# Perspectives in Nursing Management and Care for Older Adults

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Though demographic trends in developed countries are sometimes assumed to be limited to said countries, it is clear that similar issues are now affecting rapidly developing countries in Asia and South America. As such, the series will not only benefit nurses working in Europe, North America, Australasia and many developed countries, but also elsewhere. Offering seminal texts for nurses working with older adults in both inpatient and outpatient settings, it will especially support them during the first five years after nurse registration, as they move towards specialist and advanced practice. The series will also be of value to student nurses, employing a highly accessible style suitable for a broader readership.

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Gisèle Pickering • Sandra Zwakhalen Sharon Kaasalainen Editors

# Pain Management in Older Adults

A Nursing Perspective



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## **Preface**

The book *Pain Management in Older Adults: A Nursing Perspective* features theoretical and practical information about the assessment and management of pain in older adults. It is written for nurses, nurse specialists, advanced nurse practitioners, and academics who are interested in pain management in older adults.

Pain is one of the most distressing and commonest symptoms of later life. Mood, quality of life, independence, and relationship are all affected and the high prevalence of pain has a substantial impact at both individual and societal level. Although more attention has been paid to pain in older persons over the last decades, pain remains underdetected, underestimated, and undertreated especially in the most vulnerable with neurodegenerative disorders and communication difficulties.

Nurses care for older people in primary, secondary, and independent settings and have been at the forefront of pain care for centuries. Nurses play a crucial role in the assessment and management of pain. Their involvement with older persons is multifaceted, involved in pain assessment, comfort care, nonpharmacological and pharmacological approaches, and beyond managing an individual's pain, critical self-reflection and service development. Nurses are deeply involved throughout the care process and collaborate with interdisciplinary teams throughout care settings. Nursing older people is challenging and rewarding and we felt it was timely to produce a book from the nursing perspective.

We have included chapters covering epidemiology, assessment, therapeutic approaches, as well as chapters focused on the pivotal role of nurses in older persons pain management.

The editors and authors have worked to ensure that these chapters reflect older adults pain management essentials. It is our hope that this book will provide nurses working in primary health and care social areas as well as undergraduate and postgraduate nursing students with evidence that helps them in the caring process.

The book is an international collaborative effort and the editors would like to express their gratitude to all the authors for their contributions.

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## **Abbreviations**

°C Degree Celsius 5-HTR Serotonin receptor

ABCDEF Awakening and Breathing coordination of daily sedation and ventila-

tor removal trials; Choice of sedative or analgesic exposure; Delirium monitoring and management; Early mobility and exercise and

Family-centered care

ACC Anterior cingulate cortex

ACR American College of Rheumatology

AD Alzheimer disease

ADL Activities of daily living

AEs Adverse effects

AGS American Geriatrics Society

AI Appreciative Inquiry

AMDA American Medical Directors Association

AMPA α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid

APN Advanced practice nursing

ASPMN American Society for Pain Management Nursing

ATP Adenosine triphosphate AuPS Australian Pain Society B2 receptor Bradykinin receptor 2

BDNF Brain-derived neurotrophic factor

BGS British Geriatrics Society
BPGs Best practice guidelines
BPS British Pain Society
BPS scale Behavioral pain scale

BPS-NI Behavioral pain scale—not intubated

BPSD Behavioral and psychological symptoms of dementia

Ca<sup>2+</sup> Calcium ion

CAM Confusion assessment method CAM-ICU CAM for intensive care CaMKII Calcium-calmodulin kinase II

CaMKII Calcium-calmodulin kinase II cAMP Cyclic adenosine monophosphate

CAMs Complementary and alternative therapies

CBT Cognitive behavioral therapy

CCK Cholecystokinin

Χ Abbreviations

**CGRP** Calcitonin gene-related peptide

Checklist of nonverbal pain indicators **CNPI** 

**CNS** Central nervous system

Cyclooxygenase-II selective inhibitors Coxibs

Certified nursing assistant pain assessment tool **CPAT** 

Clinical practice guidelines **CPGs** 

Critical-care pain observation tool **CPOT** 

**CPS** Canadian Pain Society

cAMP response element binding protein **CREB** 

CT scan Computerized tomography scan

Desoxyribonucleic acid DNA

Diffuse noxious inhibitory controls **DNIC** 

DOR Delta opioid receptor

Deutsches Netzwerk für Qualitätssicherung in der Pflege DOP

DRG Dorsal root ganglion

DSM-5 Diagnostic and Statistical Manual of Mental Disorders Fifth Edition

Deep vein thromboembolism DVT

**DZNE** German Center for Neurodegenerative Diseases

Early Comfort using Analgesia, minimal Sedatives and maximal **eCASH** 

Human care

**EPSP** Excitatory postsynaptic potential

Extracellular signal-regulated protein kinase **ERK** Functional magnetic resonance imaging **fMRI** 

Gamma-aminobutyric acid GABA

GP General practitioner Hydrogen ion H+ Histamine receptor H1Health care practitioner **HCP** 

**IASP** International Association for the Study of Pain

**ICU** Intensive care unit ID Intellectual disabilities

**IPSP** Inhibitory postsynaptic potential

IO Intellectual quotient

IV Intravenous KA Kainate

KOR Kappa opioid receptor KT Knowledge translation Licensed practical nurses **LPNs** MCI Mild cognitive impairment

Metabotropic glutamate receptors mGluR Mini-mental state examination **MMSE** 

Mobilization-observation-behavior-intensity-dementia pain scale MOBID

Mu opioid receptor **MOR** 

Na<sup>+</sup> Sodium ion

**NCCIH** National Center for Complementary and Integrative Health Abbreviations xi

NHS National Health Service

NICE National Institute for Health and Care Excellence

NMDA *N*-methyl-D-aspartate

NOPPAIN Non-communicative patient's pain assessment instrument

NPs Nurse practitioners NRM Nucleus raphe magnus NRS Numerical rating scale

NSAIDs Nonsteroidal anti-inflammatory drugs

PACSLAC Pain assessment checklist for seniors with limited ability to

communicate

PAG Periaqueductal grey

PAINAD Pain assessment in advanced dementia

PARIHS Promoting Action on Research Implementation in Health Services

PATs Pain assessment tools

PBOICIE Pain behaviors for osteoarthritis instrument for cognitively impaired

elders

PET Positron emission tomography

PFC Prefrontal cortex
PKA Protein kinase A
PKC Protein kinase C
PLC Phospholipase C

PMN Pain management nursing

QI Quality Initiatives

RASS Richmond agitation sedation scale

RCTs Randomized clinical trials

RNAO Registered Nurses Association of Ontario

RNs Registered nurses

RVM Rostral ventromedial medulla
S1 Primary somatosensory cortex
S2 Secondary somatosensory cortex
SRD Subnucleus reticularis dorsalis

TENS Transcutaneous electrical nerve stimulation TRP Transient receptor potential cation channel

TRPM8 Transient receptor potential cation channel subfamily M member 8

TRPV Transient receptor potential vanilloid TTX Voltage-gated sodium channel

TTXr Tetrodotoxin-resistant sodium channels

UK United Kingdom
UTI Urinary tract infection
VAS Visual analogue scale
VDS Verbal descriptor scale
VIP Vasoactive intestinal peptide

VRS Verbal rating scale
WDR Wide dynamic range
WHO World Health Organization