

ALCOHOL-RELATED BRAIN INJURY

A GUIDE FOR PROFESSIONALS



THE ALCOHOL FORUM'S VISION FOR ALCOHOL-RELATED BRAIN INJURY IS THAT THOSE WHO LIVE WITH THIS CONDITION BE PROVIDED WITH THE REHABILITATIVE RESOURCES AND SUPPORT TO REACH THEIR FULL POTENTIAL AND LIVE HAPPY, FULFILLING LIVES.

Copyright: © Alcohol Forum January 2015

Published by the Alcohol Forum, Unit B9, Enterprise Fund Business Park, Ballyraine, Letterkenny, Co. Donegal. All rights reserved. No part of this publication may be reproduced or transmitted by any means without the prior permission of the publishers and copyright holders.



ALCOHOL-RELATED BRAIN INJURY

A GUIDE FOR PROFESSIONALS





THE ALCOHOL FORUM'S VISION IS THAT THE STIGMA ATTACHED TO ALCOHOL-RELATED BRAIN INJURY IS CHALLENGED AND OVERCOME.



CONTRIBUTORS

The Alcohol Forum are grateful to the following people who gave their valuable time, support and expertise to the production and peer-reviewing of this guide:

Sinead Tolan,

Occupational Therapist, Our Lady's Hospital, Manorhamilton.

Dr Paul Stewart, General Practitioner, Dunfanaghy Health Clinic, Donegal.

Dr Caroline McMonagle,

General Practitioner, Lifford Health Centre, Donegal.

Dr Mark Hogan, Senior Clinical Neuropsychologist, HSE West.

Dr Hugh Gallagher MICGP, GP Coordinator, Addiction Services Dublin North City & County.

Dr Seán Ó Domhnaill, Consultant Psychiatrist, Medical

Director Cuan Mhuire. Dr Mary Butler,

Registrar in Neuropsychiatry, Beaumont Hospital, Dublin.

Sharon Patton, Dietician Manager, Department of Nutrition and Dietetics,

Letterkenny General Hospital. Ann-Marie Morrissey,

Occupational Therapist, Clare Mental Health Services.

Fiona Mills, Occupational Therapist, Clare

Mental Health Services.

Acting Manager, HSE Alcohol and Drug Service, Letterkenny, Donegal.

Emily Scanlan,

Fundraising Manager, Alcohol Forum.

Moira Mills,

Advisor to the Alcohol Forum, Donegal.

The Alcohol Forum would like to extend their gratitude and appreciation to all professionals, services and families who have supported the development, implementation and continuation of the ARBI service in the Northwest. These have included:

HSE Mental Health and Addiction Service, Donegal. **HSE Older Peoples Services**, Donegal. HSE Social Work Department, Donegal. **HSE Mental Health Services**, Donegal. **HSE Psychology Service**, Donegal. **HSE Community and Mental** Health Occupational Therapy, Donegal. **HSE Physical and Sensory** Disability Service, Donegal. HSE Primary Care Services, Donegal. Letterkenny General Hospital, Donegal. Brentwood Private Nursing Home, Donegal. North West Regional Drug and Alcohol Task Force.

Irish Wheelchair Association, Donegal White Oaks Addiction Treatment and Rehab Centre.

Disclaimer

While every effort has been made to ensure the accuracy of content contained within this guide, no responsibility can be accepted by the Alcohol Forum, author, co-authors, contributors or funders for any errors or omissions herein. We have made every reasonable effort to ensure the accuracy of the information provided and have endeavoured, to the best possible extent, to reflect best practice and the most current data. However, in view of the continuous changes in healthcare and rehabilitation, readers are urged to use this booklet only as a guide. It is no substitute for professional training, multidisciplinary consultation and clinical supervision. No person shall have any claim of any nature whatsoever arising out of or in connection with this publication against the Alcohol Forum, author.co-authors, funders, contributors or any of its officers and employees.



ABOUT THE LEAD AUTHOR

Dr. McMonagle is the ARBI Rehabilitation Coordinator with the Alcohol Forum. She is a psychologist with a special interest in Alcohol-Related Brain Injury and has led the Alcohol Forums endeavours to respond to the needs of those affected by this condition.

CO-AUTHORS

Dr Mark Hogan,

Senior Clinical Neuropsychologist, HSE West.

Ann-Marie Morrissey,

Occupational Therapist, Clare Mental Health Services.

Fiona Mills,

Occupational Therapist, Clare Mental Health Services.

Dr Caroline McMonagle,

General Practitioner, Lifford Health Centre, Donegal.

Sinead Tolan,

Occupational Therapist, Our Lady's Hospital, Manorhamilton.

Dr Seán Ó Domhnaill,

Consultant Psychiatrist, Medical Director Chuain Mhuire.

Dr Mary Butler,

Registrar in Neuropsychiatry in Beaumont Hospital.



THE ALCOHOL FORUM



A MESSAGE FROM KIERAN DOHERTY, CEO OF THE ALCOHOL FORUM

Alcohol-Related Brain (ARBI) Injury is a hidden but growing problem across Irish communities. The lack of professional awareness surrounding the condition continues to prevent the early identification, treatment and rehabilitation of ARBI.

In our first report studying ARBI published in 2011, we highlighted the lack of specialised care pathways in Ireland to meet the needs of people affected. We believe that our Health Service will be failing some very vulnerable people unless we provide a commitment to bettering our ways of working across the spectrum of disorders which ARBI encompasses.

Our hope is that this guide will provide a comprehensive overview of the crucial roles that various disciplines can play in improving rehabilitative outcomes, and facilitates skill development amongst those professionals most likely to come into contact with ARBI. Ultimately we hope to improve the quality of life of those affected and ensure that they meet their fullest potential.

WHO WE ARE

The Alcohol Forum is a small registered charity that works to prevent and reduce alcohol related harms in communities. Based in the North West of Ireland and influencing across the island of Ireland the Alcohol Forum operates in conjunction with the Health, Justice, Education, Community and Business sectors to change the culture of alcohol in Ireland.

We are the only alcohol charity in Ireland working at community level to reduce alcohol consumption levels through community action. We are instigators of action on alcohol for community, voluntary and statutory agencies working to tackle alcohol harms nationally.

OUR VISION FOR ALCOHOL-RELATED BRAIN INJURY

- A health service which recognises ARBI as a national health priority.
- That those who live with Alcohol-Related Brain Injury be provided with the rehabilitative resources and support to reach their full potential and live happy, fulfilling lives.
- That the stigma attached to Alcohol-Related Brain Injury be challenged and overcome.
- A world where Alcohol-Related Brain Injury can be prevented.



ALCOHOL-RELATED BRAIN INJURY IRELAND'S FORGOTTEN CONDITION

The physical and behavioural consequences of heavy drinking and intoxication are, unfortunately, all too familiar to professionals working in the Irish health service today.

The impact of our societal drinking practices will be more than apparent to those treating the one-in-four emergency-department patients whose admissions can be directly attributed to alcohol consumption¹. With 88 deaths a month in Ireland now being directly related to the use of alcohol², the physical health and economic burden of this universal problem cannot be refuted.

Among the growing numbers of people presenting with alcohol-related injuries and physical health problems is a sub-group of people with a condition that remains largely undiagnosed and untreated. Up to 80% of people with a disorder known as Alcohol-Related Brain Injury (ARBI) are diagnostically missed by attending medical practitioners and allied professionals.

The low identification rates associated with this disorder serve to create a vicious cycle of repeated and increasingly extended hospital admissions, progressive deterioration, reducing prognosis and rising morbidity³. Despite having one of the highest rates of alcohol-consumption in the world, Irish professionals remain largely uninformed of this serious condition. The implications of this, not only for the affected individual, but for our health service and Irish families and communities, are enormous.

For example, ARBI now accounts for 10% of the dementia population⁴ and for 12.5% of dementias in people under the age of 65⁵. It is thought that ARBI could account for 21% of the homeless of population⁶ and up to 42% of the prison population⁷. There is a significant burden on our acute services with individuals with alcohol-related cognitive impairment being significantly over represented in populations of inpatients who are hard-to discharge⁸. This is not to mention the Irish families who suffer through the emotional turmoil of watching a loved one deteriorate cognitively, psychologically, physically and functionally over a period of many years.

It is difficult not to question why a condition that was initially discovered over a century ago, and currently affects an estimated 18,200 - 128,000 Irish people⁹, is still not comprehensively provided for within the Irish health service. The lack of professional awareness surrounding ARBI means that there is a growing group of Irish people who are silently perishing away in the context of scant professional expertise, limited resources and stigmatisation.

Regrettably, ARBI is often viewed as "somebody else's problem" and a culture of professional nilisim in relation to the disorder is sometimes apparent. A growing body of literature and international interest conclusively indicates that positive outcomes can be achieved for these clients. When appropriate service responses are offered (or developed in accordance with client needs), acute hospital bed-day usage can be reduced by 85% and 75% of affected people can be supported successfully in community settings with only a 10% relapse rate⁸⁵.

Over over-arching aim of this guide is to improve the overall quality of care individuals with ARBI receive during their contact with services. By encouraging a chain of intra and inter-professional dialogue around ARBI we hope to cultivate a multi-disciplinary cross-tier approach to the identification, assessment, treatment and rehabilitation of this disorder.

Many professionals may not recognise that they have a whole host of skills applicable to the rehabilitative process of this disorder. For example, professionals across addiction, psychology, mental health, general practice, nursing and acquired brain injury are all equipped with skills and knowledge that are fundamental in informing an integrated service response and achieving successful outcomes for people affected by ARBI. It is more a question of how core professional skills can be adapted to meet the needs of this population, and how willing we might be to extend our services to people who do not typically "fit" within our remits.

Being attuned and responsive to the individual needs of people with ARBI (and of those who care for them) will be key in preventing the progressive deterioration usually observed when the condition is overlooked or missed. By providing clear guidance on how to respond to ARBI we hope that you will see more clearly your professional role within their rehabilitation. While not a definitive guide, we hope that there will be enough information for you to begin adapting your practices to meet the very unique needs of this client group.



CONTENTS

section One - Frequently Asked Questions	1
What is an Alcohol-Related Brain Injury?	2
How does Alcohol damage the brain?	3
What is Wernickes-Korsakoff's Syndrome?	4
Wernickes Encephalopathy	5
Korsakoffs Amnesic Syndrome	5
Other Forms of ARBI	6
Is an Alcohol-Related Brain Injury like?	8
But they seem okay to me?	9
Masking Behaviours	10
What brain skills are affected?	11
How many people are affected?	12
Are men and women affected differently?	13
Can you recover from an ARBI?	14
What is the recovery course after ARBI?	15
What level of alcohol use puts a person at risk of developing an ARBI?	16
Why is it so hard for someone with ARBI to stop drinking?	17
iection Two – Alcohol and the Brain	19
The Cerebellum	20
Mammillary Bodies and Hippocampus	21
The Frontal Lobe (Pre Frontal Cortex and Fronto-Cerebellar Circuit)	22
Section Three – Screening and Assessment for ARBI	23
Identifying High-Risk Groups	24
Summary of High Risk Factors and Indicators	25
Cognitive Screening	26
Indicators of Cognitive Impairment	27
Complicating Factors	27
Benefits of Cognitive Screening	27
Conducting a Cognitive Screen	27
Preparation	27
Timing	27
Beginning	28
What to Ask – Talking about cognition	28
Screening for Traumatic Brain Injury	28
Disorders of Awareness	20
Masking Behaviours	28
Masking Behaviours Talking to Families	28 28
	28 28 28
Talking to Families	28 28 28 29
Talking to Families Behavioural Observation of Cognitive Impairment	28 28 28 28 29 29 29
Talking to Families Behavioural Observation of Cognitive Impairment Cognitive Screening Tools	28 28 28 29 29 30
Talking to Families Behavioural Observation of Cognitive Impairment Cognitive Screening Tools What do you do if you suspect cognitive Impairment	28 28 28 29 29 29 30 30 30 30
Talking to Families Behavioural Observation of Cognitive Impairment Cognitive Screening Tools What do you do if you suspect cognitive Impairment Assessment and Management of Cognitive Impairment	28 28 28 29 29 29 30 30



Screening for Malnourishment	33
Identifying Malnourishment	33
Possible signs of Malnourishment	34
Assessment for Malnourishment - when to refer to a specialist.	34
Helpful Tools for Identifying Malnourishment	34
Oral Health	35
Identifying Oral Health problems in Alcohol Users	35
What to do if you suspect Malnourishment	36
Section Four- Rehabilitation	37
A Whole System Approach for ARBI	38
Primary Prevention	39
Secondary Prevention	39
Tertiary Prevention and Treatment	39
Management and Rehabilitation	40
Stages of Rehabilitation – A model from Cheshire and Wirral Partnership NHS	41
Section Five- Professional Considerations	43
G.P Management of ARBI	44
Diagnostic Criteria	45
Contraindications or Complicating Factors	45
Common Presentations	45
Patient Assessment	45
General Appearance	45
Physical Examinations	45
Bloods	46
Collaterals	46
Cognitive Screening	46
Management & Rehabilitation	46
Prevention and Early Intervention	47
Prognosis	47
Family – The Hidden Patient	47
Acute Management and Treatment of ARBI	48
Diagnostic Criteria	48
Contraindication or Complicating Factors	48
Wernickes Encephalopathy	49
Caine Criteria	49
Common Neuroimaging Findings	49
Altered Mental Status/Mild Memory Impairment	49
Eye Signs	49
Gait Ataxia	50
Malnutrition	50
Medical Management	50
Treatment	50
Discharge Arrangements	51



Occupational Therapy in ARBI	52
Considerations for Working with Individuals with ARBI	53
Assessment	53
Rehabilitation	53
Memory	54
Executive Dysfunction	55
Physical Rehabilitation	57
Mood	57
Self-Identity, Roles and Routines	57
Vocational Rehabilitation	58
Assistive Technology	58
The Importance of the Environment	58
Collaborative Working	58
Neuropsychological Correlates of ARBI	59
Diagnosis and Classification	60
Time Course of Disorder	60
Presentations: Chronic Conditions	60
Expectations following Abstinence	60
Timing of Assessment	60
Facilitating Abstinence	61
Environmental Factors	61
Neuropsychological Assessment Process	61
Medical Notes	61
Collateral & Clinical Interviews	61
Behavioural Observation	62
Factors Influencing Formal Assessments	62
Formal Neuropsychological Tests	62
Premorbid Functioning	62
Intelligence	62
Memory	62
Executive Functions	63
Motor Skills	64
Complicating Factors	64
Counselling for Alcohol-Related Brain Injury	65
Identifying Cognitive Impairment in Therapy	66
Do people with ARBI need Counselling	66
Adapting Counselling for people with ARBI	66
Moderate to Severe: Life Story Books	66
Mild to Moderate: Adapted Cognitive Behavioural Therapy	67
Preparation	67
Developing Therapeutic Relationship	68
Behavioural Techniques	68
Simplify Cognitive Techniques	69
Compensate for Cognitive Impairment	69
Dealing with Denial	69



Substance Misuse Residential Treatment Programmes	70
Alcoholics Anonymous	70
Training for Counsellors and Therapists	70
Section Six – Adapting Environments and Interactions to meet the needs of ARBI	71
Problems of Attention and Concentration	72
Problems with Speed of Information Processing	73
Problems with Insight or Self Awareness	73
Problems with Visuospatial Ability	74
Problems with Memory	75
Problems with Self- Monitoring	76
Problems with Perseveration	76
Problems with Initiation	77
Problems with Planning and Organisation	77
Problem Solving Difficulties	78
Disinhibited or Inappropriate Behaviour	78
Ataxia	79
Peripheral Neuropathy	79
·	
Section Seven – Nutrition in Alcohol-Related Brain Injury	81
References.	88