Biomedical and Psychosomatic Models in Obstetrics and Gynecology and Sexual and Reproductive Health

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Etiology and Pathogenesis

Methods

- History,
- Lab
- Imaging

Methods

- Surgery
- Radiotherapy
- Drugs









Therapy

Genetics,
Infection,
Endocrine
Molecular etc

International Standards

International Standards

Disease centered

Morphological and functional universal characteristics of diseases

Independent of
The ill person
The environment
The Health Professional

Reduction of complexity

Disease centered

Diagnosis:

Looking for the characteristics of the specific disease in terms of morphological or functional defect by using objective methods and criteria excluding subjectivity of patient or doctor. Standardized procedures

Machine Model

Therapy:

Eliminating, Repairing or Compensating the defect to restore as much as possible the morphology and/or function Standardized procedures

Drug, Surgery, Radiation

Disease centered

Research:

Reduction of complexity
Collection of objective data; Experimental studies; Randomized controlled trials

Laboratory

Skills:

Technical operative skills.

Standardized procedures.

Disease Textbook with Etiology, Epidemiology etc.

Patient-Physician Interaction

Physician's concept of health and disease

Expert

Active

Top

Level of Facts



Medical Language

Patient's concept of health and disease

Ignorant

Passive Recipient

Down

Disease (Physician) centered communication)

- ■In disease centred communication the physician takes quickly the lead and determines the agenda.
- ■She/he uses the classical history taking with a catalogue of preformed questions. These questions are based on disease entities and serve the purpose to come quickly to a diagnosis. (you find what you look for). Emotions are suppressed, because of objectivity
- ■The patient is a passive recipient of a therapeutic prescription

Disease (Physician) centered communication)

- ■The information is gathered by standardized questions and thus it is well structured and organized
- ■This type of communication is digitalized and helps the physician to get quickly to a problem definition
- ■The standardized problem definition helps the physician to get quickly to an evidence based solution or therapy



Acute, emergency room medicine,
Defined physical disease
Specific limited problem

Limits of the biomedical model

- ■The same disease entity evokes completely different responses in different individuals like a miscarriage, a cancer, a bleeding disorder etc..
- ■Where do these differences come from and how should the doctor understand them?
- ■The presented symptoms do not fit into any known disease entity like feeling bad, feeling exhausted and tired, feeling nauseated, feeling pain in different body regions without a detectable cause.
- ■Where do these symptoms come from and how should the doctor handle it ?

Limits of the biomedical model

- Patients and gynaecologists are confronted with situations in which there is no one single evidence based solution but patients have to make personal choices.
- How should gynaecologists help in shared decision making?
- A therapeutic intervention is well founded on scientific evidence but the patient does not comply. The health risks of some behaviours are very well proven but still the patient maintains her risk prone behaviour.
- What type of "disorder" is this and how should the doctor diagnose and treat it?

The limits of the biomedical model

- ■Patients present personal problems like sexual difficulties, partner and family conflicts, stressful life events in the context of adolescence, pregnancy, postpartum, peri and post-menopause and they seek help with their gynaecologists
- How can the doctor respond to these demands and problems?
- ■Patients are experienced as difficult and demanding and the gynaecologist feels exhausted and burned out.
- ■Is there any disease category relating to the doctor patient relationship and how should these disorders be treated?

Reproductive and sexual health

- Reproductive health implies that, apart from the absence of disease or infirmity people have the ability to reproduce, to regulate their fertility and to practice and enjoy sexual relationships. It further implies that reproduction is carried to a successful outcome through infant and child survival, growth and healthy development. It finally implies that women go safely through pregnancy and childbirth, that fertility regulation can be achieved without health hazards and that poeple are safe in having sex.
 - Fourth World Conference on Women; Beijing4.-15 Sept. 1995

Sexual Health

WHO further elaborated on the concept of sexual health in particular

 "Furthermore a central aspect of being human throughout life encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, legal, historical, religious and spiritual factors." (WHO, 2006a)

The different dimensions

- a) The **dimension of prevention** (unwanted pregnancy, STI, Sexual violence)
- b) The dimension of health maintenance and promotion (Screening for diseases of the genital organs, Risk behaviour
- c) The dimension of quality of life and achievement of goals in life (capacity enjoying sexuality, safe motherhood etc)

Sexual and Reproductive Health

Physical health

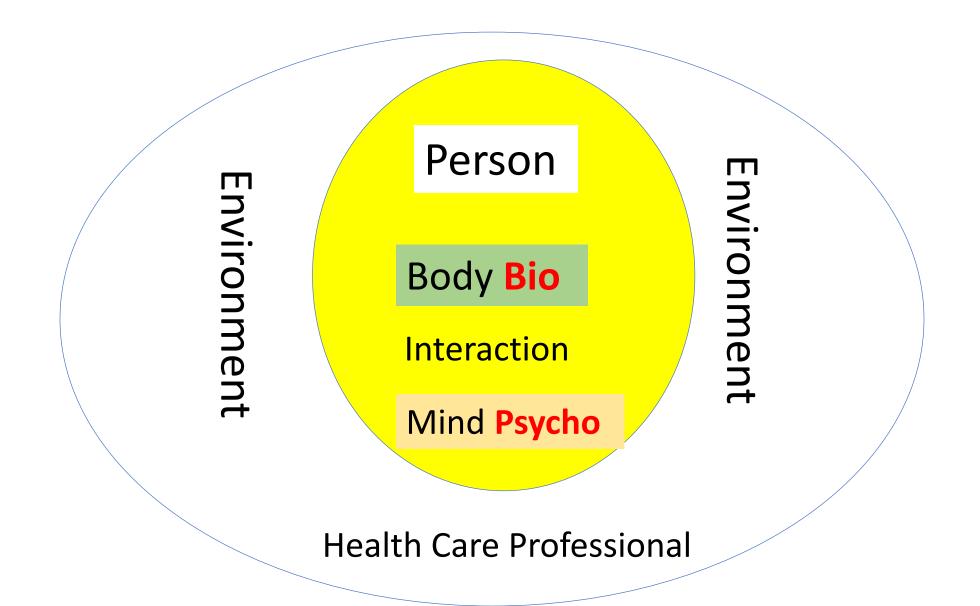
Mental Health

Sexual Health

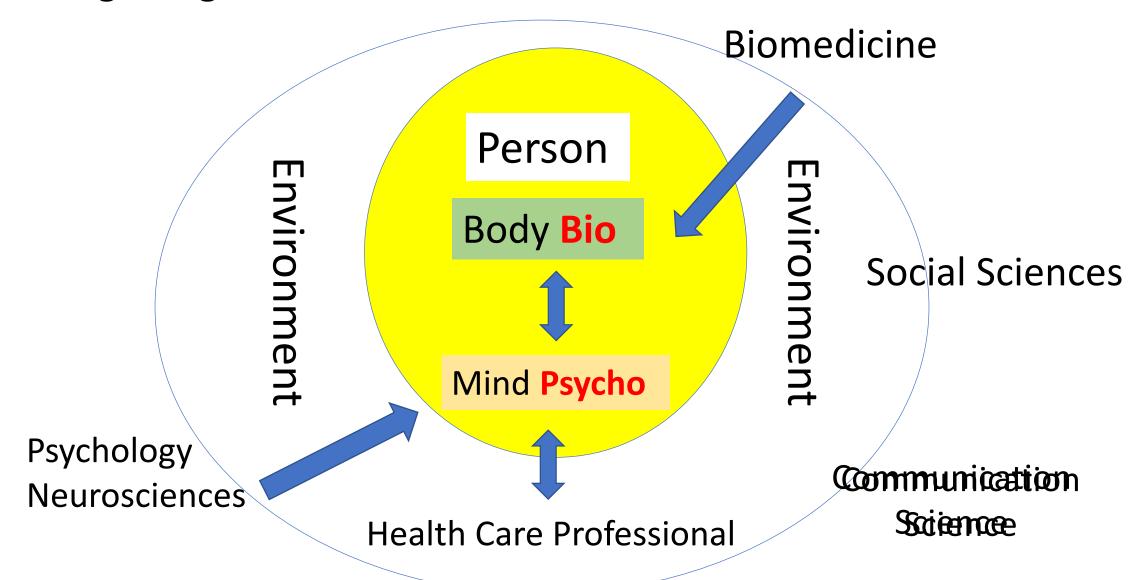
Prevention Health Promotion

Quality of life Wellbeing Aims in Life

Systemic View on Health and Disease and Medical Care



Systemic View on Health and Disease and Medical Care integrating



The integrative model

The Focus on Disease

(Universal Common Denominator)

- Knowledge
 - Disease Classification
 - Symptoms, Prevalence, Etiology Diagnosis Therapy
- Skills
 - How to make physical exam,
 - Use techniques, apply techniques

The Focus on the patient

(Thinking, Feelings, Behavior)

- Knowledge
 - · Cognition, Emotions, Motivation, Behavior
 - Different psychotherapeutic approaches and techniques
- Skills
 - Working with the relationship
 - Eclectic psychotherapy

- The physician patient encounter
 - Communication
 - Helpful (Therapeutic) Relationship
 - Ethical guidelines

Patient-Physician Communication

Physician Role:

Wants to help; Cares for the patient; uses his/her competence in the patient's health interest

Level of relationship



Confidence, Trust

Patient Role:

Hopes for help, Trusts that the physician acts in her interest, competent and caring

Understands and responds to emotion

Level of Emotions



Good Affective Contact

Expresses emotions

Physician 's concept of health and disease

Level of Facts



Commmon Language

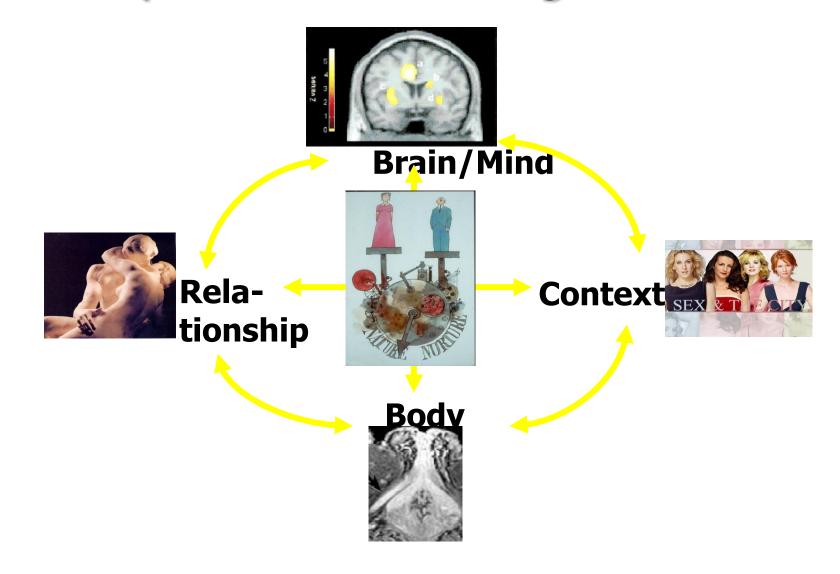
Patient 's concept of health and disease

The Bio-Psychosocial Paradigm

Knowledge

Skills

Attitudes



Laan E. Personal communication

What do we need as HCP?

Knowledge and skills

Knowledge about communication and how to create a shared reality with a patient

Communication skills

Knowledge about the body/mind/environment interaction

Skills in working with a biopsychosocial perspective

Attitudes

Patient centered, open, non judgmental attitude trying to work in the patient's best interest

Following ethical guidelines:

Autonomy

Non maleficence

Beneficence

Justice

The contents of psychosomatic training

- Communication skills
 - OProfessional listening and professional information giving
 - ODisease (physician) centered and patient centered communication
 - **OCommunication in special clinical situations**
 - O Breaking bad news
 - O Risk counselling
 - O Shared decision making
 - **Motivational interviewing**
- Clinical application of the psychosomatic, biopsychosocial model
 - ODiagnostic processes
 - **OTherapeutic interventions**

The 4 dimensions of a message

Facts

I have pain in my lower abdomen



Self disclosure

I feel helpless **Frustrated** Message

I trust you You are powerful



Make the pain go away quickly



Relationship

Knowledge about different types of clinical communication

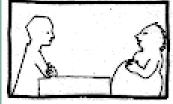
physician-centered

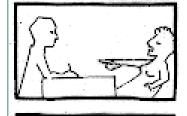
approach

patient-centered

- closed questions
- Physician leads the conversation from the beginning
- Physician defines topics and the essential
- Suppression of emotional content
- Early focussing



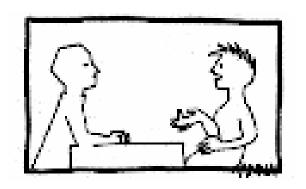






- Open questions
- Patient leads conversation at the beginning
- Topics are offered by the physician
- Emotional content is picked up
- Information giving as a reciprocal process

patient-centered approach



Active listening

Waiting
Checking back
Mirroring
summarizing



communicative skills - to create a "shared reality"

Attending

Nonverbal communication that reveals a diligent and attentive listening, a listening with the whole body

- eye contact
- body language
- intonation
- verbal tracking

communicative skills - to create a "shared reality"

Following

Attitude that allows the patient to delineate his / her situation. The focus is on the patient's message.

- door opener
- encouragement
- questions
- attentive silience

communicative skills - to create a "shared reality"

Reflecting

Repeating the content and emotions of a patient's statements attentively and with appreciation.

- paraphrasing
- mirroring
- recapitulating

Emotion handling

Emotions correspond to what the patient experiences and to her individual reality.

The emotional brain is the fastest acting part of the brain and sets the framework for communication and understanding

Being aware of body language and non-verbal expression is opening the channel for emotional exchange

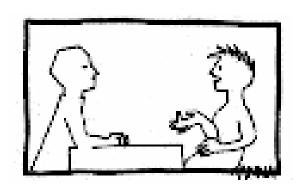
Calming down emotions rapidly may make the patient feel not understood or rejected

Giving space to emotions: silence can be helpful for the patient to give her time to tell more or express herself

Response to emotions

- The physician needs in a first step to become aware of his/her own emotions (Ex.: Feeling irritated, sad, worried, helpless)
- Then she/he has to try to perceive the emotions expressed by the patient (How does she feel?)
- In the next step he tries in his mind to verbalize the emotions expressed by the patient (she feels sad, worried, angry, frustrated, overwhelmed etc.)
- The emotions perceived by the physician can then be reflected to the patient in a respectful way using sometimes the form of a question: "I imagine, that this situation must cause a lot of anger and frustration, mustn't't it?"

patient-centered approach

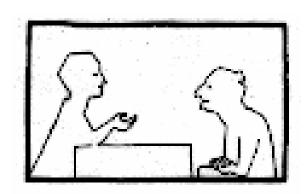


Active listening

Waiting
Checking back
Mirroring
summarizing

Adapted, individualized information giving

Elicit Provide Elicit



Professional Information Exchange

Assess the individual need for information: What and how much does the patient want to know?

Structurizing: Structure information, give importance and summarize

Announcing: Announce important messages. " Now I want to tell you something very important, which I want you to understand?"

Give small information units: Short sentences with repetitions if necessary.

Allow questions and check back: Encourage questions from the beginning and check back what has been understood by the patient.

Refer to patients' experiences and life: Use images and examples

Adress different sensory canals: Visualize what you have said. Write down in the presence of the patient. Give material

Information exchange

- Elicit the patient's needs for information, her expectations and her pre-existing knowledge about the subject he/she would like to talk about.
- Provide a defined quantity of information. It is important that the information is given in small units, well structured, that important parts are announced and the patient is encouraged to interrupt this phase by direct questioning.
- Elicit the patient's understanding and interpretation of the information by asking about the quantity, the speed, the clarity and the lack of attainability of the information given. In some situations it is equally important to ask the patient about the emotional meaning she gives to the information. "What does this information mean to you? Is it reassuring or worrying? Are there new questions coming up?"

Breaking bad news

- Preparation for the encounter.
 (Room, No beeper, who is coming, patient alone, partner, family)
- Introduction (Joining with the patient by using a more personal issue, a brief summary of the previous events and the objective of the consultation)
- Announcement (Unfortunately I have to give you bad news)
- Statement (Give the diagnosis in simple words)
- Waiting for the individual reaction of the patient (Stunned, paralyzed, confused, shocked, desperate, crying, stoic, denying etc.)
- Response to the reaction (Emotion handling, reflecting, summarizing)
- Encouraging questions and giving further information in small pieces
- Give hope (There is always something that can be done)
- Structure the near future (What is the patient going to do next, define next steps to be taken and give appointments)

The art of counselling 2 types of decisions

- Effective decisions
 - Large data base about benefits and risks
 - The benefit outweighs the risk by far
 - Most of experts and informed patient would take this decision
 - Retina inspection, HbAc1 and lipids in Diabetes; Aspirin, beta Blocker, Lipid lowering drugs after MI
 - Emergency Room

- Preference sensitive decisions
 - There are not sufficient data available about benefit and risk
 - OR

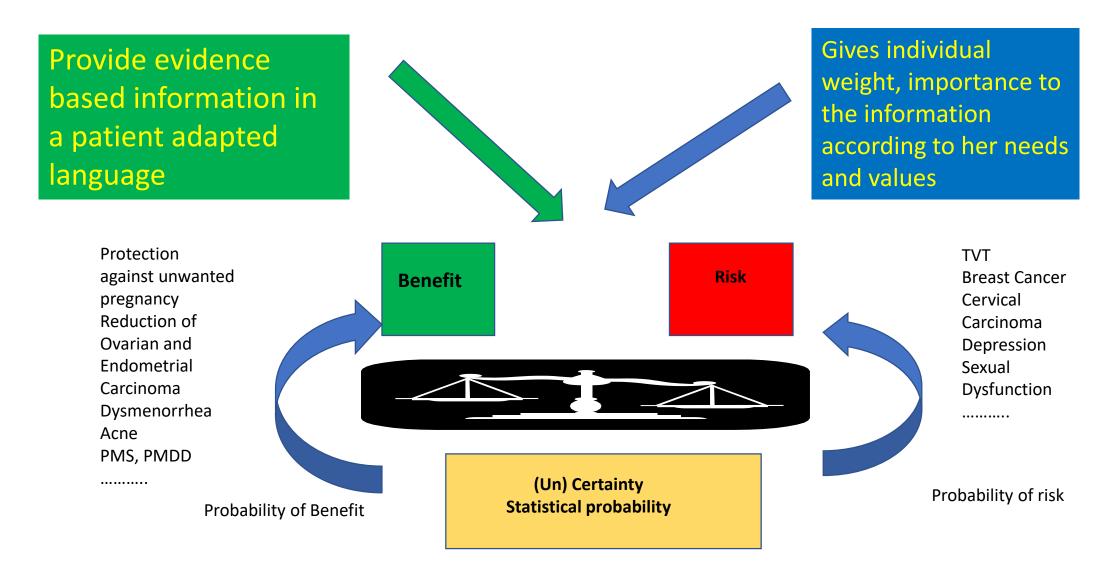
The data are available, but the benefit/risk ratio depends strongly on the patient's individual values and priorities

 Antenatal Screening, Screening Prostate Mammography-Screening, Menopause Treatment, Contraception

Hormonal Contraception

The Doctor

The Patient



Shared decision making -

The doctor's role

Listen to the needs of the patient

Assess the biopsychosocial profile in relation to the needs of the patients

Knowledge about benefits and risks of an intervention (Evidence based)

Understanding statistics

Give information to the patient in a way that facilitates understanding (visualization, comparison with everyday experience

Each decision is a trade off between benefits and risks



The patient's role

Express needs and expectations

Help the doctor to get the health relevant information

Ask questions

Give the personal importance and weight to the information about benefit and risk based on the needs, values and priorities of the individual

The time line of the biopsychosocial model

Unfullfilled **Distress** needs **Beliefs** Conflict **Early life** Life events experiences **Affective state Physical state** Infection **Previous Genetics Dysfunction** diseases, of systems **Benign** /neoplasic **Structural** growth defects

The application of the psychosomatic model:

The pathogenic understanding

Biomecial diagnostic techniques

Infection

Benign, neoplastic growth

Structural defects

Dysfunction of systems

Genetics

Psychosocial diagnostic techniques

Distress

Conflicts

Unfullfilled needs

Emotional and cognitive dysfunction

Early life experiences

The clinical application of the psychosomatic model: Diagnostic process

Biomecial diagnostic techniques

Psychosocial diagnostic techniques

Medical history

Physical examination

Sono, Radiography

Laboratory

Psychosocial history

Psychosocial assessement

Patient 's concepts and ressources

The clinical application of the psychosomatic model: Diagnostic process – ABCDEFG Mnemogram

• A = Affect

- This means that the physician should be aware of a predominant affective state like depression, anxiety, This includes also some basic knowledge about the prevalence and the diagnostic possibilities to detect affective disorders
- B= Behaviour
- Frequently risk taking or health damaging behaviour plays an important part in the pathogenesis or complication of clinical disorders in OB/GYN. This is especially true in obstetrics where behavioural problems have an important impact on the health of the mother and the child.
- C= Conflict
- Conflicts can be either external or internal and can be subdivided into attraction versus attraction, avoidance versus avoidance and attraction versus avoidance types of conflicts. Chronic unresolved conflicts lead to chronic stress, reduced motivation, depressive and anxious mood and social difficulties, which may all together impair health.

The clinical application of the psychosomatic model: Diagnostic process – ABCDEFG Mnemogram

• D = Distress

 Distress describes a condition in which a person is confronted with external or internal stressors, which overwhelm the person's coping capacity. This includes transitional periods in the course of one's life. Distress leads to psycho-endocrine, psycho-vegetative and psychomotor responses which may be hazardous to the patient's health

• <u>E= Early life experience</u>

This refers to previous life events, which may date back into childhood and adolescence.
 Traumatic experiences may have an impact on neurobiological pathways which may increase
 the patient's vulnerability to later stressful life events and may induce repetitive health
 damaging behaviour. Also emotional deprivation and neglect may have long term
 consequences regarding the emotional development and interpersonal competence of
 patients.

F = False beliefs

• False beliefs relate to general patterns of thinking which are likely to increase the vulnerability to life stressors: low self esteem, pessimism, generalization, self reference etc.

• **G** = Generalized frustration:

 Life situations in which essential needs are unmet. These situations may lead to depression, anxiety, loss of self-esteem and somatization

Comprehensive biopsychosocial diagnosis

- Symptoms and problems as descriptive summary
- conditioned
- by predisposing, precipitating and maintaining biological, psychological and social factors
- and
- patient's concepts and ressources

The application of the psychosomatic model: Diagnostic process – the 9 field matrix

| Factor matrix | Biological | Psychological | Social |
|------------------|---|--|--|
| Predisposing | Family risks, Pregnancy and birth related risks | Early trauma Abuse Neglect | Broken family Early separation Migration |
| Precipitating | Disease, Drugs, Biological transition | Loss, Life transition Separation | Migration, Cultural norms, Social changes |
| Maintaining | Side effects of drugs Etc. | Anxiety, False beliefs, stress responses | Seconary reinforcement in the environment. |

Patients' concepts and ressources

- Patient and physicians may have different concepts about health and disease
- Understanding the patient's concept helps the physician to "create a common reality" which is the basis of "developing a shared model of the problem"
- The "shared model of the problem" is the basis for therapy and compliance

The application of the biopsychosocial model – *Therapeutic Process*

Therapeutic plan according to EBM

Drugs

Surgery

Physiotherapy

Radiation

Define together with the patient the therapeutic objectives and goals

Patient-Doctor Relationship

Psychosocial interventions

Define therapeutic objectives and goals

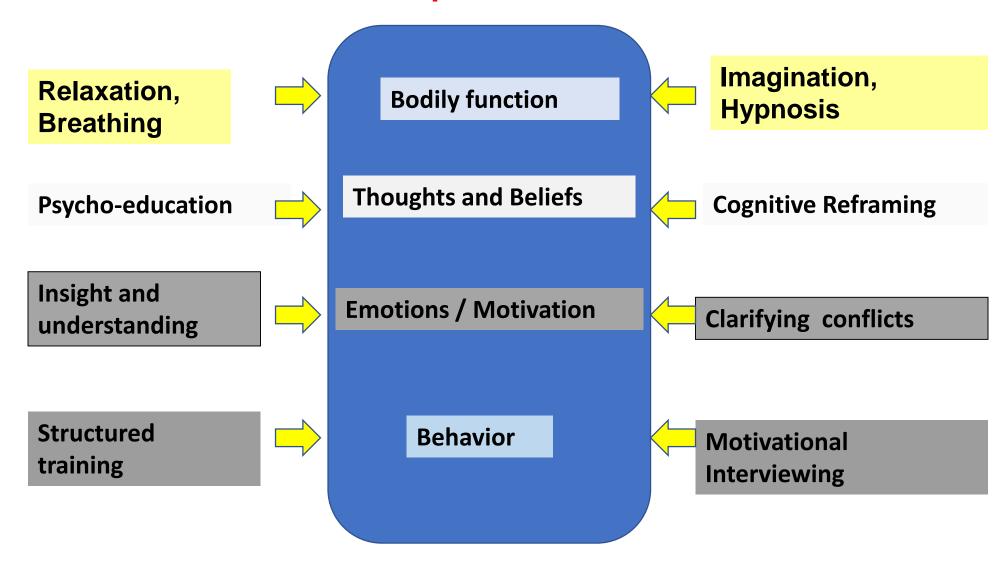
- Encourage the patient to define the objectives
- Discuss the objectives
 - What can be achieved in which time?
 - What is realistic?
 - Are there alternative objectives?
 - What to do if the objectives cannot be reached?
- Use a quality of life scale and help the patient rate her status quo and the status she wants to reach

The doctor patient relationship

- The physician is the most important drug
- Each doctor-patient encounter is at least one dosage of this drug
- He may give stability and hope
- He may share the emotions and the suffering
- He may give information and education
- He may reestablish self confidence and self responsibility

Psychosomatic Therapy

Elaboration of a shared explanatory model of the problem/disorder



• Catharsis:

- The gynaecologist encourages the patient to express her emotions and talk about her feelings (affects).
- Ex.: The 36 year old I grav. comes for a ultrasound scan at 20 weeks gestation. The scan shows a missed abortion with fetal structures without heart activity. The patient is desperate. The physician invites her into a separate room and encourages her to talk about her emotions and the questions she might have. She reveals that at the beginning of the pregnancy she did not want this child and she was thinking about abortion. Now she is convinced that the intrauterine death is god's punishment and that "it is all her fault". The physician is just listening and holding the hand of the patient. She keeps on talking about her feelings of guilt and her sadness. After a while the physician responds:
- "I can imagine the overwhelming pain you feel about the loss of the child which is even aggravated because you put the blame on you. Let me tell you that many women have mixed feelings at the beginning of a pregnancy and that this ambivalence is a normal feeling. I am very sure that you are not responsible for this death. You should give yourself permission to mourn and to be supported in this mourning process.

- Clarifying of conflicts-conflict resolution
- Clarification and brain storming
- Ex.: A 35 year old female suffers from complete loss of libido which creates a profound conflict with her partner, who feels a deep rooted sexual desire towards her. During the session with the couple it becomes evident for the male partner, that previous traumatizing sexual experiences of her have conditioned her aversive reactions to his expression of intensive desire which is experienced as threatening and aggressive. After encouraging her to verbalize her sexual wishes and needs which are much more directed towards non penetrative sex both can start to negotiate about new ways of sexual expression and encounters.

Cognitive reframing.

- Ex.: A 22 year old 0 para suffers from chronic pain, which could not be explained by laparoscopic findings. After the operation the physician explains the results. The patient is silent and withdrawn.
- Physician: "This must be somehow disappointing for you, that we could not find a single cause for your pain, which bothers you so much. I can imagine that you might have the impression that we do not understand your suffering.
- Patient: Yes, this is so frustrating, Do you think that the pain is just in my head ..pure phantasy....
- Physician: Not at all. We know that this pain is real, but that the conditioning factors are complex as we have discussed before. We were talking about the chronic pain as the result of a disturbed processing of signals coming from certain body regions......

Insight and understanding

• Ex.: The 52 year old patient had undergone treatment for mammary carcinoma with lumpectomy, radiation and adjuvant antihormonal treatment. She feels abandoned by her husband and her family and responds with a depressive mood. The physician tries to clarify with her the expectations she has towards her family. By verbalizing her wishes it becomes clear that she had never expressed her anger and frustration about her disease and the deep feeling of the injustice imposed on her by fate or god. She gains some insight into the influence of her own behaviour on the withdrawal of the family and she is able to adapt her expectations to the possibilities of her family.

• Stress reduction techniques.

• Ex.: A 36 y. old patient and her partner receive a treatment of assisted reproduction with ovarian stimulation, ovum-pickup and embryo transfer. After two failed treatment cycles the female patient exhibits a strong vegetative reaction during the ultrasound evaluation of the ovarian response; she starts crying and reports heart palpitations and headache. The physician teaches her some basic breathing techniques. In a separate consultation her way of coping with the treatment is analysed showing the enormous pressure she puts on herself and the anticipatory anxiety she develops. In a counselling session with the couple different ways of coping are discussed: Modifying the "fixed" objective of success by all means, Defining a plan B, building up compensatory activities and initiating the learning of a relaxation technique.

Understand the actual coping of the patient

Emotional coping

- Accuse, Feeling sorry for oneself, feelings of injustice and reproach
- Resignation, Fatalism, give up hope
- Anger and aggression,
- Feelings of guilt and shame
- Optimism and hope
- Suppression of emotions
- Emotional outlet





Understand the actual coping of the patient

Cognitive Coping:

- Distraction, Focus attention on other issues
- Aggravation, Interpreting issues as more severe than they seem to helpers
- Problemanalisis, Using information
- Humour, Irony,
- Dissimulation. Denying facts, bagatallizing
- Acceptance, Relativation and comparing with others
- Giving active sense to the crisis



Understand the actual coping of the patient

Behavioral coping

- Avoidance. Incl. Diagnostic or therapeutic measures
- Compensation (objects, creativity)
- Altruism
- Social withdrawal
- Distraction through work,
- Relaxation, Meditation, Yoga etc.
- Active Search for information and help,
- Looking actively for emotional support



Coping oriented interventions

Emotional:

Emotional relief, permit expression of negative emotions

Cognitive:

Identification of dysfunktional thoughts, generalization etc-

Reframing ("It is posssible that I will not achieve all but I will achieve something"

Crisis as a challenge to grow

Crisis having a sense in one's biography?



Coping oriented interventions

Behavior:

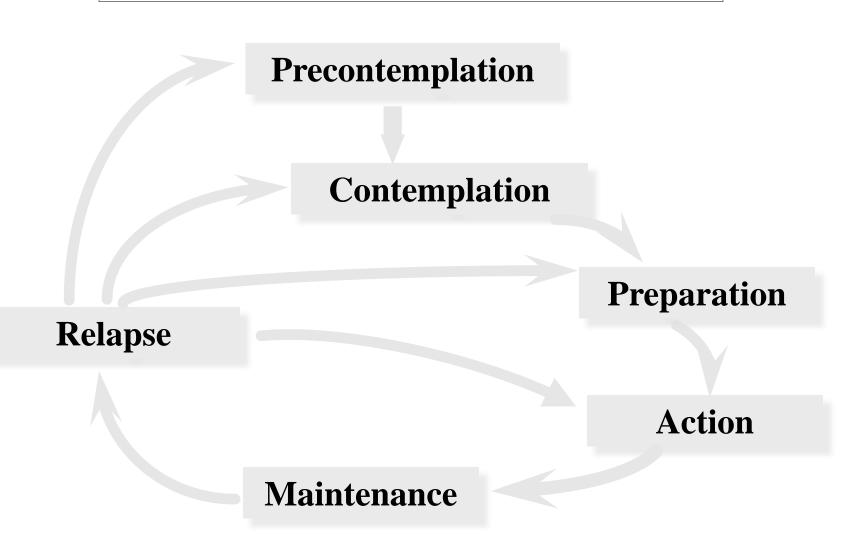
Identify helpful behavior: "When did you feel a little bit better during the last 48 hours? What happened then"

Social support Increase contact and groups, organize social life etc.)

Enhance control, What can be changed? Distinguish from what has to be accepted.

Utilizing help offers (Self help groups,, psychology).)

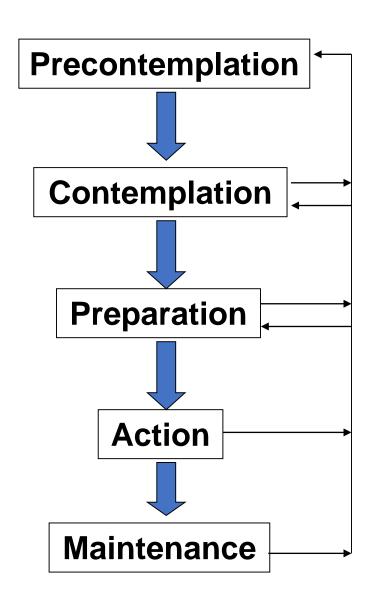
Process of Change Modell nach Prochaska und DiClemente



Model of Behavioral Change



Health behavior change model



I do not drink to much.....Alcohol is no problem for my health

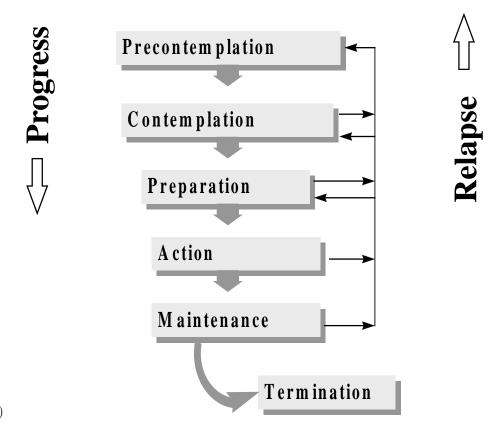
Poeple say that alcohol may cause liver and brain damage...Maybe I should cutdownbut not today because I need some relaxation after the stress

After my last bad experience I have decided that I will stop driniking alcohol

I manage not to drink alcohol evenn after a stressful day

Not drinking alchol has become a habit for me

Behavior and Health behavioral change



Nach Prochaska & DiClemente (1998)

From Precontemplation to Contemplation

I have no problem with my behavior

Talk to friends Media Doctor's talk Maybe I have a problem
I have read.
Somebody has said

Contemplation Should I change Ambivalence

- Continue Drinking
- Advantages
- Disadvantages
- Stop Alcohol
- Advantages
- Disadvantages



65

From Contemplation to Preparation/Decision

Clarify ambivalence and motivation for change

Behavior and Health behavioral change

Factors which determine Readiness to change

<u>Importance</u>: Why change? Personal values and

expectations regarding the

benefit and cost of change

Readiness

Confidence: How to change?

Self- efficacy

Motivation is what the patient does to increase importance and confidence

Behavior and Health behavioral change

Explore importance

Keep foot in the door: Low rating (1-2) " May be today is not a good day to talk about stopping to smoke. We can come back another time"

Get to know more, Focus on the scale and calrify: "Why so high?" "What would have to happen to raise importance for one point,"

Pro und Contra. Discuss and make a balance sheet. Short and longterm cost and benefits.

<u>Doubts and concerns."</u> What worries you about the change? What are your doubts? Let's write it down and follow it up.

Anticipate change: "Let's imagine a moment that you changed your behavior. How would you feel. How would your usual day look like

How important is it at this moment for you to......

•1 2 3 4 5 6 7 8 9 10

Not at all important very important

Behavior and Health behavioral change

Build up confidence

Foot in the door: Discuss briefly possibilities of change to come back later.

Get to know more: Focus on scaling and clarify: "Why is your cofidence right know at this point?" "What could help you to increase it to one more point upwards?"

Brainstorming. Brainstorming about solutions. Realistic goals. Let the patient choose. Distinguis between global goals, strategies and specific taks.

<u>Past expriences (successes and failures)</u>: "What did help you? Where were the barriers and the resistance?"

Assess confidence regarding specific tasks and start with simple tasks

How confident are you that you are able to change?

•1 2 3 4 5 6 7 8 9 10

No confidence very confident

From Preparation to Action

Define change
Operationalize change
Behavioral plan
Strategies
Time line

Strategies
Choices
Decision
among
options

From Action to maintenance

Help maintain new behavior

Regular visits

Feedback

Discuss

experience

Enforce

Confidence

The Relapse. The rotating door

Acknowledge the progress Positive experience

What was difficult? What can be learnt?

What made importance less What made confidence less

