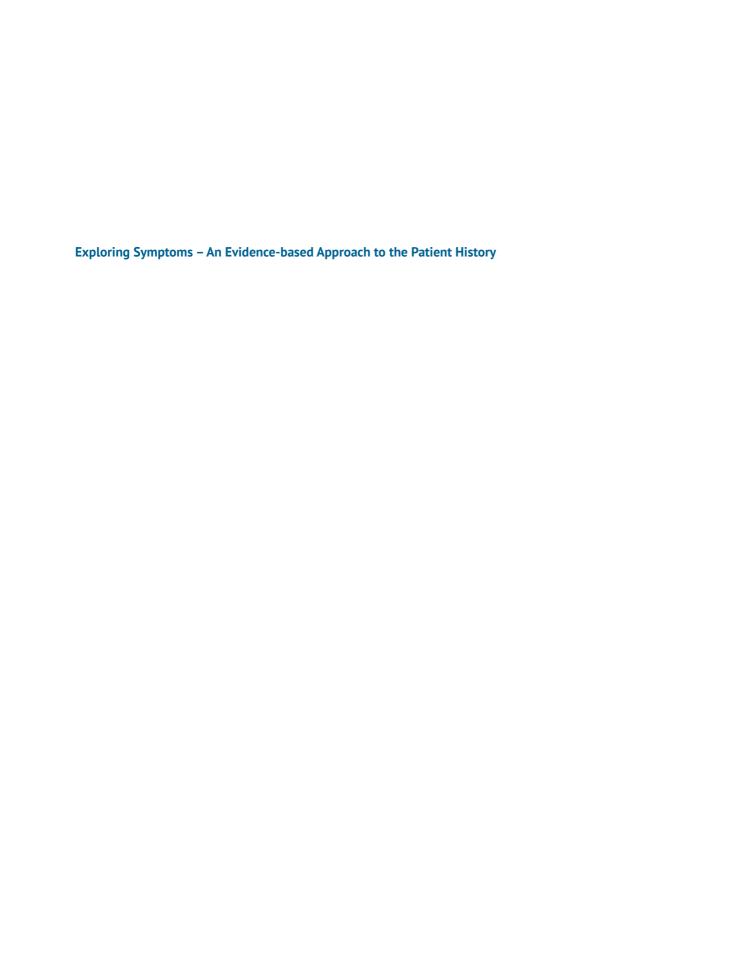
# **JOHN FRAIN**

# EXPLORING SYMPTOMS

AN EVIDENCE-BASED APPROACH
TO THE PATIENT HISTORY



WILEY Blackwell



# **Exploring Symptoms – An Evidence-based Approach** to the Patient History

John Frain University of Nottingham, UK This edition first published 2025 © 2025 John Frain

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### **Preface**

Patients present with symptoms not diseases. They rely on healthcare professionals to accurately interpret these symptoms. A patient who attends their doctor is saying: 'I've noticed my anatomy and physiology are changing'. Can you tell me: is this normal change as I get older? Or am I developing a disease? If it is a disease: will it get better, and will I return to normal? Or will it continue and change my health and level of function? Will it shorten my life?

Answering these questions requires good communication but also accurate interpretation of the patient's description based on understanding of what is being described. *Exploring Symptoms* describes the connection between the underlying science of symptoms and the words used by patients to describe them. Though many patients may have a particular disease, each person's experience and description of it is unique to them. Nonetheless, connecting science, patients words, and studies of how symptoms are presented in disease facilitates clinical reasoning and diagnostic accuracy. It is safer for patients and more professionally satisfying for clinicians. Importantly, it may lead to more judicious use of finite resources with more appropriate choice of limited diagnostic technologies.

Despite technological advances in medicine and particularly in diagnostics, the patient history remains responsible for approximately 80% of diagnoses. Even where examination, blood tests and imaging are undertaken, they can only be accurately interpreted by reference to the patient's symptoms. Rightly, we emphasise the evidence-base to establish new investigations and treatments not least on the grounds of patient safety. However, the history, our most important tool, remains without a firmly established and widely known evidence-base so far as its content is concerned. Understanding the patient's symptoms is crucial to modern medicine for diagnostic accuracy, patient safety, and satisfaction and for good resource management in finite health services.

I have tried to ensure this work is representative of those who too often feel excluded from heath care and who suffer discrimination from services through no fault of their own. I could not include everything about all groups or individuals, but this book is dedicated to everyone. I hope it will contribute to improving care for all of us.

I thank Dr. Anna Frain for her reading and re-reading of the chapters which has helped to refine and clarify the text and for all the support she has given over the past year I have been writing this book. Dr. Jo Butler of www.medical-artist.com has provided some wonderful anatomical illustrations to help connect the science to the patient experience. Thank you also to Fozia Mushtaq, Prathishta Gnanaratnasingham, Isabel and Leo Ashford, Leonardo Jackson and Dr. Magdy Abdalla all from the University of Nottingham, UK for their contribution to Chapters 1, 5 and 15.

## **Abbreviations**

ACS acute coronary syndrome ADL activity of daily living aF birth-assigned female

AIDS acquired immune deficiency syndrome

aM birth assigned male AOR adjusted odds ratio

ASDR age-standardised death rates
ASIR age-standardised incidence rate
ASMR age standardised mortality ratio

ASR age standardised rate AUC area under the curve

BPD borderline personality disorder BPH benign prostatic hypertrophy CFS chronic fatigue syndrome

CGA comprehensive geriatric assessment

CI confidence interval CNS central nervous system

COPD chronic obstructive pulmonary disease

CRC colorectal cancer
CVD cardiovascular disease
DALY disability adjusted life year
DGBI disorders of gut-brain axis

DIMS disorders of initiating and maintaining sleep

DLQI dermatology life quality index
DOS disorders of excessive somnolence

DSM V diagnostic and statistical manual of mental disorders

EASI eczema area and severity index

ED erectile dysfunction

EDC endocrine disrupting chemicals

EMBID endocrine, metabolic, blood and immune disorders

ENS enteric nervous system

FND functional neurological disorder FSH follicle stimulating hormone FTD formal thought disorder FUO fever of unknown origin

#### **xxvi** Abbreviations

GCS Glasgow coma scale
GD gender dysphoria
GI gastrointestinal
GP general practitioner

GTS generalised tonic-clonic seizures

GUM genitourinary medicine HCl hydrochloric acid

HIV human immunodeficiency virus HMB heavy menstrual bleeding

HPA hypothalamo-pituitary-adrenal axisHRT hormone replacement therapyHVS hyperventilation syndrome

IADL instrumental activities of daily living

IBD inflammatory bowel disease i.e. ulcerative colitis and Crohn's

IBS irritable bowel syndrome

IPSS international prostate symptom score

LBP low back pain

LGBTQ+ lesbian, gay, non-binary, transgender, queer +

LR likelihood ratio

LUTS lower urinary tract symptoms

ME myalgic encephalitis

MRI magnetic resonance imaging

MSK musculoskeletal

MSM men who have sex with men NCCP non-cardiac chest pain NEWS national early warning score

NSAID's non-steroidal anti-inflammatory drugs NSTEMI non-ST elevation myocardial infarction

OA osteoarthritis OAB overactive bladder

OR odds ratio

PASI psoriasis area and severity index PNES psychogenic non-epileptic seizures

PUD peptic ulcer disease

PVB premature ventricular beat RA rheumatoid arthritis

RA-ILD rheumatoid arthritis-interstitial lung disease

RR risk ratio

SAH subarachnoid haemorrhage SDI socio-demographic index SGM sexual and gender minority

SIBO small intestinal bacterial overgrowth
SIRS systemic inflammatory response syndrome

SM sexual minorities

SNOOP4 mnemonic for assessment of headache:

Systemic symptoms Neurological symptoms Onset sudden Onset after age 50 **P**rogressive

Precipitated by Valsalva Postural relationship

**P**apilloedema

SOC skin of colour

**SOCRATES** Site

> Onset Character Radiation

Alleviating factors

Time course

**E**xacerbating factors

Severity

SAH subarachnoid haemorrhage STD sexually transmitted disease STI sexually transmitted infection TIA transient ischaemic attack uncertainty interval UI

UK United Kingdom of Great Britain and Northern Ireland

US United States of America UTI urinary tract infection WHO World Health Organisation

WSW women who have sex with women

years lost to disability YLD YLL years of life lost