

The relationship between sleep disorders and (reactive) aggression in forensic psychiatric patients.

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The primary objective of this study is to examine the relationship between sleep disorders and (reactive) aggression in forensic psychiatric patients in the Forensic Psychiatric Center Dr. S. van Mesdag in Groningen. In addition to this,...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Sleep disorders and disturbances
Study type	Observational non invasive

Summary

ID

NL-OMON34061

Source

ToetsingOnline

Brief title

Sleep and Aggression

Condition

- Sleep disorders and disturbances

Synonym

sleep disorders, sleep problems

Research involving

Human

Sponsors and support

Primary sponsor: GGZ Drenthe (Assen)

Source(s) of monetary or material Support: GGZ Drenthe

Intervention

Keyword: Aggression, Forensic Psychiatry, Impulsivity, Sleep disorders

Outcome measures

Primary outcome

- Measurements of current sleep quality and quantity and current subjective aggression, impulsivity and hostility with questionnaires.
- Objective information (from therapists of subjects) about the current risk of aggression, impulsivity and hostility obtained with the scores on the last HKT-30.

With these parameters the following hypothesis will be examined:

A lower sleep quality and sleep quantity is associated with a higher rate of (reactive) aggression.

Secondary outcome

With data obtained from the questionnaires, personal interview and the medical file the following hypothesis will be examined:

- What is the epidemiology of sleep disorders in forensic psychiatric patients?
- What kind of sleep disorders do forensic psychiatric patients experience/have?
- If forensic psychiatric patients have sleep disorders, when did they start?

For example after traumatic experiences, during detention period or during stay in the clinic?

- Are therapists aware of sleep disturbances of patients and if so, how are sleep disorders treated among forensic psychiatric patients?
- Are specific psychiatric disorders related to specific sleep disturbances?

- Are there specific psychiatric disorders in which the relationship between sleep disorders and (reactive) aggression is stronger compared to other psychiatric disorders?

Study description

Background summary

A large group of psychiatric patients has complaints about their sleep. Despite the fact that these sleep disorders are most often a result or symptom of the psychiatric disorder (review: Abad and Guileminault, 2005), recent insights strongly suggest sleep disorders should be treated in addition to treatment of the psychiatric disorder. This may have a positive effect on the course of the psychiatric disorder and possibly prevents relapse (for example: Krakow et al., 2001; Fava et al., 2006).

Treatment of sleep disorders in forensic psychiatric patients could even be of greater importance. A lack of sleep is associated with emotional instability. Studies in young, healthy people show that a poor quality of sleep is associated with anger/hostility (Pilcher et al., 1997) and superficial sleep with impulsiveness and aggression (Schubert., 1977). Sleep deprivation is associated with a higher rate of aggression (Roth et al., 1976). A group of sexual offenders with sleep apnoea showed less subjective aggression and hostility after treatment of their sleeping disorder (Booth et al., 2006). A lower quality of sleep is associated with a higher rate of aggression, impulsivity and hostility in a group of male young delinquents (Ireland and Culpin, 2006). Some neurological evidence comes from an fMRI study in young healthy subjects which showed evidence for a stronger emotional response to negative stimuli after lack of sleep (Yoo et al., 2007). There seems to be an association between quality and quantity of sleep and aggression. Sleep disorders thus may be a risk factor for impulsive aggressive behavior. Even though this may have important implications for the forensic psychiatry, the relationship between sleep and aggression has never been studied in forensic psychiatric patients.

Abad VC, Guileminault C. Sleep and psychiatry. *Dialogues in Clinical Neuroscience* (2005) 7: 291-303.

Booth BD, Federoff JP, Curry SD, Douglass AB. Sleep apnea as a possible factor contributing to aggression in sex offenders. *Journal of Forensic Science* (2006) 51: 1178-1181.

Fava M, McCall WV, Krystal A, Wessel T, Rubens R, Caron J, Amato D, Roth T.

Eszopiclone Co-administered with fluoxetine in patients with insomnia coexisting with major depressive disorder. *Biological Psychiatry* (2006) 59: 1052-1060.

Ireland JL, Culpin VC. The relationship between sleeping problems and aggression, anger, and impulsivity in a population of juvenile and young offenders. *Journal of Adolescent Health* (2006) 38: 649-655.

Krakow B, Hollifield M, Johnston L, Koss M, Schrader R, Warner TD, Tandberg D, Lauriello J, McBride L, Cutchen L, Cheng D, Emmons S, Germain A, Melendrez D, Sandoval D, Prince H. Imagery rehearsal therapy for chronic nightmares in sexual assault survivors with posttraumatic stress disorder. A randomized controlled trial. *JAMA* (2001) 286: 537-545.

Pilcher JJ, Ginter DR, Sadowsky B. Sleep quality versus quantity: relationships between sleep and measures of health: well-being and sleepiness in college students. *Journal of Psychosomatic Research* (1997) 42: 583-596.

Roth T, Kramer M, Lutz T. The effects of sleep deprivation on mood. *Psychiatric Journal University Ottawa* (1976) 1: 136-139.

Schubert FC. Personality traits and polygraphic sleep parameters. *Waking Sleeping* (1977) 1: 165-170.

Yoo SS, Gujar N, Hu P, Jolesz FA, Walker MP. The human emotional brain without sleep - a prefrontal amygdala disconnect. *Current Biology* (2007) 17: R877-R878.

Study objective

The primary objective of this study is to examine the relationship between sleep disorders and (reactive) aggression in forensic psychiatric patients in the Forensic Psychiatric Center Dr. S. van Mesdag in Groningen.

In addition to this, epidemiologic numbers of sleep disorders in forensic psychiatric patients will be generated, next to data on type of sleep disorders and treatment of sleep disorders in forensic psychiatric patients. The question which psychiatric disorders relate to sleep problems in forensic psychiatric patients will also be examined.

Study design

The project will last approximately 10 months, in which 6 months are reserved for collection of data. In a group of forensic psychiatric patients each subject will be evaluated once with 4 subjective questionnaires about sleep and aggression/impulsivity and a personal interview with one of the researchers. The latter will focus on quality of sleep during life, possible origins of sleep disorders, comparison of current sleep and sleep during detention time,

current quality of sleep, sleep hygiene, and possible effects from current treatment for sleep disorders. In addition, information about basic data as age and sex, the DSM-IV-TR diagnosis, current use of medication and scores on the last risk assessment (HKT-30) will be obtained from the medical file. There are no medications, medical instruments or psychosocial interventions involved in this study.

Study burden and risks

Not applicable.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

Patients who signed the informed consent will be enrolled in the study, given that none of the exclusion criteria is applicable.

Patients who do not speak Dutch will be interviewed with help of a translator. Also they will receive help filling out the questionnaires.

Exclusion criteria

Patients who at the time of enrollment are in a psychotic condition making a conversation or fair judgments of their own interests impossible or lost contact with reality will be excluded from the study.

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 15-10-2010

Enrollment: 135

Type: Actual

Ethics review

Approved WMO

Date: 23-08-2010

Application type: First submission

Review commission: METC Isala Klinieken (Zwolle)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL32640.075.10