dezelicが後から加わる。同病院見学。
		10:30	ザグレブ大学計算センター見学(機器及びデータベースシステム)。
		11:30	医学部訪門, 学部長代理Dr. V. Katićと会談。医学部計算機室見学(入試成績処理及び学績システム建設中)。
		14:00	Dezelić, BozikovとCAI開発計画及びCAI将来システム, 現有システムの欠陥等について協議。疫学シミュレーションの実演。
		16:00	さらにDr. M. Viragを交えて救急医療CAI作製計画, 交通事故患者取扱いコースの具体的内容検討。
		19:30	Stamper校director Dr. S. Vuletić主催の晩餐会。
26	火	9:00	Dr. Vuletić. Bozikov, Mrs. Kerrnと協同作業の総括。 1. CAIシステム開発手順。 2. ハードウェアシステム及びソフトウェアシステム。 3. CAIプログラム開発手順方法。
		12:30	Dezilić, Bozikov, Skupniak, Jaksić等本プロジェクトメンバーによる定例会議に出席。

月　日	曜日	内　　容	
		13:30	答礼昼食会。
		15:00	総括続行 Dezelić, Bozikov と。
			4. 具体的なプログラム開発計画。
			5. プロジェクトのシステム運営へのマイクロコンピュータ利用。
27	水		ザグレブからベオグラードへ移動。
28	木	8:30	駐ユーゴスラビア天羽大使に会見，報告。
29	金		帰国の途につく。