

THESIS REVIEW

PSYCHIATRIC ASPECTS OF SMOKING

Review submitted by **Samy Abdul-Kawy**
for partial fulfillment of Master degree of Psychological
Medicine & Neurology-Ain-Shams Faculty of Medicine,
Supervised by: Prof. — A. Okasha, Prof. — A. Sadek,
and Dr. Afaf H. Khalil, 1985.

Review of literature on the subject illustrated that history of tobacco smoking dates since its discovery in 1556, and its use by American Indians. The biochemical studies of tobacco smoking showed the difference in composition of main stream smoke and side stream one. These studies demonstrated the absorption of nicotine from the different types of tobacco (e.g.), cigarette, cigar, pipe, snuff, and nicotine chewing gum, and their blood concentration profiles. Hazards of smoking either to the smokers and non-smokers (i.e. passive smokers) were presented. The pharmacological approach in the review pointed out the distribution of nicotine receptors all over the body especially in the CNS and the different pharmacological actions of nicotine and its effects on the higher psychological functions. A chapter was specified for nicotine use as drug dependence showing the criteria of addiction such as tolerance and withdrawal symptoms. The different patterns of smoking behavior (e.g. frequency of puffing, depth of inhalation, and number of cigarettes smoked), to gain the accustomed level of each smoker were also mentioned. Motivations for starting smoking were reported to be genetic and psychosocial factors, while the maintenance of smoking was detected to occur under the pharmacological and psychosocial factors. Personality of smokers with their psychoneurotic profiles was considered, associated with the different psychological explanations of smoking behavior, including the psychodynamic, behavioral, and cognitive social learning approaches.

The present review included two types of prevention of smoking, first is the primary line suggesting the role of public health services, medical staff, government role in promotion and taxation of tobacco sales, and production of low tar and nicotine cigarettes, and second is the secondary line of prevention establishing the

less hazardous forms of smoking (e.g. low tar/nicotine cigarettes, cigars, and pipes), nicotine substitutes (e.g. nicotine chewing gum, and nicotine nasal solution), and aids with psychotherapy for smoking cessation, especially the behavioral multicomponent techniques.

Lastly, recommendations were made and directed to public health education programs, health services, physicians, and medical staff, these were crystalised on to:

I. Public education: Testing and promoting the best methods of encouraging children and young population not to smoke by the health authorities and education authorities, nationally and locally. Attention should be given to the smoking problem of teachers on school premises. Display of notices by tobacco retailers stating that selling cigarettes to people under 16 is illegal and not to sale cigarettes in sticky (i.e.-single) Regular surveys of public attitudes to smoking and health. Developing anti-smoking package programs, and expliciting health warnings on cigarette packs.

II. Health Service: No smoking by health workers in public, role of physicians to alert cigarette smokers to the smoking risks, to support education programs, and to pressure cigarette companies to produce less hazardous cigarettes.

III. Others: Creating greater restrictions on smoking in public places, phasing out of all tobacco sales promotion, rising prices of high tar/nicotine cigarettes, limitation of tar/nicotine levels by withdrawing these with high content from sale, introducing alkaline tobacco to decrease smoke inhalation, making insurance services available to non-smokers at reduced rates, including nicotine dependence disorder in the Egyptian Manual of psychiatric diseases, establishing anti-smoking clinics in general hospitals, and finally, the review recommended further studies on smoking in Egyptian society to detect its psychosocial promoting factors.

M.R.AL-Fiky

THESIS REVIEW
PROLACTIN :
A NEUROENDOCRINE STUDY IN PSYCHIATRIC
DISORDERS

By: Zakaria Abdel Hakam Sayed

M. Sc. Thesis submitted to Ain Shams Faculty of Medicine under the supervision of Prof. AHMED OKASHA, Prof. ADEL SADEK and Dr. AFAF H. KHALIL (1985-1986).

This review of the role of the pituitary hormone, prolactin (PRL), in psychiatry began by explaining its physiologic and behavioural actions, and the pharmacologic factors influencing its secretion.

Prolactin concentrations are apparently unaltered in schizophrenics. Studies with different drugs were discussed regarding their significance for the dopamine hypothesis of schizophrenia.

During neuroleptic treatment, the changes in plasma PRL in relation to plasma drug level, development of parkinsonian side-effects, improvement and dopamine receptor blockade were discussed. The potent stimulating effect of insulin on PRL release may suggest a neuroleptic like action of insulin coma therapy.

The data on PRL levels in affective disorders were reviewed. The influence of antidepressants is reported to be contradictory. The increase in PRL levels after ECT gives an indication of the efficacy of the seizure activity and may help to explore ECT mechanisms.

It was documented that there is a direct relationship between the degree of PRL rise and the extent of epileptic activity. Determination of serum PRL after the ictus may help distinguish epilepsy from psychogenic fits.

In anorexia, the results showed a clear alteration of PRL response. Also, PRL has a role in the genesis of the premenstrual tension syndrome and may be a key factor in pseudocyesis.

Prolactin has provided a clue to psychogenic infertility and sexual dysfunctions.

The role of PRL in alcoholism and other addictive disorders were mentioned.

It appears that the study of PRL along with other hormones is based on the opportunity it provides to gain insight into neurotransmitter activity in the brains of psychiatric patients in the hope that this may lead to a better understanding of the diseases as well as improved treatment.

It was recommended that psychiatrists need to become more familiar with prolactinomas as they are associated with psychiatric dysfunctions. Monitoring plasma PRL and ACTH might do a great help in increasing the specificity of the DST in depressive disorders. A further understanding of epilepsy may be achieved through altering hormonal release after the fits. Measuring serum PRL levels of females with features of PMT syndrome might consider hyperprolactinemia as one of its causes, and treat accordingly. Also, every patient with sexual disturbance should have PRL level measured.