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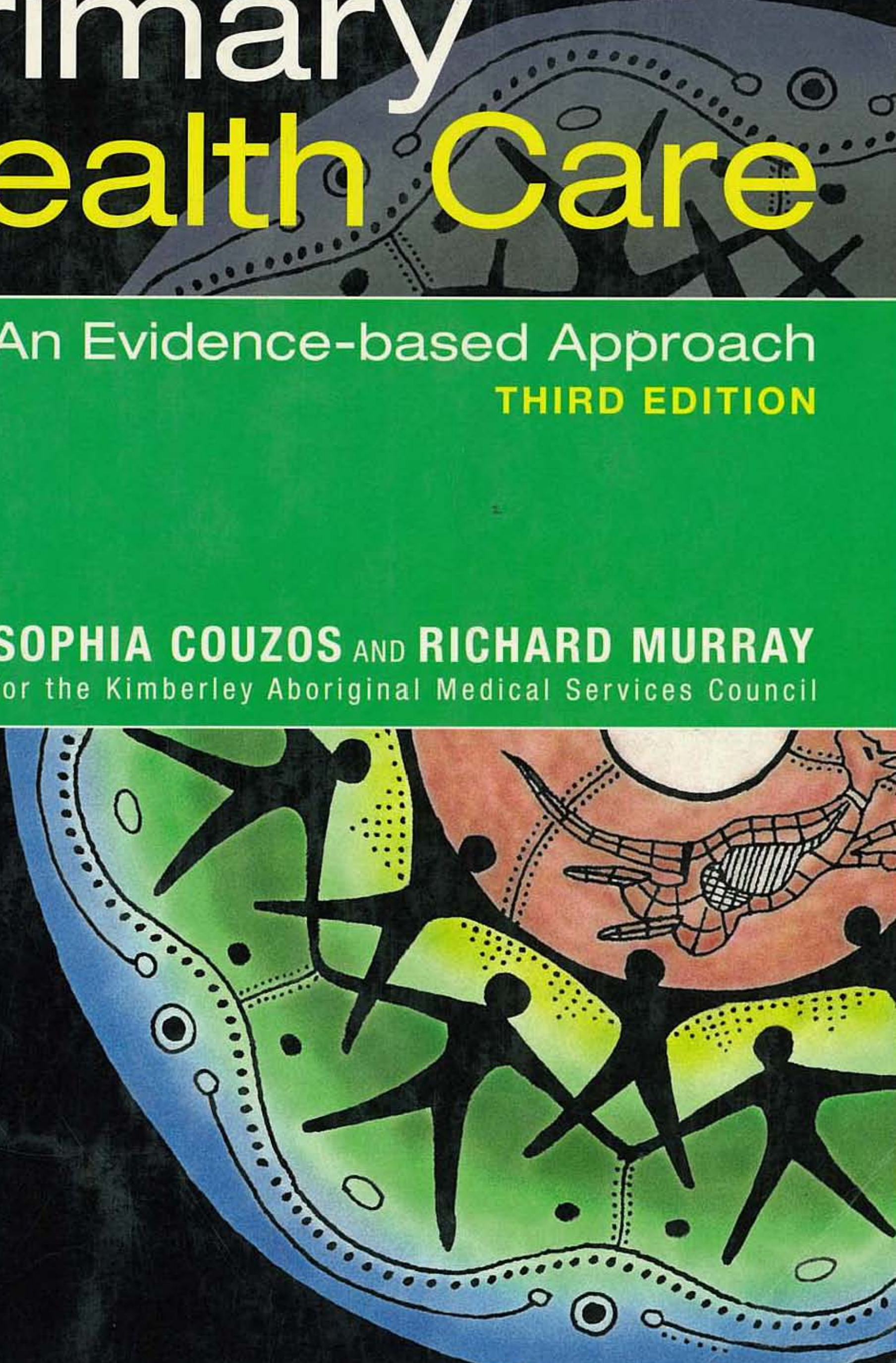
Aboriginal Primary Health Care

An Evidence-based Approach

THIRD EDITION

SOPHIA COUZOS AND RICHARD MURRAY
for the Kimberley Aboriginal Medical Services Council



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NACCHO

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253 Normanby Road, South Melbourne, Victoria 3205, Australia

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research,
scholarship, and education by publishing worldwide in

Oxford New York

Auckland Cape Town Dar es Salaam Hong Kong Karachi
Kuala Lumpur Madrid Melbourne Mexico City Nairobi
New Delhi Shanghai Taipei Toronto

With offices in

Argentina Austria Brazil Chile Czech Republic France Greece
Guatemala Hungary Italy Japan Poland Portugal Singapore
South Korea Switzerland Thailand Turkey Ukraine Vietnam

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First published 1999
Reprinted 2000
Second edition published 2003
Reprinted 2005, 2006
Third edition published 2008
Reprinted 2008

National Library of Australia Cataloguing-in-Publication data

Couzos, Sophia, 1960– .
  Aboriginal primary health care.

  3rd ed.
  Includes index

  ISBN 9780195551389 (pbk.).

  1. Aboriginal Australians—Medical care.
  2. Medical care—Australia. I. Title.

362.849915

Edited by Anne Mulvaney
Cover and text design by Rob Cowpe Design
Typeset by Rob Cowpe Design
Proofread by Chris Wyness
Indexed by Neale Towart
Printed in Hong Kong by Sheck Wah Tong Printing Press Ltd

Dedication

This book is dedicated to the memory of Dr Puggy (Arnold) Hunter, one of Australia's outstanding Aboriginal leaders and former Chair of the National Aboriginal Community Controlled Health Organisation, whose vision strongly informed the development and revision of this work. Puggy died shortly after reaching his 50th birthday, in September 2001. His image and his name are used throughout this book in accordance with the express wishes of his family.

Puggy inspired thousands to question and reform Australian efforts to improve the health of Aboriginal peoples. He was awarded an Honorary Doctorate in April 2001 from James Cook University and a posthumous Human Rights Medal for 2001 from the Human Rights and Equal Opportunity Commission in recognition of his exceptional contribution to the advancement of human wellbeing. In 2001, the Puggy Hunter Memorial Scholarship Scheme was established by the former Federal Health Minister, the Hon. Dr Michael Wooldridge, to support Aboriginal and Torres Strait Islander students in their health studies.

Puggy's moderate voice of influence over the political agenda, his witty intellect and moral authority will continue to echo in the hearts of those who knew him. To honour Puggy, each chapter is prefaced with his often humorous and always poignant words.

Foreword

TO THE FIRST EDITION

This guide was a culmination of the work of many individuals—Aboriginal and non-Aboriginal workers, Aboriginal governing committees—from the Aboriginal Community Controlled Health Services (ACCHSs) of the Kimberley region of Western Australia over the past two decades. The Kimberley ACCHSs, like others around the country, arose through a process of Aboriginal community struggle in response to the perceived failure of mainstream health services to meet health care needs.

The achievements of the working partnerships between Aboriginal community members, local Aboriginal workers, and non-Aboriginal health professionals with technical expertise is an example of the sort of practical grassroots movement for reconciliation being called for by the National Council for Aboriginal Reconciliation. The experience of most ACCHSs is that self-determination in Aboriginal health care, far from contributing to community division, is a powerful force for community cohesion, understanding, and genuine reconciliation between Aboriginal and non-Aboriginal Australians.

Like other ACCHSs, we have operated in a climate where the health care needs of our people are great and the resources scarce. It is precisely this type of environment which demands a concentration of effort on what has been shown to do more good than harm and to do so in the most organised way possible. We needed to ensure that there was not unnecessary variation in health care practice among members of the health care team, so standardisation of approach became important. Members of the health teams required the support of practical problem-based clinical guidelines. These considerations led to the development of standard treatment guidelines and systems for their application in an Aboriginal primary health care environment.

The work in development and systematic application of management guidelines (initially paper-based, then computerised) was initiated by Dr Ian Wronski and Maggie Grant in 1988. The guidelines were updated in 1993 by Dr Stuart Garrow and, in 1995, Dr Garrow conceived the idea to further develop the guidelines as a resource manual for use in the Kimberley. The aims were to explore primary health issues relating to important Aboriginal health problems to remove uncertainty in the delivery of preventive health care, to make service approaches consistent across the Kimberley, to inform the implementation of information systems and the use of performance indicators for quality enhancement, and to promote the integration of health care approaches and enhance program sustainability.

The 'Best Practice Project', as it became known, was possible with the assistance of the Commonwealth Department of Health and Family Services, GP Divisions and Grants Program. Work on the project commenced in August 1996 with the support of the Kimberley Aboriginal Medical Services Council, comprising Aboriginal community members representing local health boards across the Kimberley. The development of National Health and Medical Research Council recommendations for guidelines, the Cochrane Database of Systematic Reviews, the evidence-based medicine paradigm, and the National Aboriginal and Torres Strait Islander Health Clearinghouse (Edith Cowan University) considerably influenced the format, methodology, and content of the review.

Following discussions with the Office of Aboriginal and Torres Strait Islander Health Services during the course of the project, the value of applying the systematic review principles to Aboriginal primary health care issues at a national level was explored. Dr Ian Anderson and Ms Alison Dell from the Office worked to develop formal national systematic reviews of a range of Aboriginal health issues. The diabetes and ear health chapters of this book were expanded for two of these reviews and thus represent shortened versions of the Systematic Reviews of Existing Evidence and Primary Care Guidelines on the management of diabetes and otitis media in Aboriginal populations (which are also currently available). The important role of the Steering Committees in the development of these documents is acknowledged.

This book should help the health staff of ACCHSs, other primary health care providers (particularly remote area practitioners), and medical students to understand the reasons for interventions and the need for certain approaches to health care that differ for the Aboriginal population. It should also strengthen the application of 'what has been shown to do more good than harm', as often there is considerable delay before best practice is implemented.

In Aboriginal health, the experienced primary health care practitioner and Aboriginal Health Worker will generally have a much better appreciation of the technical health care needs of the Aboriginal community than other medical providers. This book may help lessen a sense of isolation and empower these practitioners, particularly those working in remote areas, to feel confident dealing with health problems about which they may have had little formal training and for which information may be poorly accessible. Hopefully, this book will help to disseminate the valuable research and experience that health professionals working with Aboriginal people have acquired over many years.

Finally, I hope that this work will have a real impact on the health of my people from the Kimberley, and Aboriginal people across the country who bear so great a burden of sickness and grief.

Puggy Hunter

CHAIRPERSON
NATIONAL ABORIGINAL COMMUNITY CONTROLLED HEALTH ORGANISATION (NACCHO)
AND KIMBERLEY ABORIGINAL MEDICAL SERVICES COUNCIL (KAMSC)
MAY 1998

Foreword

TO THE SECOND EDITION

Following the success of the first edition of this book, the Kimberley Aboriginal Medical Services Council is pleased to endorse this second edition, developed with the assistance of Dr Sophie Couzos and Dr Richard Murray. This edition includes many additional chapters as well as revisions to the current chapters.

I am confident that this book will better equip health professionals with the information and knowledge needed for best practice in the delivery of primary health care to Aboriginal communities and help achieve the healthy outcomes we are all seeking.

The book is a technical resource, to assist you in dealing with some of the more common obstacles and tasks that you may face every day when working in Aboriginal health. It shows what we know works, in a best-practice and culturally safe way, and can be used in the clinic, home, or school context. I am proud of this book, which has been entirely developed, produced, and published to improve the delivery of health care to Aboriginal people.

Aboriginal health has been ignored or suppressed in the health system for too long now. In recent years, however, thinking has started to change. Aboriginal health is now taught at various levels in many educational training centres around Australia, and there is more interest than ever among health professionals who want to understand how to deal with health problems and the process of delivering health care to Aboriginal people.

I would recommend that all health professionals and others involved in the design and delivery of primary health care services to Aboriginal communities become familiar with this book. It provides key tools for ensuring all health professionals meet the needs of our culturally and linguistically diverse society.

Lastly, I am honoured to acknowledge Dr Arnold Puggy Hunter for his life-time contribution in ensuring Aboriginal people have access to the best possible health care.

YOURS IN HEALTH,

Henry Councillor

CHIEF EXECUTIVE OFFICER
KIMBERLEY ABORIGINAL MEDICAL SERVICES COUNCIL INC.
SEPTEMBER 2003

Foreword

TO THE THIRD EDITION

Following the success of the first and second editions of this book, the Kimberley Aboriginal Medical Services Council is pleased to release a third edition. We are grateful to the editors and authors Dr Sophie Couzos and Associate Professor Richard Murray as well as many other contributing authors who are widely respected in their field.

This landmark text includes several new chapters on antenatal care, respiratory infection (including bronchiectasis), and asthma, as well as extensive revisions of every chapter. The book is a crucial resource for health care providers in prevention, diagnosis, and effective treatment of health problems among Aboriginal populations. It will help support best practice, not just in clinical care, but in broader aspects of policy and the historical, cultural, and social dimensions of Aboriginal primary health care.

A strength of the book is that it is based on best evidence as well as the realities of Aboriginal health care as informed by health professionals with extensive experience working in the field. Many publications and reports claim to promote best practice, but lack grounding in the complexities and diversity of Aboriginal community experience.

Our aim is to enhance the personal and professional competence of all health care providers in working with Aboriginal communities to ensure that practice is both culturally appropriate and technically effective. I strongly recommend that all health care providers and anyone involved in the design and delivery of primary health care services to Aboriginal communities become familiar with this book.

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Henry Councillor

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NOVEMBER 2007

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Acknowledgments

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Steering Committee of the Office of Aboriginal and Torres Strait Islander Health Services, Commonwealth Department of Health and Human Services; Otitis Media Systematic Review, Canberra; Dr Aileen Plant; Dr Paul Torzillo; Dr Ian Anderson; David Clarkson; Dr Peter Carter; Dr John Daniels; and Cindy Zvekic. (Ear Health)

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Funding and support for the 2nd edition came from the Commonwealth Department of Health and Ageing, through the Aboriginal and Torres Strait Islander Health Projects of the Rural Faculty of the RACGP.

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LOGISTICAL SUPPORT

The contribution of Ms Yvette Roe, from the Indigenous Health Unit, Faculty of Medicine, Health and Molecular Science, James Cook University, Townsville, Queensland, and Project Officer for the preparation of the 3rd edition, is most gratefully acknowledged.

The Board and Secretariat of the National Aboriginal Community Controlled Health Organisation, Canberra, ACT.

The Board and Secretariat of the Kimberley Aboriginal Medical Services Council, Broome, Western Australia.

The 3rd Edition Reference Group for the revision of this book: Mr Henry Councillor (KAMSC), Dr Sophie Couzos (NACCHO), Dr John Daniels (AMS Redfern), Dr Carmel Nelson (KAMSC), Dr Richard Murray (ACRRM), Dr Mark Wenitong (Wuchopperon), Dr Jenny Reath (RACGP), and Dr David Atkinson (KAMSC).

Meredith Rees and Michelle Green, Higher Education Development Editors, Oxford University Press, Melbourne, Victoria.

Aboriginal Health and Medical Research Council of NSW (AH&MRC).

The following are acknowledged for the support provided to individual chapters:

The late John Newfong, for groundbreaking and inspirational work on policy (Aboriginal Health and History).

Staff of the Australian Indigenous Health*InfoNet*, particularly Jane Burns, Samantha Burrow, Ineke Krom, Sasha Stumpers, Amy Hardy, and Natalie Weissofner (Health Status).

Dr Katie Panaretto and Sarina Solar provided useful comments (Pregnancy Care).

Members of the Aboriginal Women's Issues Working Group for developing Australian Pregnancy Care Guidelines (Pregnancy Care).

Lisa Atkins and Monique Meikle for designing the first version of the bronchiectasis management plan (figure 9.2) and for their input into respiratory health during their time in central Australia (Respiratory Infections).

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James Cook University e-Library electronic journals for the research support provided.

And finally, a financial contribution towards the 3rd edition is gratefully acknowledged from the Program Management and Implementation Section, Office of Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Ageing, Canberra, ACT, and in particular to Ms Chris Harrington, Mr Gerard De Ruyter, and Kannika Phomson.

Abbreviations

ABS	Australian Bureau of Statistics
ACAM	Australian Centre for Asthma Monitoring
ACCHS	Aboriginal Community Controlled Health Service
ACD	anaemia of chronic disease
ACEI	angiotensin-converting enzyme inhibitors
ACIR	Australian Childhood Immunisation Register
ACR	albumin–creatinine ratio
ACS	acute coronary syndrome
ACT	Australian Capital Territory
ADA	American Diabetes Association
ADGP	Australian Division of General Practice
AF	atrial fibrillation
AFB	acid-fast bacilli
AGPS	Australian Government Publishing Service
AHMAC	Australian Health Ministers' Advisory Council
AHS	Australian Hearing Services
AHW	Aboriginal Health Worker
AIDS	acquired immunodeficiency syndrome
AIHW	Australian Institute of Health and Welfare
AI/NA	American Indian/Native Alaskan
ALRI	acute lower respiratory tract infection
AMA	Australian Medical Association
AMI	acute myocardial infarction
AMS	Aboriginal Medical Service
ANZDATA	Australia and New Zealand Dialysis and Transplant Registry
AOM	acute otitis media
APSGN	acute post-streptococcal glomerulonephritis
ARB/ARA	angiotensin II receptor blockers/antagonists
ARF	acute rheumatic fever
ARR	absolute risk reduction
ASCO	Australian Standard Classification of Occupations
ASOT	anti-streptolysin O titre
ASPREN	Australian Sentinel Practice Research Network

ASVS	Australian Standard Vaccination Schedule
ATSIC	Aboriginal and Torres Strait Islander Commission
AUDIT	Alcohol Use Disorders Identification Test
AusDiab	Australian Diabetes Obesity and Lifestyle Study
Aust	Australia
BCG	Bacille Calmette-Guérin
BEACH	Bettering the Evaluation and Care of Health
BIT	Burrow ink test
BMI	body mass index
BP	blood pressure
BRAMS	Broome Regional Aboriginal Medical Service
BSE	breast self-examination
BTR	bilamellar tarsal rotation
BV	bacterial vaginosis
CAD	coronary artery disease
CAP	community acquired pneumonia
CAPD	continuous ambulatory peritoneal dialysis
CARI	Caring for Australians with Renal Impairment
CARPA	Central Australian Rural Practitioners Association
CBE	clinical breast examination
CCCH	Centre for Community Child Health
CDC	Centers for Disease Control and Prevention, Atlanta, USA
CDEP	Community Development Employment Program
CDHAC	Commonwealth Department of Health and Aged Care
CDHFS	Commonwealth Department of Health and Family Services
CDT	carbohydrate-deficient transferrin
CESCR	Committee on Economic, Social and Cultural Rights
CHD	coronary heart disease
CHINS	Community Housing and Infrastructure Needs Surveys
CHIP	Community Housing and Infrastructure Program
CHSP	Commonwealth Hearing Services Program
CI	confidence interval
CIN	cervical intraepithelial neoplasia
CKD	chronic kidney disease
CKMB	creatinine kinase-MB
COAD/COPD	chronic obstructive airways disease/pulmonary disease
COAG	Council of Australian Governments
CQI	Continuous Quality Improvement
CR	cardiac rehabilitation
CRCAH	Cooperative Research Centre for Aboriginal Health
CRF	chronic renal failure
CSLD	chronic suppurative lung disease
CSO	Community Service Obligation
CSOM	chronic suppurative otitis media

CT	computerised tomography
CTN	'call to needle time'
CVD	cardiovascular disease
CXR	chest X-ray
DAA	Department of Aboriginal Affairs
DCCT	Diabetes Control and Complications Trial
DNA	deoxyribonucleic acid
DOT	direct observation of treatment
DSM-IV	Diagnostic and Statistics Manual of Mental Disorders
ECG	electrocardiogram
EIA	enzyme immunoassay
ENL	erythema nodosum leprosum
ENT	ear, nose, and throat
EPC	enhanced primary care
EPDS	Edinburgh Postnatal Depression Scale
EPO	erythropoietin
ESKD	end-stage kidney disease
ETS	environmental tobacco smoke
FACSIA	Department of of Families, Communities Services and Indigenous Affairs
FASD	fœtal alcohol spectrum disorders
FBE	full blood examination
FDA	US Food and Drug Administration
FCAATSI	Federal Council for the Advancement of Aborigines and Torres Strait Islanders
FEV1	forced expiratory volume in 1 second.
FPG	Fasting Plasma Glucose
FTT	failure to thrive
FVC	forced vital capacity
GAD	glutamic acid decarboxylase
GAPP	Guidelines for Addressing Postnatal Problems
GAS	group A streptococci
GBHC	gamma-benzene-hexachloride
GBS	group B streptococcus
GCT	glucose challenge test
GDM	gestational diabetes mellitus
GET	Global Elimination of blinding Trachoma
GFR	glomerular filtration rate
GGT	gamma-glutamyl transferase
GINA	Global Initiative for Asthma
GNP	glomerulonephritis
GP	general practitioner
GTT	glucose tolerance test
HAHU	Heads of Aboriginal Health Units

HD	haemodialysis
HDL	high density lipoprotein
HFL	Healthy for Life program
HFP	Aboriginal and Torres Strait Islander Health Performance Framework
Hib	Haemophilus influenza type b
HIV	human immunodeficiency virus
HKML	heat-killed M. leprae
HLA	human leukocyte antigen
HMG CoA	Hydroxymethylglutaryl coenzyme-A
HPF	health performance frameworks
HPV	human papilloma virus
HRCT	high resolution computed tomography
HREC	human research ethics committee
HSV	herpes simplex virus
HTLV-1	human T-lymphocytic virus type 1
ICCs	Indigenous Coordination Centres
ICD	International Classification of Diseases
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICS	inhaled corticosteroids
ICT	information and communication technology
IDDM	insulin dependent diabetes mellitus
IDF	International Diabetes Federation
IHD	ischaemic heart disease
ICD-10-AM	International Classification of Diseases, 10th Revision, Australian Modification
IFG	impaired fasting glucose
IGRAs	interferon-γ release immunoassays
IGT	impaired glucose tolerance
IM	intramuscular
IM/IT	information management/technology
IMPAKT	Improving Indigenous Patient Access to Kidney Transplantation
INR	International Normalised Ratio
IPD	invasive pneumococcal disease
IRIS	Indigenous Risk Impact Screen
ISTC	Interational Standards for Tuberculosis Care
IT	information technology
IU	international units
IUGR	intrauterine growth retardation
IV	intravenous
IVP	intravenous pyelogram
KAMSC	Kimberley Aboriginal Medical Services Council
KCAT	Kidney Check Australia Taskforce

KSDC	Kimberley Satellite Dialysis Centre
LBC	liquid-based cytology
LDL	low density lipoprotein
LDL-C	Low density lipoprotein-Cholesterol
LBW	low birth weight
LFT	liver function test
LIFE	Living is For Everyone
LMP	last menstrual period
LTBI	latent TB infection
LV	left ventricular
MB	multibacillary
MBS	Medicare Benefits Schedule
MCDS	Ministerial Council on Drug Strategy
MCV	mean cell volume
MDG	Millennium Development Goals
MDI	metered dose inhaler
MDRD	modification of diet in renal disease
MDT	multi-drug therapy
MGRS	Multicentre Growth Reference Study
MI	myocardial infarction
MIC	minimum inhibitory concentration
MIMS	Monthly Index of Medical Specialities
MMR	maternal mortality ratio
MRSA	methicillin-resistant Staphylococcus aureus
MSU	mid-stream urine
NAA	nucleic acid amplification
NAC	National Asthma Council
NAAT/s	nucleic acid amplification testing/tests
NACCHO	National Aboriginal Community Controlled Health Organisation
NAGATSIHID	National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
NAHS	National Aboriginal Health Strategy
NAIHO	National Aboriginal and Islander Health Organisation
NAT	nucleic acid based tests
NATSIHC	National Aboriginal and Torres Strait Islander Health Coucil
NSFATSIH	National Strategic Framework for Aboriginal and Torres Strait Islander Health
NATSIHO	National Aboriginal and Torres Strait Islander Health Official
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSINSAP	National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NSDS	National Chronic Disease Strategy

NCHS	National Centre for Health Statistics
NDOQRIN	National Diabetes Outcomes Quality Review Initiative
NDSS	National Diabetes Services Scheme
NFI	nerve function impairment
NGO	non-government organisation
NHFA	National Heart Foundation of Australia
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NIASH/S	National Indigenous Australians Sexual Health Strategy
NICE	National Institute for Clinical Excellence
NIDDM	non-insulin dependent diabetes mellitus
NIHIP	National Aboriginal and Torres Strait Islander Health Information Plan
NIPII	National Indigenous Pneumococcal and Influenza Immunisation Program
NIPS	National Immunisation Program Schedule
NNDSS	National Notifiable Diseases Surveillance System
NNT	number needed to treat
NPHP	National Public Health Partnership
NRF	National Reporting Framework
NSAIDS	non-steroidal anti-inflammatory drugs
NSFATSIH	National Strategic Framework for Aboriginal and Torres Strait Islander Health
NSHSVH	National Strategy for Heart, Stroke and Vascular Health in Australia
NSIF	National Service Improvement Framework
NSMPI	Nuclear Stress Myocardial Perfusion Imaging
NSP	needle and syringe program
NSTEACS	non-ST-segment elevation ACS
NSTEMI	non-ST-segment elevation myocardial infarction
NSW	New South Wales
NT	Northern Territory
NTEHP	National Trachoma and Eye Health Program
NTM	non-tuberculous mycobacteria
NZ	New Zealand
OATSIH	Office for Aboriginal and Torres Strait Islander Health
OM	otitis media
OME	otitis media with effusion
OTC	over the counter
PB	paucibacillary
PBS	Pharmaceutical Benefits Scheme
PCI	percutaneous coronary intervention
PCR	polymerase chain reaction
PCV	pneumococcal vaccine

PEF	peak expiratory flow
PHAA	Public Health Association of Australia
PHC	primary health care
PHCAP	Primary Health Care Access Program
PHE	periodic health examination
PHOFA	Public Health Outcome Funding Aggreement
PID	pelvic inflammatory disease
PIP	Practice Incentives Program
PIRS	Patient Information and Recall Systems
POC	point of care
PPD	purified protein derivative
PPNG	penicillinase producing neisseria gonorrhoea
PPV	polysaccharide pneumococcal vaccine
(A)PSGN	post-streptococcal glomerulonephritis or acute PSGN
PY	person-years
Qld	Queensland
RACGP	Royal Australian College of General Practitioners
RAD	reactive airway disease
RAWG	Research Agenda Working Group (Aboriginal Health)
RCIADIC	Royal Commission into Aboriginal Deaths in Custody
RCT	randomised controlled trial
RDH	Royal Darwin Hospital
RHD	rheumatic heart disease
RNA	ribonucleic acid
Rpa	reteplase
RR	relative risk
RPR	rapid plasma reagin
RRR	relative risk reduction
RSV	respiratory syncytial virus
SA	South Australia
SAR	service activity reporting
SCATSIH	Standing Committee on Aboriginal and Torres Strait Islander Health
SDRF	Service Development and Reporting Framework
SFCS	Stronger Families and Communities Strategy
SMBG	self-monitoring of blood glucose
SMR	standardised mortality (or morbidity) ratio
SNAICC	Secretariat of National Aboriginal and Islander Child Care
SRA	Shared Responsibility Agreements
STD	sexually transmitted disease
STEMI	ST-segment elevation myocardial infarction
STI	sexually transmitted infection
TAIHS	Townsville Aboriginal and Islander Health Service
Tas	Tasmania

TB	tuberculosis
TCC	total contact casting
TF	follicular trachoma
TG	triglyceride
TI	inflammatory trachoma
TIA	transient ischaemic attack
TM	tympanic membrane
TNK	tenecteplase
TPa	tissue plasminogen activator
TST	tuberculin skin testing
UA	unstable angina
UDHR	Universal Declaration of Human Rights
UK	United Kingdom
UKPDSG	United Kingdom Prospective Diabetes Study Group
UN	United Nations
UNICEF	United Nations Children's Fund
URTI	upper respiratory tract infection
USA	United States of America
USPSTF	United States Preventive Services Task Force
UTI	urinary tract infection
VAHS	Victorian Aboriginal Health Service
VDRL	venereal disease research laboratory
Vic.	Victoria
VMT-ST	voluntary muscle and sensory test
VT	vaccine type
WA	Western Australia
WAACHS	Western Australia Aboriginal Child Health Survey
WC	waist circumference
WHO	World Health Organization
WHR	waist–hip ratio
WIC	Women Infants and Children's Program
WPHC	well person's health check

Introduction

> *Please, before you go running off with all good intentions, talk to our mob around the country. Talk to our services, because I can honestly tell you from the position that NACCHO is in, we would not—I will not- endorse anything that comes to the table that hasn't been endorsed by my local community or through the State bodies. So if you are going to do Aboriginal health, do it with us, don't do it without us.*
>
> The late Dr Puggy Hunter

This book is a guide to help health professionals deliver primary health care and develop health policy that is appropriate, valid, sustainable, and acceptable to Aboriginal populations.

It is a reference document from which students, health providers, and organisations can access summarised 'evidence' relating to health problems faced by Aboriginal peoples and Torres Strait Islanders, but it also serves to guide clinical practice through explicit supported statements that help practitioners make decisions in the clinical situation.[1] While the book may be seen as a guideline in this respect, its role is more as a resource for the local development of guidelines or a template against which to achieve local agreement so as to enhance the implementation of best practice. The local development or modification of guidelines by general practitioners/health staff who will be using them is a well-recognised and critical strategy to facilitate implementation is thought to be an important strategy in general practice.[2,3,4]

This book is also a tool for enabling more equitable health system responsiveness to the Aboriginal and Torres Strait Islander population. There is a strong health policy and population approach that informs on disparities in access to health care and where reforms are needed. It is hoped the book will help to overcome bureaucratic inertia by providing evidence for preventive interventions and health policies that can make a difference.

Primary health care

The delivery of health care to Aboriginal and Torres Strait Islander populations invariably has a strong disease-control or public health focus because of the continuing burden of diseases associated with poverty. An emphasis on both the individual and the population is a hallmark of primary health care.

The Aboriginal Community Controlled Health Services (ACCHSs) have been implementing primary health care since the early 1970s, when they were first developed. The international movement to implement health care that encompassed health promotion strategies, nutritional and environmental interventions for disease control, social supports, and essential drugs in addition to primary medical care was defined as 'primary health care' by the World Health Organization (WHO) Conference in Alma-Ata in 1978.[5]

Aboriginal Community Controlled Health Services still best exemplify the delivery of primary health care in Australia. 'Primary health care' according to the National Aboriginal Community Controlled Health Organisation (NACCHO) is defined as essential, integrated care based upon scientifically sound and socially acceptable procedures and technology made accessible to communities (as close as possible to where they live) through their full participation, in the spirit of self-reliance and self-determination. Subject to the availability of resources, care involves the treatment of diseases and management of chronic disease, provision of medication, preventive medicine, dental health, counselling, health education and promotion, rehabilitative services, antenatal and postnatal care, maternal and child care, and environmental health and community support services (such as transport, advocacy, home care, interpreting services, school health, prison health, funeral support, provision of food, financial assistance, etc) in a holistic context.[6]

Primary health practitioners are patient advocates and have a fundamental role to play in ensuring health equity. This means that the social and economic forces that influence health and disadvantage patients are considered in the provision of health care. The breadth of preventive interventions, together with their indisputable importance, is what makes primary health care so vital yet so misunderstood by policy makers as evidenced by insufficient resourcing of the sector that targets the Aboriginal and Torres Strait Islander population (chapters 1 and 2).

Evidence-based practice

The health care paradigm of evidence-based practice has focused attention on the determinants of current practice and the need for 'best practice' in the management of important health problems.[7] Evidence not only drives clinical interventions, but should also drive policy,[8] although this is rarely the case (chapter 2). Health providers are now very aware of the value of evidence-based approaches that aim to improve health outcomes by focusing on health care processes that have been shown to: do more good than harm, decrease practice variation, and optimise resource utilisation.[9]

Practice variation often stems from uncertainty in the types of interventions that work best, especially for the health problems faced by the Aboriginal and Torres Strait Islander population. This is because of Aboriginal people's greater burden of disease; higher levels of co-existing morbidity; poorer access to health systems, education, and health hardware; and preponderance of diseases reflecting poverty and disadvantage that are uncommon in other Australians such as skin infections, suppurative ear infections, trachoma, tuberculosis, and rheumatic fever. Some diseases considered to have been eradicated from Australia still occur in the Aboriginal and Torres Strait Islander population (for example, leprosy).

Many students also receive no training in handling these matters. In ACCHSs where nearly 90% of the episodes of care are to Aboriginal or Torres Strait Islander patients,[10] there is a frequent turnover of health staff, and a great deal of practice is based on 'word of mouth' passed on through an apprenticeship system or by trial and error repeated over the years. Valuable time and goodwill may be lost in the process and this is compounded by the difficulties in doctor recruitment for ACCHSs across Australia, so a need for guidance on the delivery of evidence-based preventive interventions is fundamental. The good news is that in 2004 the Committee of Deans of Australian Medical Schools (now known as Medical Deans Australia) endorsed a national curriculum framework for the inclusion of the health of Aboriginal peoples and Torres Strait Islanders in all medical curricula.[11]

How health policy in Australia is made (or not made) is also generally a mystery to those who deliver clinical care. This need not be the case and is largely the result of medical curricula lacking content on the Australian health policy process. Knowledge of health policy is of vital importance when delivering health care to Aboriginal peoples because the health sector perpetuates inequities when it excludes those who need health care the most. How this happens should be understood, lest health professionals unwittingly contribute to these inequities.

Terminology

> ... they even tried to call us some sort of insect a while ago by calling us 'Atsics' and now they still try to chuck us together in a sense by saying 'indigenous'.
>
> Dr Puggy Hunter,
> Opening Address, 6th National Rural Health Conference, March 2001

This book respects the preferred terminology when referring to the Aboriginal and Torres Strait Islander population.[12] The term 'Aboriginal peoples' reflects the diversity of the original people of Australia. The term 'Indigenous Australians' is less commonly used, and Indigenous is always capitalised.

Although this book makes reference to Aboriginal people's health, there is significant heterogeneity within this population, with diverse Aboriginal nations each with their own language and traditions.[13] Aboriginal peoples in different regions of Australia face similar but at times different health problems, or the same health problems but to different degrees. Moreover, the health of Torres Strait Islanders, who come from the islands of the Torres Strait beyond Cape York in Queensland, is very similar to that of Aboriginal peoples but Torres Strait Islanders represent a distinct Indigenous Australian population. While authors of this book have taken care to distinguish between populations, many studies combine Aboriginal and Torres Strait Islander population data, and therefore effort has been made to be inclusive so that the information in the book can be applicable to both Aboriginal peoples and Torres Strait Islanders.

Generalisability

In Australia, interventional research involving the Aboriginal or Torres Strait Islander population is rare. Consequently, for this book there was a need to draw on international studies and expert consensus statements that could be generalised to the Aboriginal and Torres Strait Islander population.

The 'transferability' or 'generalisability' of research is the inference that research findings in one population can be applied to others. One way of defining populations is by their 'race'/ethnicity, but generalising research is usually more about characterising the influence of factors other than 'race'/ethnicity per se on expected outcomes. Some of the factors which may influence the generalisability of research are differences in age, sex, degrees of biomedical risk, diagnostic skill of practitioners, health resources, client adherence, and socioeconomic status.[14] In applying research findings to other populations, the question may be posed: 'Is my patient so different from those in the trial that its results cannot help me make my treatment decision?'[15]

Using ethnicity to justify against generalising research findings can be potentially unethical. For example, there is little evidence that ethnicity predicts differences in pharmacological responsiveness because it cannot be given a precise biological definition as race and ethnicity are widely agreed to be social constructs.[16,17] Using ethnicity as a criterion may inappropriately deny medicines to certain population groups when they have been shown to work generally.[18]

Policy makers are tending to place emphasis on commissioning research that examines whether treatments or health systems applied to Indigenous Australian populations and health care settings achieve the same outcomes as those already shown for the general population. The reasons for this may be political, or may be due to misunderstanding.[19] One thing is certain: given the significant heterogeneity of the Aboriginal and Torres Strait Islander population within Australia, it is not possible to make any generalisation about an ethnographic basis for differences in therapeutic outcomes.

A famous example of the exploitation of the characteristics of trial subjects was the US Food and Drug Administration (FDA) approval of the isosorbide/hydralazine drug combination for heart failure[20] for only one ethnic/racial group (African Americans). The evidence from the trial did not show variations in drug response attributed to ethnic group, it merely showed it worked in African Americans. The regulatory restrictions on ethnicity were imposed only because they were requested by the drug company[21] for market gain. The FDA's defence was that making the medicine available was in the interests of African Americans.[22] While others believe this was well intentioned, it was a flawed interpretation of the trial and set back future drug approval mechanisms.[23] There is a difference between policy that allocates medicines to population subgroups because of disparate disease burdens from that which suggests ethnic differences in efficacy.

The issue of generalising study findings is now being investigated at the genetic level. Pharmacogenomics is a new field exploring the genetic basis for differences in drug responses with the aim of predicting individual responsiveness to therapy,[24] but it raises ethical and legal concerns if applied inappropriately to population subgroups.[25,26]

Many individual and population-based interventions do not involve drug therapy and the generalisability of external studies in these situations may be dependant on Aboriginal people's values, culture, social expectations, expertise in program delivery, and resources. This explains the need for Indigenous-specific programs and policies, in addition to the equity argument. Such considerations should not be used to deny services or policies directed to the Aboriginal and Torres Strait Islander population.

The key message regarding generalisability is that too much emphasis is placed on whether research findings apply to a certain patient population. The complaint has been: 'but no study has shown that this works in the Aboriginal population'; when, in fact, 'energy currently devoted to agonising over the minutiae of the inclusion and exclusion criteria used to generate the research evidence, is better spent considering how it can be applied to the special situations and values of our patients'.[27]

Format of the book

All of the health problems reviewed in this book contribute significantly to the burden of disease affecting Aboriginal peoples, but are amenable to prevention and to improvements in the consistency of practice (by reducing unnecessary variations), with the potential to reduce morbidity and costs to the health sector if interventions are widely implemented. The 3rd Edition Reference Group (see Acknowledgments) guided the process of revision and the selection of new chapters. Selected authors represent those invited by the Reference Group on the basis of their expertise in the subject matter.

All chapters, with the exception of those addressing the policy process, social issues, organised prevention, well person's health check, and pregnancy care have a similar format. They begin with health policy positions endorsed by governments or other bodies, which may describe health goals and targets for the Aboriginal and Torres Strait Islander population. Identifying such agreements (or lack thereof) is of vital importance as health policies set the scene for primary health care resourcing, and can thus influence clinical care. The absence of an agreement or policy may assist in opening up opportunities for their development. To understand the importance of health policy, the editors strongly encourage reading chapters 1 and 2 of this book.

Chapter sections on the burden of disease, case definitions, and diagnostic procedures follow 'goals and targets', with subsequent discussion of the evidence for preventability. In order to define, organise, and separate prevention strategies from standard disease management approaches, 'prevention' has been divided into primary, secondary, and tertiary types:

- primary prevention—aims at complete avoidance of the disease or to delay its onset
- secondary prevention—aims at detecting and curing the disease before it causes symptoms
- tertiary prevention—aims at minimising the consequences for a patient who already has the disease.

These definitions reflect the public or population health approach to disease control.[28] This approach was selected in order to enable *systematic* disease management because this is what defines *primary health care* and differentiates it from primary medical care, hospital care, or palliative care. Primary health care practitioners need to view the management of disease at all levels—from interventions that influence health hardware, social or behavioural factors, or the provision of immunisation or chemoprophylaxis before the disease is evident, through to interventions that engage with tertiary level health care and rehabilitation services.

Methodology

Because of the breadth of the subjects addressed in this book, many types of evidence were used. The use of *primary research* has been combined with existing *integrative summaries* such as systematic reviews and meta-analyses and, when unavailable, the use of overviews or narrative summaries by experts. *Clinical practice guidelines* developed and used by other health services, nationally and internationally, have been used in order to address practical issues for which evidence was lacking, such as optimal follow-up periods after treatment.

The collation and synthesis of research in a systematic review considers the hierarchy of primary research. The best 'evidence' that defines optimal therapeutic approaches is that derived from randomised controlled trials. A combination of randomised controlled trials synthesised in a meta-analysis or systematic review constitutes evidence of the highest quality because it is least subject to bias.[29] The following system of levels of research evidence illustrates this hierarchy:

- level I—based on studies, such as meta-analysis or systematic reviews, of all relevant randomised controlled trials
- level II—based on well-designed randomised controlled trials
- level III—based on well-designed cohort or case-control analytic studies
- level IV—based on opinions of respected authorities, clinical experience, descriptive studies, and case reports or reports of expert committees.

In order to supplement areas of clinical uncertainty, authors have sourced evidence that comprised expert opinion through position statements, guidelines, and other consensus-based documents. The use of grey literature (unpublished) and published Aboriginal expert opinion (for example, Aboriginal Health Workers) was encouraged. It is important to acknowledge that clinical decisions still have to be made in the absence of research evidence, which highlights the importance of expert opinion as reported from consensus statements or overviews. This book has used expert opinion where there is an absence of higher-level evidence.

Authors used a qualitative approach to synthesis of the research literature similar to that used by the US Preventive Services Task Force.[30] Integration took the form of a narrative summary within chapters. Other forms of synthesis included tabular representation of studies and their major findings.

Implementation

Although individual health services should decide how they will 'put prevention into practice', clinical chapters have a section on implementation, data collection, and performance indicators to provide a practical framework. In order for guidelines to become part of the routine primary care process, this book has suggested care plans and recall schedules where relevant as well as general principles for organising prevention (chapter 4). These can assist services to measure progress and are a part of quality assurance activity that is increasingly being requested of services by funding bodies. Some performance indicators or process indicators have been suggested, the collection of which will depend on the sophistication of the information technology used by services. Ultimately, the collection, aggregation, and analysis of this practice level information is a matter for individual health services to determine.

The emphasis on population approaches is crucial in informing services on how to optimise field team and opportunistic preventive health care delivery, as well as assisting regional public health units with program design. The recommendations are not intended to be prescriptive. Standard treatment manuals are widely available and should be consulted.[31,32]

Guidelines for clinical practice are useless if they are not used. It is hoped that this book will strengthen the substantial contribution that Aboriginal and non-Aboriginal primary health care providers such as general practitioners, nurses, Aboriginal Health Workers, allied health workers, and students are making in their efforts to make the health system more equitable for Aboriginal peoples and Torres Strait Islanders across Australia. If we were to see an authentic political commitment towards 'health equality within a generation' for Aboriginal peoples in the next few years,[33] we could also hope that by 2027 a book such as this would not be needed.

Notes

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