

Physical Illness and Schizophrenia

A Review of the Evidence

This book provides the first comprehensive and systematic review of current research evidence on the prevalence of physical diseases in people with schizophrenia, a disorder afflicting approximately 1% of the global population, and a group with mortality rates twice as high as the general population. The evidence presented will support programmes aiming to increase awareness of these problems and improve treatment. This is the first in a series of books addressing an issue emerging as a priority in the mental health field: the timely and proper recognition of physical health problems in people with mental disorders. It should be read by policy makers, service managers, mental health professionals and general practitioners.

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Preface

This is the first of a series of volumes addressing an issue which is emerging as a priority in the mental health field: the timely and proper recognition of physical health problems in people with severe mental disorders.

It is now well documented by research that people with severe mental disorders have a higher prevalence of several physical diseases and a higher mortality from natural causes than the general population. They seem not to have benefited from the recent favourable trends concerning mortality due to some physical diseases, in particular cardiovascular illness. Their access to physical healthcare is reduced and the quality of the physical care they receive is worse as compared with the general population. If we are really concerned about the quality of life of people with mental disorders and wish to protect their civil rights, we cannot ignore the fact that physical health is a crucial dimension of their quality of life, and that access to a physical healthcare of the same quality as that available to the rest of the population is one of their basic rights as human beings and as citizens.

The initial trigger for the preparation of this series of books has been a personal communication to one of us from a physician working with the Médecins sans Frontières in a Central Asian republic. He felt desperate because he was unable to get sufficient resources to deal with the very high mortality of people with schizophrenia admitted to the central mental hospital in the country: according to his account, one person out of two admitted for schizophrenia was likely to be dead at the end of the year in which he/she was admitted for treatment. Some of the excess mortality would be due, like in other countries, to suicide, but a large proportion of those who would die would have a physical disease (e.g. tuberculosis) as the main cause of death.

Indeed, mental hospitals in many countries are often lacking equipment that could help in making the diagnosis of physical illness as well as medications and other material that would make it possible to recognize and treat physical illness. Psychiatrists are reluctant to treat physical illness, perhaps as frequently as doctors in other medical specialties fail to recognize that their patients also suffer from a mental disorder or refuse to provide treatment for it.

Why people with mental illness are more likely to have a physical illness than the rest of the population is only partially known. Part of the answer to this

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question may be that some people with mental illness do not pay sufficient attention to their bodies and do not follow elementary rules of hygiene and disease prophylaxis. The fact that they often live in conditions of poverty and are exposed to considerable dangers of violence and abuse might also explain some of the excess morbidity and mortality from physical illness that they have. The fact that people with mental illness may be abusing alcohol or taking drugs and that they are therefore exposed to the health consequences of substance abuse and diseases related to the manner of use of drugs (e.g. hepatitis) may also play a role. There remains, however, a substantial proportion of excess physical morbidity that is not explicable by the above-mentioned factors, and it is therefore necessary to suppose that there are factors that facilitate the occurrence of physical illness and are inherent in people who have mental disorders. Changes in the immune system and hormonal imbalance have been mentioned as being among those factors, but it is obvious that more research will be necessary to unravel the puzzle of high rates of physical illness in people with mental disorders.

In many countries psychiatrists have taken off their white coats, shed the symbols of being physicians, forgetting that they are medical doctors — with a particular interest in mental symptoms but still essentially practitioners of a medical discipline. The creation of the specialty of liaison psychiatry is a sad testimony to the fact that only a small proportion of psychiatrists have an interest in dealing in a comprehensive manner with people struck by illness. There are no liaison internists, liaison dermatologists nor liaison surgeons: when invited to consult other colleagues, they simply do that without creating a subgroup that will be specially trained to do this. The existence of liaison psychiatrists is an unwise message to the rest of medicine: despite having a medical diploma, only a few among the psychiatrists are sufficiently well trained in medicine to be able to deal with patients who have a mental and a physical disease at the same time.

What should be done about this? The first step is raising awareness of the problem among mental healthcare professionals, primary care providers, patients with mental illness and their families. Education and training of mental health professionals and primary care providers is a further essential step. Mental health professionals should be trained to perform at least basic medical tasks. They should be educated about the importance of recognizing physical illness in people with severe mental disorders, and encouraged to familiarize themselves with the most common reasons for underdiagnosis or misdiagnosis of physical illness in these people. On the other hand, primary care providers should overcome their reluctance to treat people with severe mental illness, and learn effective ways to interact and communicate with them: it is not only an issue of knowledge and skills, but most of all one of attitudes.

Another essential step is the development of an appropriate integration between mental health and physical healthcare. There is some debate in the



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literature about who should monitor physical health in people with severe mental disorders. However, the crucial point is that there should always be 'somebody' in charge of this problem (i.e. a well-identified professional should be responsible for the physical healthcare of each patient).

Finally, further research in this area is needed. Physical illnesses should not be always regarded as confounding variables in studies dealing with mental illness. Physical comorbidity should be studied systematically, so that the interaction between the various mental disorders and the different physical diseases – in inpatients as well as in outpatients, in women as well as in men, and in young people as well as in the elderly – can be better understood.

This series of books aims to contribute to several of the above steps, by providing a comprehensive review of current research evidence on the prevalence of the various physical diseases in people with the most common mental disorders, and by identifying possible targets for future research. We hope the volume will be useful not only to policy-makers and mental health professionals, but also to primary care practitioners and at least to some extent to those who receive care from mental health services and their families.



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Abbreviations

AD Alzheimer's disease ADH antidiuretic hormone

AHA American Heart Association

AIDS acquired immundeficiency syndrome

AMI acute myocardial infarction AML amyotrophic lateral sclerosis

AP angina pectoris

ARA American Rheumatism Association

ASA arylsulphatase A

ASA-CS arylsulphatase A cerebroside sulphate ASA-NCS arylsulphatase A nitrocatechol sulphate

ATP Adult Treatment Panel (definition of metabolic syndrome)

BDV Borna disease virus
BMC bone mineral content
BMD bone mineral density
BMI body mass index

CATIE Clinical Trials of Antipsychotic Treatment Effectiveness

CI confidence internal CNS central nervous system

COPD chronic obstructive pulmonary disease

CPK creatinine phosphokinase CSF cerebrospinal fluid

D2 dopamine 2

DEXA dual-energy X-ray absorptiometry

DM diabetes mellitus

DMFT decayed, missing and filled teeth

DNA deoxyribonucleic acid

DSM-III Diagnostic and Statistical Manual of Mental Disorders, 3rd

revision

DSM-IV Diagnostic and Statistical Manual of Mental Disorders, 4th

revision

ECG electrocardiogram
EEG electroencephalogram

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FVC

estimated free thyroxine EFT₄ **ESR** erythrocyte sedimentation rate **EPS** extrapyramidal side-effects/symptoms **ESS** euthyroid sick syndrome forced expiratory volume FEV₁ **FSH** follicle-stimulating hormone FT₃I free triiodothyronine index FT₄I free thyroxine index

GBV-C GB virus-C (GB, initials of the first patient)

GRH gonadotropin-releasing hormone

forced vital capacity

HBV hepatitis B virus

HbsAg hepatitis B surface antigen

HCV hepatitis C virus

HDL high-density lipoprotein

HDL-C high-density lipoprotein cholesterol

HGV hepatitis G virus

HIV human immunodeficiency virus

HTLV-1 human T-cell lymphotrophic virus type 1

IBS irritable bowel syndrome

ICD-10 International Classification of Diseases, 10th revision

IFG impaired fasting glucose
IgE immunoglobulin E
IGT impaired glucose tolerance
IHD ischaemic heart disease
IRR incidence rate ratio

i.v. intravenous

LDL low-density lipoprotein LH luteinizing hormone

MEDLINE Online database of 11 million citations and abstracts from health

and medical journals and other news sources

MI myocardial infarction
MeSH Medical Subject Headings
MLD metachromatic leukodystrophy

MS metabolic syndrome

n number

NAD nicotinamide/ nicotine acid NDWG normalized diurnal weight gain n.s. not statistically significant NTI non-thyroidal illness

OR odds ratio

OSA obstructive sleep apnoea

p significance level



List of abbreviations

χv

PBCs pregnancy and birth complications

PCR polymerase chain reaction

PD polydipsia PU polyuria

QTc rate-corrected QT interval RA rheumatoid arthritis

RateR rate ratio
RR relative risk
RRBP Riva Rocci/l

RRBP Riva Rocci/blood pressure
s. statistically significant
SAD schizoaffective disorder
SIDS sudden infant death syndrome
SIR standardized incidence rate

SMR standardized morbidity ratio SPGU specific gravity of urine

STEP Schizophrenia Treatment and Education Program

 T_3 triiodothyronine T_4 thyroxine

TBE tick-borne encephalitis
TBG thyroxine-finding globulin
TCI transient cerebral ischaemia
TMD temporomandibular disorder
TRH thyrotropin-releasing hormone
TSH thyroid-stimulating hormone

TTV TT-virus (TT, initials of the first patient)

URI upper respiratory infections VA ventricular arrhythmia WI water intoxication