

Lectures in Bolivia

Comprehensive Problem-Based System
Systema Integral basada en Problemas

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Lectures in Bolivia Day 1

{ 1 } Introduction

I will introduce the system.

The Comprehensive Problem-Based System(CPBS), which I will explain hereafter, is a technique of thinking. It is a technique used to examine a patient, diagnose, and consider treatment.

It is also a form of writing in the body of medical record. The characteristic of this form is rationality. If the thoughts and actions are not rational, it is not possible to follow this format. Conversely, if you can follow this format, naturally your thoughts and actions will become rational.

Today, let's begin with an overview.

I will explain the details later.

{ 2 } The goal is a "Problem List".

Let's say you have a patient in front of you. What is the goal? The first goal is to create a "Problem List".

What is "Problem"? For now, just think of it as a patient's disease. I will explain more later. "Problem List" is a list of patients' diseases.

{ 3 } Gathering basic data

Now, we do not know anything about the patient in front of us. In order to diagnose a disease, we have to know the patient. To do this, we must first collect basic data.

What are the basic data? The "Basic Data" are the medical information of the patient collected in order to discover the patient's problem.

{ 4 } Basic data

There are four basic documents.

1. Medical history

This includes the present history, past data, social life and family history. It is important to note that the present medical history is a chronological record of what the patient has told us about his/her illness. Therefore, the subject of this statement is the patient.

The patient's symptoms, observations, feelings, and thoughts are written in the present history. What the doctor has seen in the past is in the past data.

Do not be concerned only with the present medical history, and do not neglect the social life and family history. Diseases occur in everyday life. Without knowing

the daily life of the patient, we cannot understand the disease properly.

2 Past data

This is a record of medical institutes. These are records of doctors', nursing records, images, test results, etc. that have been kept at hospitals and clinics.

3 Physical findings

This is the current examination findings. Past examination findings can be found in the past data.

4 Screening test findings

What constitutes a routine package may vary by specialty. For example, internal medicine and obstetrics are different. It also varies from era to era and from country to country.

Now that we have all of the basic data, we are able to learn what we know medically about the patient. This is all that is medically known about the patient. We know nothing else.

{ 5 } Creating the Problem List

At this point, we are finally ready to create a problem list. What we have in front of us now is a jumble of information about the patient. Symptoms, physical examination findings, test results, and past events are all in one place.

Remember that a "problem" is a disease. The patient may have more than one disease. It could be many.

Now, here is the important part. Since each problem is a disease, each one has its own past, present and future. So, let's consider each one separately as a problem. This is the difficult part of the brain's work.

When we think of a diagnosis, we tend to think of everything as one. Meat, vegetables, and rice are all combined together, like a Brazilian dish. Meat should be separated as meat, vegetables as vegetables, and rice as rice, and placed on separate plates. Each of these plates is a problem; if they are divided into three dishes, there are three problems. If there are 10 dishes, there are 10 diseases.

In order to correctly separate the information in the basic data, the basic data must not be ambiguous. It is necessary to have a broad knowledge and a deep understanding. Otherwise, it is nothing more than a small dish of Brazilian food.

Dr. C. Cristaldo : Please illustrate with an example.

Dr. Kurimoto : Let me give you a very simple example.

Case 1

Materials of Past : urine protein(-) 2wks ago.

Present symptoms : fever 38°C, sore throat × 3 days

Physicals : reddened tonsils with exudate. no edema. blood pressure 110/80.

Labs : urine protein(2+) RBC 30/hpf cast(+). WBC 11000 PMN 80%.

#1 acute tonsillitis

PP : fever 38°C, sore throat × 3 days.

PF : Reddened tonsils with exudate. WBC 11000 PMN 80%.

PO : Infectious pharyngitis. Bacterial etiology(strept,staph)? Not viral?

#2 proteinuria

PP : urine protein(-) 2 wks ago. no symptoms.

PF : blood pressure 110/80. urine protein(2+) RBC 30/hpf cast(+).

PO : Glomerulonephritis? Not of immune complex disease associated with
#1 bacterial agent, because of short interval between #1 and #2 ?

Lectures in Bolivia Day 2

In the first session, we discussed how to separate the basic materials by problem.
Let's actually do it. Please make a problem list for the following case.

Case 2 50 yo F

Present illness : Fatigue × 2wks. Polyuria and loss of body wt. 6kg in 10days.

Shivering × 3days. No appetite × 2days. Urine not voided in 12hrs. Found drowsy this morning.

Physicals : BP 70/50 PR 128R/min RR 30R/min. BT 37.9 °C. Chronically ill and emaciated. Glasgow E3V4.

Skin turgor ↓ Jaundice-. Pallor-. Cervical vein-. Thyroid normal. Dental caries multiple.
Heart: Dullness: rt.St.border-K44(not enlarged). S1 and 2 weak S3-S4-mm-.

Lungs: BL fine crackles. Abdomen: L-L border 6ics, Liver vertical span 6cm, Spleen-

Kidneys- Mass- Muscular guarding- Bowel sound ↓ Ascites-. Aortic bruit-.

Made grimace by knock on back.

DTRs all hypoactive. Babinski-. Peripheral arteries: dorsal pedis normal, tibialis post normal. Rectal content brown.

Lab : Catheter urine 20ml: SG1030 PH5 protein 2+ sugar 3+ uro ± keton 2+ WBC numerous RBC 5/hpf.

Bioch: Glu 500mg/dl CRN 2.5mg/dl. CBC: Hb 10.0mg/dl MCV 70(n90) MCH 26(n32), WBC 10500(st 40% sg 50% toxic granule + Dohle + vacuole +).

Materials of Past : none

* Dra. Schofat (Intern, Univ. of Cochabamba graduate)

#1 Fatigue #2 Polyuria #3 Bodyweight loss #4 Shivering #5 Anorexia #6 Sopor
#7 Anuria

Corrected list after being warned that problem is a disease.

#1 Dehydration #2 Anemia #3 Acute Renal Failure #4 Diabetes Mellitus

* Dr. Penia (Pediatrician with 13 years of graduation from Univ. of Cochabamba)

#1 DM #2 Ketoacidosis #3 Renal failure #4 Polyneuropathy #5 Anemia

* Dr. Kurimoto's Problem List

#1 Dental Caries[*]

#2 Hypochromic Microcytic Anemia[*]

#3 Diabetes Mellitus[*]

#4 Acute Pyelonephritis[*]

#5 Shock Syndrome[*] → Septic Shock Syndrome(#4)[*]

Lectures in Bolivia Day 3

{ 6 } Naming the Problem

Now, let's give a name to the divided plates. In other words, let's give a name to the problem. Give it the name that best describes the disease. A problem is “a disease and what it is called at the time”. The name does not have to be the name of a disease that is usually used.

For example, it may not be a classic name of a disease such as pulmonary tuberculosis, Chagas cardiomyopathy, or gastric ulcer. That is fine. Often, it is not possible to diagnose a disease with a classical name, and in such cases, the name of the symptom or finding should be given to the problem. For example, polyarthralgia, pleural effusion, coma, and so on. That is the “problem”. The disease is now called by that name.

{ 7 } Description of Problem

We have now divided the basic data by problem. Each problem has its own history and its own present. The history and present state of each problem can be written. Write clearly and distinctly. Do not mix the past, present, and future. Avoid the Brazilian dish style here as well.

For each problem, write a summary of the problem from the basic data. In the “PP”, write the patient's symptoms and past data, i.e. what has happened before the current examination. “PF” denotes the physical findings and examination results. In other words, the current observations.

General symptoms and findings common to each problem should be written in the current main problem.

Up to this point, the information was contained in the basic data. From this point on, the information will be separated from the basic data. Let's talk about another important point here. All of the basic data must be written as “factual” statements. There should be no vague speculation in the basic data. A correct “problem list” cannot be created based on ambiguity.

{ 8 } Analysis of Problems

A problem is a disease. Let's begin discussion of problem. We will start examining the differential diagnosis, nature, causes, mechanism, extent, scope, and prognosis. These can be called thoughts. These are judgments. These are written in “PC”.

{ 9 } Description of facts and description of judgment (nature of description)

Now that we have mentioned statements of fact and statements of judgment, do you clearly understand the distinction between the two? A statement of fact is a statement for which there is evidence. A statement of judgment is an opinion.

Let us clarify this distinction using the example of test results. An example of a statement of fact is “Hb 15.0/Na155”. “Hb normal/hyponatremia” is a statement of judgment. “Hospital Universitario Japonés was established in 1999” is a statement of fact, even though it is incorrect. “Bolivia has developed” is a statement of judgment whose content is a fact.

Please do not confuse the two. This is possible. X is a statement of fact since for which there can be evidence, but the statement is not a fact. Y is a statement of judgment, but the statement is a fact.

In “PC”, write your thoughts and judgments. We have already discussed what the idea is about. The basis of the idea must be included in the basic data.

{10} Plan for Problem

The last thing to say is about plans of the problem which are the act of diagnosisDx, treatmentTx, explanation and recommendationEx.

In this way, each problem can be distinguished and described. In the actual medical record, the plan often spans each problem, so they are grouped together and listed under the current main problem.

{11} Progress Record

From now on, you must first write down the problem and then write a record of its progress. When a new problem appears, collect materials about it, name it, and write a record of the progress of that problem.

{12} Update the name of the problem.

For each problem, a diagnostic plan should be made. As a result, you will be able to learn more about the problem. Then, we will be able to change the name of the problem to something better.

Problem will then be called by that name. The name will change one after another. If we can, we will finally settle on a classic name that cannot be replaced any more. For example, adult T-cell leukemia, minimal change glomerulopathy, acute streptococcal meningitis, and so on.

This is the entirety of this form.

{13} Problem List Format

Finally, here are some important points to keep in mind when preparing a problem list.

Problem list is a list of the patient's diseases, so all the diseases are written. Do not write about your own interests. Don't write it out of interest. A patient's disease is not related to a doctor's interest. The problem list can be used by anyone, anywhere, at any time to identify a patient's diseases.

Each problem on the list is numbered. It is tempting to start numbering the most important problem first, but the numbers are in the order of occurrence of the disease that became problems. Therefore, the oldest problem is the first. The most recent one is the last number. The problem numbers are always the same, everywhere and at any time.

Then, on the problem, the date of the listing is written. Not the date it happened. The plan is born from the problem. Therefore, write the date of each problem on the problem list.

Now, let's go back and we shall discuss about the important part in details.

{14} Extraction of Problem

The basic data is in front of you. Let me explain the rough idea of finding problems from the information in the basic data.

- a) First, consider the time and course of onset. Classify them as acute, subacute, or chronic. Then, we can categorize them into different groups.
- b) Consider the organs. Consider whether there are abnormalities in all organs, and classify them accordingly. Sometimes, different diseases coexist in one organ.
- c) Then, consider the nature of the clusters formed by considering the onset and the organs. This is the key and probably the most difficult part.

Usually, we think of the name of the disease out of the blue. We don't do that. What we need to think about is pathophysiology.

Let me give you an example. Let us consider "Hyponatremia". If we suddenly think of classical names for the disease, chronic renal failure, Addison's disease or SIADH will pop into our minds. We will not think of it that way. We will consider the pathophysiology of hyponatremia in this patient. To do this, we must have knowledge of the pathophysiology of hyponatremia in general.

The sodium value is just the concentration of one drop of serum, so it does not imply that the entire body is low in sodium. It may just be diluted by edema. Or, if there is indeed a decrease in total sodium, the amount of sodium lost is greater than the amount gained. In other words, a negative balance. Where did the loss come from in this patient? Urine? Sweat? Diarrhea?

Do you know the concentration of Na in sweat and digestive fluids? Do you know how much Na people take every day? Is the Na in the replacement infusion calculated? Without sweating or diarrhea or vomitus, almost the same amount of Na is lost in urine as ingested.

If there is an abnormally large amount of Na being lost in the urine, the patient's system is abnormal. Either the kidney tubules are bad, or the tubules are good but the hormones are insufficient. If there is no signs of kidney dysfunction, such as proteinuria, azotemia, and so on, the kidneys do not seem to be bad, so the hormonal function to store Na is defective.

Considering the pathophysiology, we may conclude the following in some patients. Fatigue, anorexia, hypotension, and hyponatremia are all part of one disease, and the first three are the result of hyponatremia.

This is what it means to consider the pathophysiology.

d) Think about each of the symptoms and findings in the basic data in this way. Then, a coherent picture of problem will emerge. There may be only one problem, or there may be many.

{15} Naming the Problem

The name of the “problem” should be chosen that best expresses the characteristics of the disease at the time. In the case of the example just discussed, hyponatremia would be the most appropriate name, rather than malaise, anorexia, or hypotension.

In many cases, the classical names for the disease, such as yellow fever, acute HVA hepatitis, or Hodgkin lymphoma, are not given at the outset. Symptoms, physical findings, and laboratory abnormalities will be the first “problem” to be named. Even if it is not the classical name of the disease, it is the name of the patient's disease at this point in time. Sometimes a more specific name is given. For example, exudative pleuritis, acute meningitis.

Problem must be a fact. It cannot be uncertain or speculative. If it is not certain that it is tuberculous pleuritis, the name “problem” should be limited to exudative pleuritis and should not extend to tuberculous pleuritis. If it is limited to exudative pleuritis, other causes are possible. However, once the diagnosis of tuberculous pleuritis is established, other causes are not be considered. If it is wrong, the fact will be lost and sometimes the patient will die.

Here is another example. Let's say a patient has abdominal pain, diarrhea, and vomiting. What is the problem? In some patients, the problem is diarrhea, in others it is abdominal pain. It is not right to name “diarrhea” the problem of a patient who has diarrhea once and has severe abdominal pain. The problem of a patient who has diarrhea more than ten times a day and is dehydrated must be “diarrhea”. We must carefully analyze the basic data and name the problem.

{16} The “set” of problem

Now, we have named the problem of the patient. Here, let us consider “Problem” in a general way.

The problem is a “set” of such name. Let's think of problem “Diarrhea”. There are various kinds of diarrhea. Diarrhea with fever, diarrhea without fever, watery diarrhea, diarrhea with mucus, etc. etc. etc.

This patient's “diarrhea” is also in the “set”: diarrhea. What is characteristic of this patient's diarrhea in the “set”: diarrhea? Think about it. Thinking about it is the beginning of differential diagnosis. After the PP and P F of the problem, let's turn this into PC.

For example, let's give it to PC as follows

#1 Diarrhea.

PC: This is a young Tokyo man with diarrhea that is subacute and bloody, accompanied by fever and neutrophilia.

If you can give a clear characteristic at this point that distinguishes it from other types of diarrhea, you can quickly approach a specific name. (By the way, what do you think of this Tokyo man's diarrhea? If it were a Bolivian's?)

Then, we can develop a diagnostic plan for differentiating these problems. As a result of the search, we can change the name of the patient's problem from the nonspecific "set": diarrhea to the name of a more specific "set". The classic disease name is the name of the most specific "set".

For example, nonspecific ulcerative colitis or amoebic dysentery. The patient's disease is then in the "set": nonspecific ulcerative colitis or "set": amoebic dysentery.

{17} Differentiation of Problem

Once the name of the problem has been decided upon, it is time to work on differential diagnosis of the problem. Here, too, we will consider pathophysiology.

Let's also look at a few more examples.

#1 Anemia

A low Hb level is not the same as anemia. It may be only diluted due to high plasma volume. Anemia is a condition in which there is absolutely low volume of red blood cell.

Anemia is a true lack of red blood cells. Let's look at MCV, MCH and MCHC. These are the quality of each red blood cell.

If the MCV and MCH are normal, then each one is fine, but not produced in large numbers. Aplastic anemia is a typical example.

If MCV, MCH are below normal, each erythrocyte is small and produces only a little Hb. In other words, Hb synthesis in the cytoplasm is impaired. This is hypochromic microcytic anemia. The most common examples are iron deficiency anemia, in which iron is lacking, and anemia associated with chronic active inflammatory diseases, in which iron utilization is impaired. If iron is deficient, how? Not enough to eat or lost? If lost, how? Is there chronic bleeding somewhere? Heavy menstruation (hypermenorrhea)? Do you know how to tell if menstruation is heavy or light? Just because a patient says they are heavy does not mean it is true. It is a statement of judgment.

If MCV and MCH are above normal, Hb continues to be formed in the cytoplasm despite impaired nuclear maturation. Typical example is pernicious anemia due to

vitamin B12 deficiency. We also consider the pathophysiology of the deficient Vitamin.

This pathophysiological analysis can easily be used to formulate a diagnostic plan. The physician must become, above all, a pathophysiologist.

{18} Problem Name Renewal

Thus, the problem is successively renamed from nonspecific to more specific names. This is the direction of differential diagnosis. The new name is entered into the problem list along with the date of the new name.

Lectures in Bolivia Day 4

{19} The category of the name of "Problem"

Here we consider the name of the "problem" itself. There are two different categories of names.

A: Etiological and morphological category

B: Functional and physiological category

Compare these two categories.

A: Atrial septal defect B: Congestive heart failure

A: Pulmonary fibrosis B: Respiratory failure

A and B coexist. As you can see, the patient is with a combination of A and B. The patient's disease is a congestive heart failure caused by an atrial septal defect, and at the same time, an atrial septal defect causing congestive heart failure. (The residents were asked to write other examples on the chalkboard)

An atrial septal defect can result in congestive heart failure in some patients and not even congestive heart failure in others, and they will be fine. In such a case, what would you name the problem ?

If the patient has congestive heart failure, the problem list would look like this

#1 Atrial septal defect

#2 Congestive heart failure (#1), where #2 indicates that #1 is the cause.

What if the patient has Chagas cardiomyopathy? It is safe to say that there is no Chagas cardiomyopathy that is not congestive heart failure. In that case, #1 Chagas cardiomyopathy is sufficient. It automatically includes congestive heart failure. In such cases, there is no need to separate the two. There are many other such cases to consider.

Alzheimer's disease and dementia, acute tubular necrosis and acute renal failure, Graves' disease and hyperthyroidism. (The residents were asked to write other examples on the chalkboard)

{20} Name Specificity

Now, let's examine these two categories carefully. We can see that there is a progression from nonspecific to specific.

A: Pancytopenia \supset leukemia

\supset acute leukemia \supset acute lymphocytic leukemia \supset acute T-cell leukemia

B: shock syndrome \supset septic shock syndrome

\supset staphylococcal exotoxin shock syndrome

The left set is more broadly nonspecific and the right set is more narrowly specific.

{21} Updating Problem Names

In this way, we can understand the direction in which diagnosis is proceeding. The name "problem" has become, from nonspecific to specific, in both etiology-morphology and function-physiology.

Here are some examples to help you understand.

#1. Abdominal pain \rightarrow acute pancreatitis

(symptom name) (classical name of disease)

#2 Pleural effusion \rightarrow Exudative pleuritis \rightarrow Tuberculous exudative pleuritis

(finding name)(more specific name of disease) (classical name of disease including etiology)

#3 Congestive heart failure \rightarrow Chagas cardiomyopathy

(name of functional physiological disease) (classical name of disease including etiology)

#4 Acute hepatitis \rightarrow Acute hepatitis A

(classical name of disease) (classical name of disease including etiology)

At each stage of the disease, as it goes through different stages of renaming, analyze the characteristics and write them in PC. This will serve as the basis for the next phase.

The problem must be true. The name you give it must be unwavering and well thought out. Do not leap to an uncertain name.

{22} Development of Problem

Finally, there are seven types of "problems" that develop.

1: Cancellation

#1 Pleural effusion → (Cancelled) [Date of cancellation].

2: Correction

#1 Upper gastrointestinal hemorrhage → (Correction) Epistaxis [date of correction].

3: Progress

#1 Anemia → Iron deficiency anemia [date of progress].

4: Identification of cause

#1 Acute pneumonia → Acute pneumococcal pneumonia [date of identification].

*

#1 Nephrotic syndrome → Nephrotic syndrome (#2) [date of specificity]

#2 Systemic lupus erythematosus

5: Inclusion

#1 Hypereosinophilia → #2 [date of inclusion].

#2 Exfoliative dermatitis

6: Transition

#1 Acute renal failure → (Transition) Chronic renal failure [date of transition].

7: Healing

#1 Lung abscess → Healed [date of cure].

{23} Provisional Problem List

The problem list must be compiled after collecting ample basic data. In reality, however, there are many cases where a diagnostic plan and treatment must be initiated without sufficient basic data. In such cases, even if the basic data are insufficient, a tentative problem list should be prepared. The same method of describing problems is used.

While the provisional problem list is being developed, collect basic data and complete the official problem list as soon as possible.

Lectures in Bolivia Day 5

This is the last lecture. From next sessions, we will have patient rounds and discussions, based on actual patient presentations.

Ⓐ Basic Documents

Do not forget that the basic data should be a description of the facts !

1: How to describe the present medical history

The patient is the subject of the history of present disease.

(1) Write chronologically.

(2) When did the symptoms start?

How did it start?

e.g. The day after returning from Vallegrande.

As soon as I drank my morning coffee.

Where?

What was the nature of the symptoms? (Write as the patient perceives it)

How bad?

e.g. I was so sore I couldn't stand up, so I sat down.

Walked, although it hurt.

How long did the symptoms last?

How did the symptoms persist?

What did the patient do about it?

Don't turn a patient's plain words,

e.g. A burning pain in the chest.

A tearing pain in the abdomen

Hurt as if a nail were driven into my head

into medical clichés. (like "severe abdominal pain")!

Thus, it is to say exactly what and how the patient feels.

(3) Patient may describe the symptom vaguely.

If patient gives vague descriptions of symptoms, make them clear.

If patient says something meaningless, find out the symptoms. If patient says, "I have a bad heart," do not take it. If patient says he/she has a "heart problem", do not write it down.

(4) When patient states a finding, ask who observed it.

e.g. I noticed it myself this morning when I looked in the mirror.

My wife noticed it.

I did not notice the pulse drop until the doctor told me.

(5) Recognize the accompanying symptoms and the findings. Symptoms do not appear at random. Symptoms are often grouped together because of the presence of a disease and its symptoms.

e.g. Fever and nausea associated with headache

Hoarseness associated with inability to swallow

Sickness associated with fever

(6) Other physicians may refer the patient to other physicians for diagnosis based on the symptoms and findings at the time of diagnosis.

e.g. When I was told I had pleurisy, I felt pain in my chest every time
breathed.

When I was told I had pleurisy, I had beer-colored water drained.

(7) Describe other hospital events as seen by the patient

2: Physical examination .

The “Clinical Record”, which has been used for a long time in Comprehensive Problem-Based Internal Medicine, will be provided. Items to be observed are printed. Resident's findings are collated. The resident is then instructed to correctly observe and describe them. Proper findings are essential to a proper problem list.

3: Screening test packages

The screening package may vary from specialty to specialty, but in any case, it should meet the following requirements

- (1) High sensitivity to common abnormalities.
- (2) High sensitivity to serious abnormalities, even if they are not numerous.
- (3) Simplicity of examination work.
- (4) Low cost.

4: Past data

- (1) Write the source and date of the data.
- (2) Write specific figures in the test results. Do not simply replace the description with your own judgment, such as “normal” or “abnormal”.
- (3) The film should be reviewed. The medical record contains the doctor's findings. It is the findings he/she took at that time. What was not seen at the time often comes to light later.
- (4) Look at the specimen by yourself. Do not be satisfied with just a report. Peripheral blood specimens are easy to examine, so everyone able to be skilled at it.
- (5) If there is anything unclear in the material, ask the pathologist to explain it to you under the microscope. If you have any questions about the material, do not hesitate to ask the previous doctor.

⑧ Conference

Conferences are not for patient referrals, but for discussions for the correct diagnosis and better treatment. In order to discuss effectively, the format of the conference needs to be established.

Order of presentation:

- (1) State the patient's name, sex, age, and occupation.
- (2) Read out the current medical history (Read out the history as written. Do not add anything ! Do not omit ! Only what is written will appear in the record).
- (3) List the past diseases.
- (4) List the physical findings according to the items in the medical record (All of them, but unable to present those that have not been examined).
- (5) List the past data that are useful (the degree of understanding of the doctor in charge can be clearly seen in the way this information is listed).
- (6) Give the examination findings reviewed this time with the date (date and time)
- (7) The images should be exhibited.

The basic data has been given. The "Problem List" should now be presented.

- (8) Read out the "Problem List" (no need to explain problems).
- (9) For each problem, separate the plan into diagnosis and treatment(not necessary to explain the reason for the plan).

Questions and discussion will begin after the presentation.

© Evaluation of Residents

- (1) Be able to interview the patient and write an accurate medical history.
- (2) Be able to collect and summarize past data effectively.
- (3) Be able to take a complete physical examination.
- (4) Be able to perform basic examinations on one's own.
- (5) To be able to make a "problem list".
- (6) To be able to plan for "problems".
- (7) To be able to discuss with other physicians.
- (7) Be able to explain and give appropriate instructions to paramedicals and other doctors.
- (8) Be able to explain in a way that patients and their families can understand.
- (9) Be able to reduce panic of patients and their families.

* * * * *

Now then, let's actually try it!