Psychosomatic and eating disorders: diagnosis and treatment

Ferenc Túry
Semmelweis University
Institute of Behavioural Sciences

The term „psychosomatic” has a double meaning:

- psychosomatic disorders
- psychosomatic medicine

Psychosomatic medicine is an integrative science (*Lipowsky*)

- Formerly: dualistic approach (body – mind)
- Need for a multidimensional, holistic approach: psychosomatic unity
- System theory, circular causality (instead of linear thinking)
- Biopsychosocial model versus biomedical model

The traditional biomedical model is illness centered, exclusionistic (*Engel, 1977*)

Danger of reductionism

Shortcomings of this model: lack of the interpretation of chronic disorders

Chronic disorders are influenced by life conditions, life events, experiences, states of mood, etc.

The psychosomatic symptom can be interpreted, if we observe it in the context where it appears

The psychosomatic symptom can be regarded as a communicative behaviour

Body language: analytic interpretation of conversions

The symptom communicates, it has a symbolic meaning

History of psychosomatic thinking

Heinroth, 1818: the term „psychosomatic”

Jacobi, 1822: the term somatopsychic

Freud: psychoanalysis – conversion, symbolic, dramatic expression

Anxiety – defense mechanisms

Lack of appropriate defense – somatic conversion

Psychoanalytic basis of psychosomatic disorders:

preverbal trauma – lack of appropriate emotional development – somatic manifestation

First three years of life

„Neurotic" (affective and anxiety) disorders: verbal stage of the personality development

Deutsch, 1922: psychosomatic medicine is the psychoanalysis used in the medicine

Ferenczi: behaviour of the therapist is an essential factor in the treatment

Adler: inferiority, compensation, vulnerability

Pavlov: psychophysiology

Cannon: in the situations of danger: „fight or flight”.

Selye: stress theory

Franz Alexander: vegetative neurosis. There are special personality traits predisposing to certain illnesses

Michael Bálint: the doctor as a medicament

Bálint groups

Schafer, 1966: sociopsychosomatics: the main causes of the psychosomatic disorders are the conflicts coming from social and interpersonal relationships

Sifneos, 1973: alexithymia

Locke, 1981: psychoneuroimmunology

Traditional classification

There are three major symptomatological cluster of psychosomatic disorders:

- conversions: the conflict is expressed in a somatic response, and it has a symbolic meaning
- functional disorders: no organic alterations. Disorder of functions.
- psychosomatoses: there are distinct organic alterations

Major psychosomatoses (seven holy illnesses – *Franz Alexander*):

- bronchial asthma,
- colitis ulcerosa,
- hypertension,
- neurodermatitis,
- rheumatoid arthritis,
- gastrointestinal ulcer,
- anorexia nervosa.

Another classification *(Engel, 1967)*:

- Psychogenic disorders: only a slight somatic participation, e.g. conversion, hypochondria
- Psychophysiological disorders: somatic reaction to psychosocial factor
- Psychosomatic disorders – classic forms
- Somatopsychic disorders: psychological reactions to somatic diseases

Major research fields of psychosomatics

Formerly: psychodynamic approach

Now:

- learning theories relating to somatic processes: self-regulation, biofeedback
- cognitive theories, the role of meaning and belief systems in the development of disorders
- psychoendocrinology, psychoneuroimmunology

New trends in psychosomatics

Health psychology deals with the conditions of health, adaptive behavioural patterns (conflict resolution, coping)

Maintainig of health, prevention, psychological factors are also in the focus of health psychology.

Definition of health psychology by Matarazzo (1982):

Health psychology is a specific contribution of psychology to the promotion and maintaining of health, the prevention and treatment of disease.

Causes of appearance of health psychology:

- Shortcomings of the biomedical models
- Significance of quality of life
- The focus shifted from the infectious diseases to the chronic ones.
- The development of behavioural sciences (e.g. learning theories, coping, studies on stress, etc.)
- Costs and benefits of health care
- Importance of primary prevention

Behaviour medicine is a broad, interdisciplinary field of the research, education and clinical practice, which analyses the role of psychological regulation.

It deals with the screening and correction of behavioural risk factors (e.g. smoking).

Definition by Schwartz és Weiss (1978):

The behaviour medicine is an interdisciplinary science which integrates biomedical and behavioural approaches, and this knowledge and practice is applied in the prevention, diagnosis, and rehabilitation.

Therapeutical considerations

The therapeutical approach should be integrative.

Therapy should be patient centered not illness centered.

Doctor as a medicine (*Bálint*).

Burn-out: danger of (psycho)therapy

Placebo effect: simultanoues somatic and psychotherapeutical effects

Evidences in the treatment

Pharmacotherapy

(e.g. antidepressants)

Close relationship to depression and anxiety.

Psychotherapy

Different settings:

- Individual
- Family
- Group therapies

Major methods:

- psychodynamic,
- cognitive-behavioural therapy,
- interpersonal therapy,
- family therapy,
- relaxation and biofeedback,
- hypnotherapy

Eating disorders

http://go.to/funpic

Why are important the eating disorders?

- High morbidity: the prevalence of obesity (BMI > 30) is about 20%, the prevalence of subclinical cases is almost 50% in certain populations.
- The morbidity increases – the role of sociocultural factors.
- High mortality of anorexia.

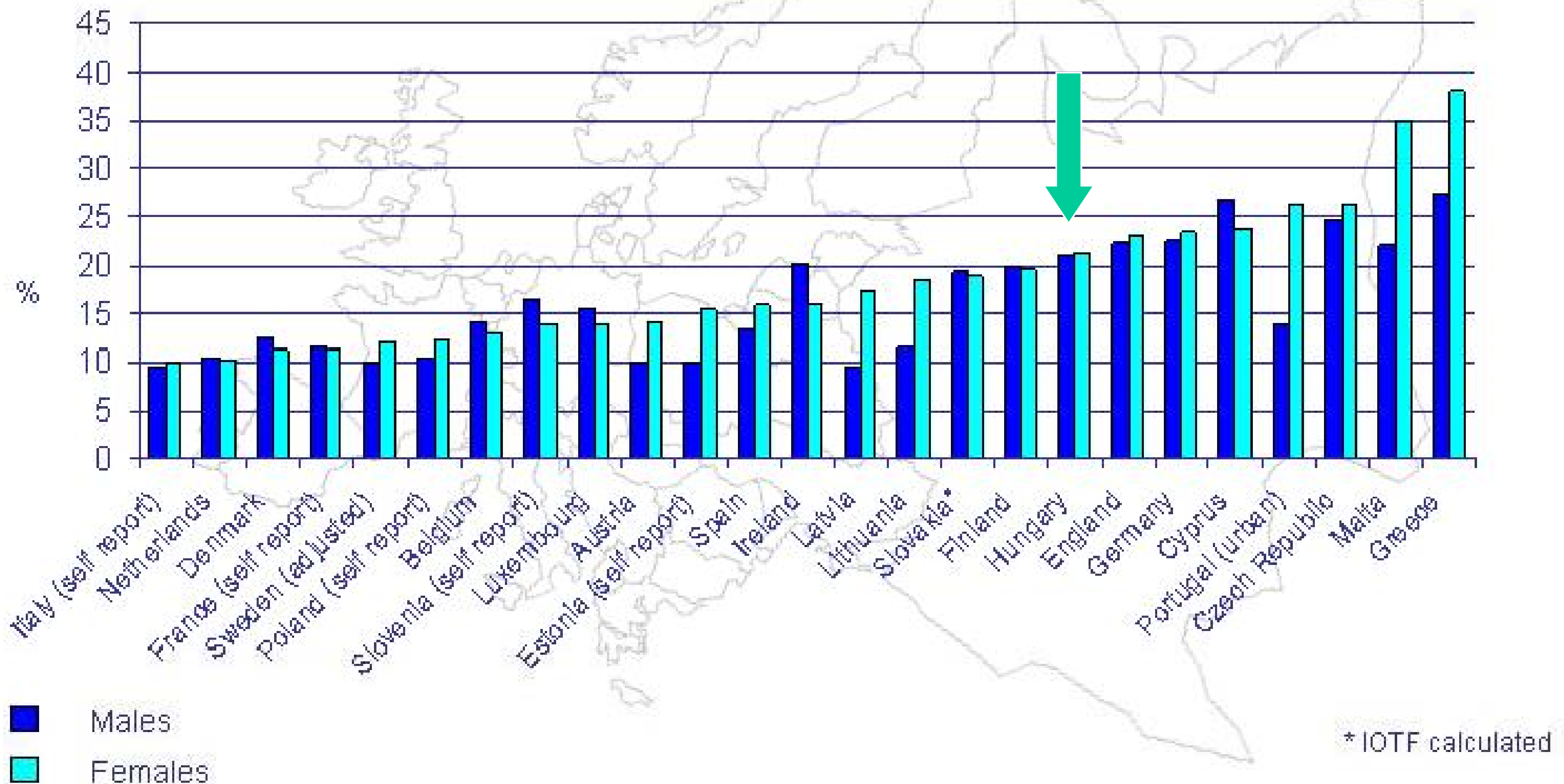
  10 years after the onset: 8%, after 20 years 20%.

Epidemiology

The prevalence of obesity (BMI ≥ 30) in the Western civilizations is about 30%.

Hungary: 20%.

Obesity in European Adults (BMI ≥ 30)

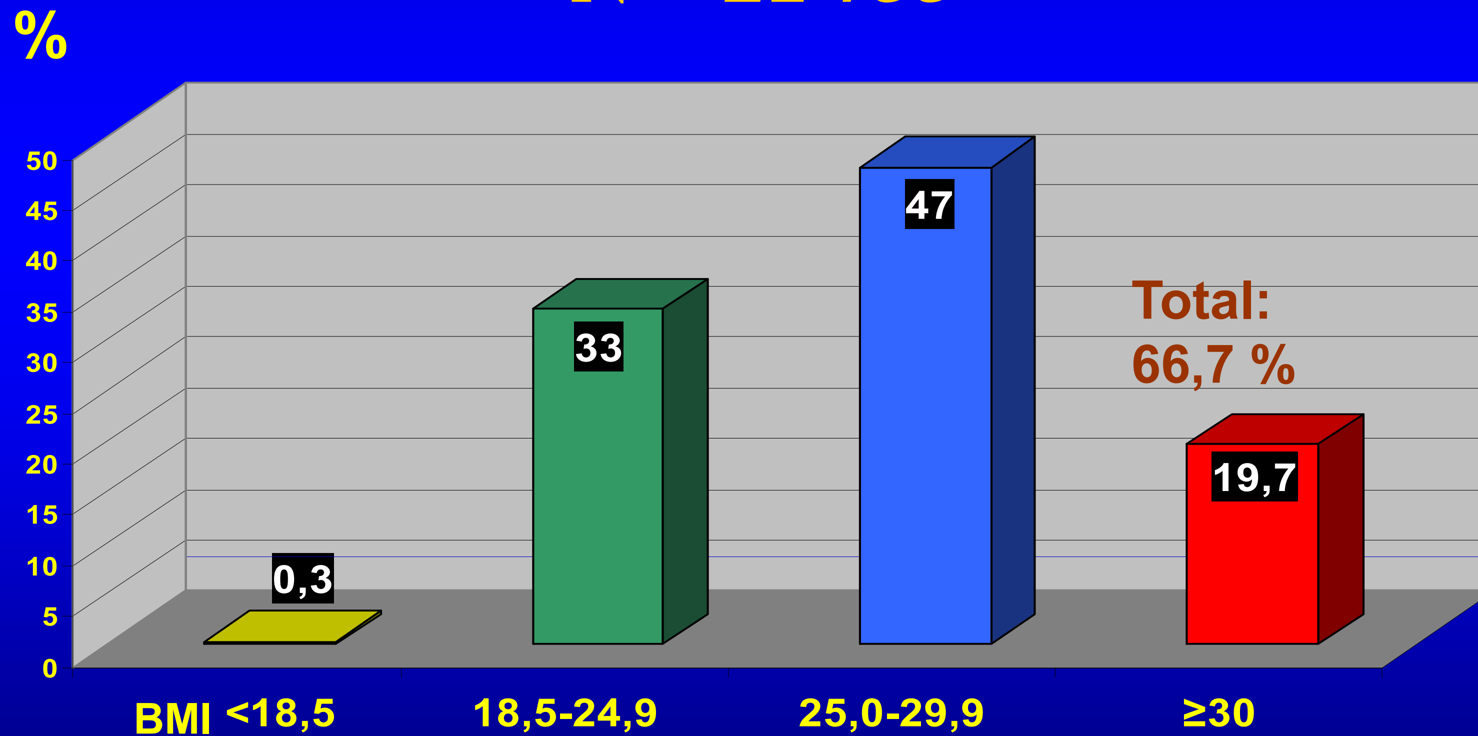


Age range and year of data in surveys may differ. With the limited data available, prevalences are not age standardised. Self reported surveys may underestimate true prevalence. © International Association for the Study of Obesity

iaso

iaso

Frequency of overweight and obesity in a Hungarian representative sample among males (*Halmy et al, 2004*)



Hungarian data

(Halmy, 2000)

		1994	*2000*
Males:	overweight	34.1%	38.3%
	obese	13.1%	18.4%
Females:	overweight	26.6%	27.9%
	obese	13.2%	20.4%

Point prevalence: among 18-35 year old females: 1-4%.

In Hungary: cca 30 000 eating disordered patients.

Onset:

AN: 12-18 years

BN: 17-25 years

There is an increase in the morbidity rate of eating disorders in the last decades.

„Hidden” disorders or real increase?

Recognition of the syndromes is important: 2/3 of anorectic patients were recognized by the GP, but this rate is only 16% in bulimia.

Among teenagers the most frequent illnesses are:

- obesity
- asthma bronchiale
- AN
- diabetes mellitus

Anorexia nervosa (DSM-IV)

A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).

B. Intense fear of gaining weight or becoming fat, even though underweight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

D. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g., estrogen, administration.)

Specify if:

Restricting type: during the current episode of anorexia nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

Binge-eating/purging type: during the current episode of anorexia nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

Bulimia nervosa (DSM-IV)

A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:

- ♦ eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
- ♦ a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating)

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.

C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

D. Self-evaluation is unduly influenced by body shape and weight.

The disturbance does not occur exclusively during episodes of anorexia nervosa

Specify if:

Purging type: during the current episode of bulimia nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas

Nonpurging type: during the current episode of bulimia nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

There are newer forms of eating disorders: binge eating disorder, purging syndrome, orthorexia nervosa, muscle dysmorphia, eating disorder body builder type, etc.

The distribution of subtypes changes: there is an increase in the multiimpulsive forms (bulimia, drog abuse, alcoholism, suicide, self-harm behaviour, promiscuity).

Binge eating disorder

There are binges, but without compensatory behaviour.

These subjects are obese.

The prevalence of the binge eating disorder (BED) in general population is 1-3%.

Among overweight and obese people: 5-8,5%.

Among obese subjects seeking help: 9-30%

(*de Zwaan 2001, Stunkard és Allison 2003*).

Muscle dysmorphia

Pope et al, 1993: reverse anorexia nervosa

Later the name changed: muscle dysmorphia.

The prevalence among body builders: 8.3% in the US (9/108 – *Pope et al, 1993*).

In Hungary: 4.3% (6/140 – *Túry et al, 2001*).

Athletic ideal („Schwarzenegger ideal”).

Hidden disorder.

Arnold Schwarzenegger

(1947-)

http://go.to/funpic

Eating disorder, body builder type

(Gruber and Pope, 2000)

Body fat phobia.

Rigid eating habits.

Orthorexia nervosa

Bratman (1997): dependence on healthy food.

Kinzl et al (2005): 500 female dieticians

Response rate: 41%.

Risk of orthorexia: 12.8%

Mona Lisa in the US for one week

before

after

Etiopathogenesis

Eating disorders are complex psychosomatic disorders with biological, psychological, and sociocultural components.

Multidimensional models differentiate predisposing, precipitating, and maintaining factors

Predisposing factors:

individual risk factors: biological (genetics, neurotransmitters, etc.), premorbid obesity, IDDM, psychological (disorders of self perception, special personality characteristics, sexual of physical abuse)

family risk factors: ED, affective disorder or alcoholism in the family, special family relationships, magnification of cultural values

sociocultural risk factors: cultural norms, slimness ideal

Precipitating factors:

Different stressors which cause dieting: life events

Maintaining factors

Cognitive and family reinforcements, effects of malnutrition

Loss of social skills, isolation, depression, change in the family structure, etc.

Biological theories

New results in AN: lower leptin plasma level, increased CSF level of NPY and CRH, decreased CSF level of the serotonin metabolite 5-HIAA

BN: serotonin may have in important role in the pathogenesis, plasma CCK level and satiety is diminished after meals. There are observations relating to the alterations of PYY and NA metabolism.

Psychological theories

Psychodynamic, cognitive-bahavioural, family dynamic models

Sociocultural models

Main arguments: epidemiological differences in different cultures, increase in the morbidity of EDs, sex difference, characteristic age distribution, ethnical differences, social class differences, high ED prevalence in certain subcultures and groups (dancers, models, homosexual men)

Eating disorders: disorders of **„3W”**
(white Western women)?
Today: there is an increase among black people, non-Western countries and males.

Question: the gender difference will disappear??
(*Van Furth, 1998*)

Transcultural studies: culture-bound or culture change syndromes?

Adaptation to Western cultural ideals (overidentification?)

McDonaldisation?

+

=

Other selective models of eating disorders

- Depression model, addiction model, ED as obsessive-compulsive syndrome, dissociation hypothesis

Treatment of eating disorders

Pharmacotherapy

Nutritive rehabilitation

Psychotherapy

Psychoeducation and self-help

Integrative programs

Pharmacotherapy

It should not be used as an exclusive treatment form

AN: antidepressants may have a role in the maintenance of weight after gaining weight

BN: antidepressants are useful regardless to the chemical structure(MAOIs, SSRIs, TCAs)

- Short term abstinence rate in the pharmacotherapy of BN is about 30%, the symptom reduction is about 70%
- Relapse rate is high (30-45%)
- The mechanism of antidepressants may be different as in depression
- High drop-out rate
- Drug dose may be higher as in depression (e.g. 60 mg fluoxetine)
- Combination of pharmacotherapy and psychotherapy may be more effective

Psychotherapy

- Psychodynamic therapies
- Cognitive-behavioural therapies
- Interpersonal psychotherapy
- Family therapy
- Group therapies
- Body oriented therapy
- Hypnotherapy

Integrative programs: stepped care

- In the first step generally self-help groups, psychoeducation is applied.
- Later: pharmacotherapy, outpatient group therapy.
- Outpatient psychotherapy, family therapy
- Intensive inpatient therapy

Prognosis

High mortality in AN: about 8% after 10 years, 20% after 20 years

Rough estimation at follow-up: 50% is symptom-free, 25% improves with remaining sypmtoms, 25% does not change