

Psychiatric disorders & physical activity

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1. General overview on mental health
 - definition, pa health benefits
2. Psychiatric disorders (reasons, prevalence, taxonomies, effects in life)
3. Schizophrenia
4. Depression
5. Effects of physical activity
6. Case Finland
7. Teaching / didactics / pedagogy
8. Sources

IN THIS PRESENTATION

- **FREUD : " ... TO BE ABLE TO LOVE AND TO WORK"**
- **" ... A RESOURCE THAT KEEPS UP OUR PSYCHIC ACTIVITIES. WE COLLECT MORE AND ALSO USE THIS RESOURCE ALL THE TIME, AND WITH THIS RESOURCE WE ARE GUIDING OUR LIVES"**

1. MENTAL HEALTH

Physical activity as a “mood keeper”, “spirit keeper”, as a preventive tool

- practically no side effects
- feasible for everybody
- cheap, also possible with no costs
- also other significant health benefits (20 or more health conditions)
 - - metabolic syndrome
 - - stroke
 - - ...
 - sexual potency (male)
 - life time expectancy

1. MENTAL HEALTH

- **"Mens sana in corpore sano"**
- **"Sound (healthy) mind in sound (healthy) body"**

1. MENTAL HEALTH

ETIOLOGY (=reasons & origin):

- Mostly not known
- Early childhood (Freud & psychotherapeuts)
- Tragical or very sad happenings in life
- Genetic reasons ?
- Also physical reasons (hit to the head, stroke, chemical/electrical changes in cns?)
- Multiple reasons

2. PSYCHIATRIC DISORDERS

PREVALENCE:

1/5 lifetime prevalence (western world)

mostly depression

2. PSYCHIATRIC DISORDERS

DSM-IV (=Diagnostic and Statistical Manual, version 4.)

- **Almost 200 diagnoses, including subcategories like:**
- **Anxiety Disorders (11) e.g. panic disorder**
- **Eating Disorders (3), e.g. anoreksia nervosa**
- **Impulse-Control Disorders (6), e.g. pyromania**
- **Mood Disorders (50), e.g. depression, bipolar**
- **Personality Disorders (11), e.g. narcissistic**
- **Psychotic Disorders (13), e.g. schizopherinia**

2. PSYCHIATRIC DISORDERS

DISORDERS (many different taxonomies...), this is version Vilhu ;) :

Schizophrenia

- hebefrenic, catatonic, paranoidic

Depression

Psychosis

Neuroses (fobias, obsessive-conductive disorders,...)

Bipolar (manic – depressed – manic ...)

Borderline personality disorder

**many many diagnoseses...polydipsia ...delirium
tremens**

2. PSYCHIATRIC DISORDERS

Hinders/effects on life:

- usually dramatic decrease in physical activity
- sense of being less valuable than others
- lack of self-confidence and initiative
- social shyness
- the effects of medication may cause:
 - thirstiness
 - overweight
 - tiredness
 - unability of getting started

2. PSYCHIATRIC DISORDERS

- Most "difficult" of psychiatric disorders
- also – but not at all always – multiple personalities
- a psychotic disorder
- typically begins around age 20,
- prevalence ~1%, mostly males
- more prevalent in Finland than elsewhere
- etiology mostly unknown (but traumatic!)
- prediction for healing 1/3, 1/3, 1/3

3. SCHIZOPHRENIA

POSITIVE SYMPTOMS:

- delusions**
- hallucinations**
- broken speech, one word or short sentences**
- broken, non-logic conduct**

NEGATIVE SYMPTOMS:

- emotions go flat (banal)**
- speech goes flat (banal)**
- non-willingness**
- unability to feel pleasure**

3. SCHIZOPHRENIA

Depression is often a part of larger psychiatric disorder.

Comorbidity: individuals with depression have very often (50% or so) other psychiatric disorders, too. F.ex.:

- eating disorder
- drug or alcohol abuse

4. DEPRESSION

SOME PERCENTAGES ON PREVALENCE/EPIDEMIOLOGY

- lifetime prevalence 20% women, 10% men
- at this (=every) moment 5% are depressed
- general length of D is 6-12 months, 20% longer
- risk for suicide 20x (=5-10%)
- prediction for healing is very good (more than 90%)
 - -> 50% will relapse (occur again) -> healing
 - -> 70 % will relapse -> healing
 - -> 90 % will relapse

4. DEPRESSION

META-ANALYSIS (Martinsen at 90`s)

1. experiences of pleasure (also: endorfine-hypothesis)
2. stopping of negative thoughts ("I can't do anything" "nothing is worth of nothing")
3. reducement of anxiety and nervousness
4. better self-confidence
5. reducement of depressive mood
6. better body-image

5. EFFECTS OF PHYSICAL ACTIVITY

7. better social adaptation
8. better ability to work
9. better sleep
10. better ability to think clearly
11. reduced prevalence of neuroses
12. diminished use of alcohol and drugs

5. EFFECTS OF PHYSICAL ACTIVITY

- AEROBIC AND NON-AEROBIC EXERCISE AS EFFECTIVE (F.EX. MARTINSEN & AL., 1989; DOYNE & AL., 1987)
- A RAISE AT ACTUAL CONDITION IS NOT A PRECONDITION FOR POSITIVE EFFECTS ON MOOD (THIRLAWAY & BENTON, 1992)
- "REASONABLE STRESS/LOAD" IS MOST EFFECTIVE (MOSES YM., 1989)

5. EFFECTS OF PHYSICAL ACTIVITY (research results on depression)

- SUMMARY (DEPRESSION)
 - REGULAR PHYSICAL ACTIVITY PROTECTS FROM DEPRESSION
 - DEPRESSIVE SYMPTOMS CAN BE TREATED WITH PHYSICAL ACTIVITY
 - OPTIMAL “DOSE” OF PHYSICAL ACTIVITY IS NOT CLEAR → FROM 1 TO 3-4 X / WEEK, FROM 20 MIN TO 7 HRS A WEEK
 - THE TYPE AND INTENSITY OF PHYSICAL ACTIVITY DOESN'T MATTER – ALL DISCIPLINES ARE WELCOME!

5. EFFECTS OF PHYSICAL ACTIVITY (research results on depression)

PATIENTS WITH SCHIZOPHRENIA

- INCREASED RISK E.G. OVERWEIGHT, DIABETES, CORONARY DISEASES
 - SMOKING 2-3 X , THE DEAL OF 'HEAVY SMOKERS' MULTIPLE
 - UNHEALTHY DINING HABITS
 - PATIENTS WITH SCHIZOPHRENIA HAVE LESS PHYSICAL ACTIVITY
 - WITH REGULAR, INSTRUCTED / GUIDED PHYSICAL ACTIVITY THE OVERWEIGHT (CAUSED BY ANTIPSYCHOTIC MEDICATION) CAN BE TREATED
 - ALSO POSITIVE EFFECTS ON QUALITY OF LIFE
E.G. POULIN YM. AUSTR NZ J PSYCHIATRY 2007!
- THE BENEFITS OF PHYSICAL ACTIVITY ARE OBVIOUS, BUT NO REAL EVIDENCE AS A PREVENTIVE OR A MEDICINE

5. EFFECTS OF PHYSICAL ACTIVITY (research results on schizophrenia)

HOSPITALS

- ~ 4-5000 individuals hospitalized at the moment
- in `80 the number was like 20 000
- -> lots of individuals at outpatient care at the moment
- ~ 50 hospitals, ~ 35 physical activity instructor / pa therapists at the hospitals
- pa is mostly a essential part of the care

6. Case Finland

- a wide range of different therapies; psychotherapy, group therapy, work therapy, music therapy, art therapy, physiotherapy, physical activity therapy, ...
- physical activity instructors works mainly with physios

In MUNICIPALITIES there are ~100
physical activity instructors -> ~150
mental groups weekly around the country

6. Case Finland

WHAT KIND OF PHYSICAL ACTIVITY IS GOOD FOR MENTAL WELL-BEING?

- always welcome/nice/pleasant for the individual
- 1. Flow-experiences for somebody
- 2. Adventure sport for somebody
- 3. Physical activity with goals for somebody
- 4. Philosophical physical activity for somebody

7. TEACHING / PEDAGOGY

CANADIAN META-ANALYSIS AT 90 'S: THREE GOOD SPORTS FOR INDIVIDUALS WITH PSYCHIATRIC DISORDERS:

1. NATURE
2. MUSIC / DANCE
3. CATHARSIS

7. TEACHING / PEDAGOGY

PRACTICAL TIPS FOR TEACHING / INSTRUCTING:

- the diagnosis is not important !!
- pa educators don't work with psychotic / dangerous patients
- always on a voluntary basis – a gentle push/prompt might be needed anyhow
- physical activity is a part of the treatment
- be specially reflective "antennae out"
- not too motorically demanding movements

7. TEACHING / PEDAGOGY

- movement from small / brief to step by step larger / more complicated
- have enough breaks = intervall-type of exercise
- Medication:
 - have water / drink available, the medication causes often thirstyness
 - antipsychotic medication (neurolepts); most of the medicine is taken in the morning -> possibly tiredness, sickness, powerlessness
- try to keep up nice atmosphere -> people want to have more positive experiences

7. TEACHING / PEDAGOGY

- you can feel success as a educator already, when a person has shown up
- the feedback is not necessarily as spontaneous and generous as in a mainstream group
- ->
- you need to find your personal `kicks` out of more narrow scale of expressions of emotions / feelings!

7. TEACHING / PEDAGOGY

Leppämäki Sami 2009

Jokela Hannu 2004

Martinsen Egil 2000

Salminen Eija 2000

& the sources mentioned in the text.

8. Sources

“Physical activity is
good for you ... if it
feels like it!”

Kiitos!

Thank you!