Rural **minds**

Professor Brian Kelly explains the basis of his work on mental health, which seeks to conduct epidemiological research that is easily transferable into practical mental health service policy, thereby tackling the problems faced by many individuals in rural communities

How did your interest in oncology and palliative care develop?

My interest began during my time training in Psychiatry. Having always been interested in the psychiatric aspects of physical illness and mental healthcare within the general health system, I had the benefit of invaluable mentorship during my PhD from people such as Professor Beverley Raphael who gave me the opportunity to explore research in this field. I have learnt a great deal from my colleagues in oncology and palliative care over the years, and find this an area where psychiatry can have a particularly valuable role assisting patients, families and the clinicians who care for them. It can be very rewarding to work with people around the very human issues that they confront amidst some of the most difficult challenges of their life.

From what context did your investigation into rural communities emerge?

In 2004 I had the opportunity to lead a rurally-based academic unit in New South Wales (NSW), Australia: the University of Newcastle's Centre for Rural and Remote Mental Health. This unit was charged with the task of developing research, education and mental health service policy across the state of NSW, with a view to advancing academic opportunities in rural mental health, and the research base that can inform future development of health services. This was a unique situation in which an academic role was closely linked to the practical task of policy development, and working with rural communities and health services. I have had the opportunity to work with an excellent team of rural researchers across a widely dispersed but highly collaborative network.

I grew up in rural regions which also inspired me to take this opportunity to work in an area of significant unmet need. It gave me the chance to build on my experience in working with general health services in improving mental health for the community.

What has been the overarching goal from the study's outset?

There is a policy need for epidemiological research in mental health that can more directly translate to community programmes, identify levels of service needs and identify consequences of the limited access to care. The project addresses important gaps in previous mental health epidemiological research. It is innovative in examining the interaction of individual, household, family and community-level factors and investigating risk factors across the diverse range of rural communities. It is also innovative in following a cohort over time (currently up to five years).

The project focuses on rural and remote community characteristics and uses secondary data sources to investigate the role of novel geographic factors. Previous epidemiological research has under-sampled rural and remote regions, and has clustered diverse regions as 'non-urban'. This has prevented detailed investigation of geographically distributed factors. Research investigating broad determinants of rural health outcomes is a major current research priority.

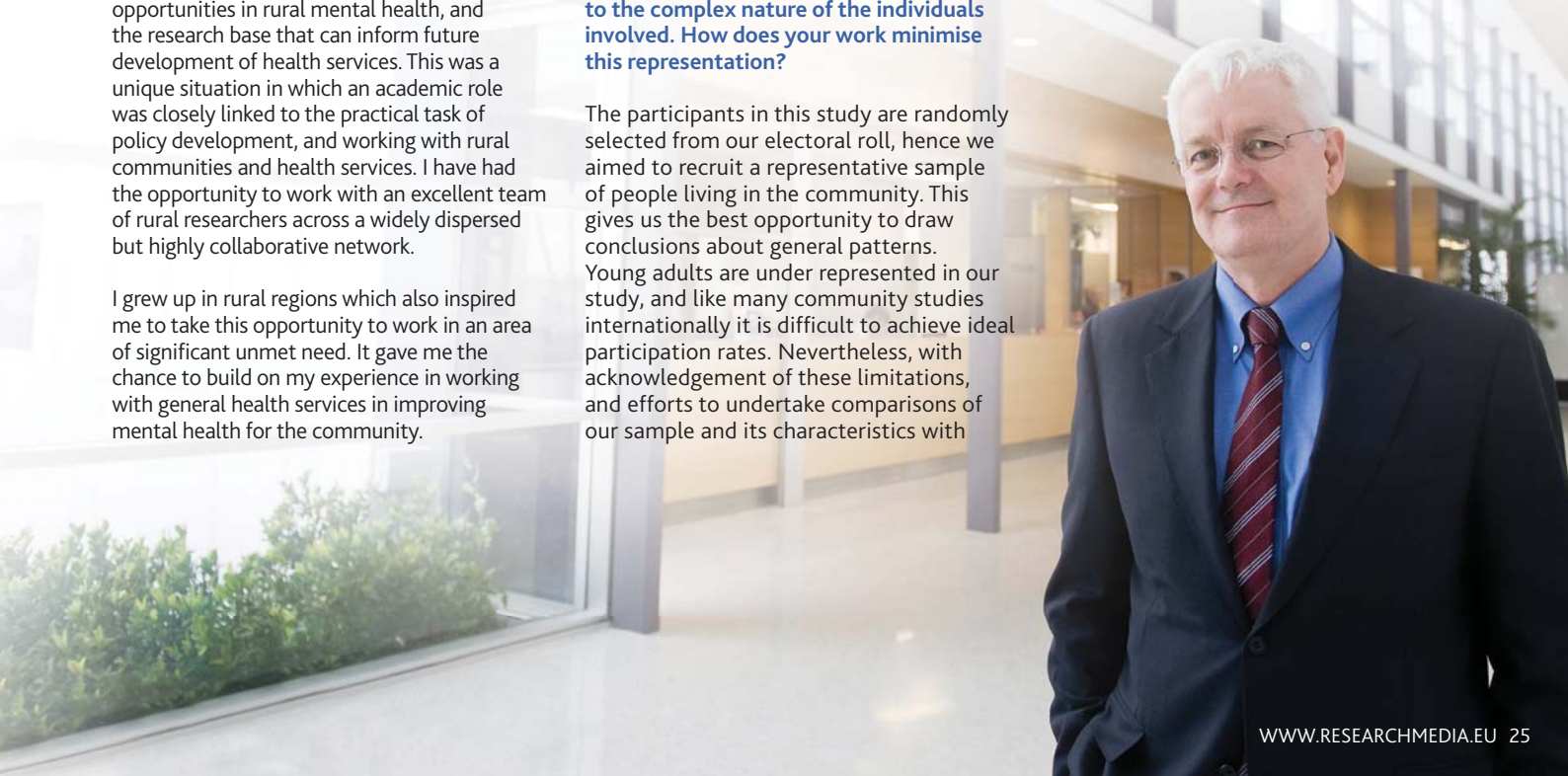
Although your longitudinal study looks at many determinants of mental ill health, you still run the risk of generalisation due to the complex nature of the individuals involved. How does your work minimise this representation?

The participants in this study are randomly selected from our electoral roll, hence we aimed to recruit a representative sample of people living in the community. This gives us the best opportunity to draw conclusions about general patterns. Young adults are under represented in our study, and like many community studies internationally it is difficult to achieve ideal participation rates. Nevertheless, with acknowledgement of these limitations, and efforts to undertake comparisons of our sample and its characteristics with information available about rural residents in general, we can see what biases we have and attempt to address them.

Could you describe your hopes for the future of mental health and wellbeing?

My hopes for the future are: that mental health be truly considered a fundamental aspect of general health; that people with mental illness will have access to equivalent resources and care as those with other health problems; and that we overcome the artificial separation of mental health from other health services. This would mean that addressing mental health needs of patients and their families becomes part of every healthcare professional's business.

Concurrently, I would hope that we see greater equity in the expectations people have in their treatment and health outcomes wherever they live, together with greater focus on promoting good mental health, which is a responsibility for all parts of our community. Much of this requires overcoming the stigma of mental health problems at community, health service and governmental levels. In addition, greater inclusion of people with mental health problems in all aspects of community life and greater support for people recovering from mental illness through improved community involvement are critically important.



Reducing mental health risks

A team at the **University of Newcastle** in Australia has been investigating the specific mental health problems and predictors of mental health deterioration which are accentuated by the isolation of rural and remote areas, using their recent work to improve the lives of people who live outside major cities

WITH A NUMBER of societal changes influencing the mental health of the general community, it is important for researchers in this area to have reliable figures from which to guide future health programmes and services. Many studies of non-urban areas either homogenise rural experience or have a low sample rate, thus failing to assess the nuances of rural life. With the loss of community infrastructure and organisation, as well as reductions in the chances for employment opportunities and exposure to environmental adversity, rural communities face a raft of factors which can increase the risk of mental health problems individuals may experience. Furthermore, socioeconomic disadvantages associated with poorer health in many areas is such that the relative poverty of the non-metropolitan regions puts rural people at high risk.

Alongside risk of, and outcomes from, mental health problems in these regions, it is also important to understand mitigating factors that might be protective and support adaptation of people and communities exposed to adversity. A team at the University of Newcastle and collaborators in Australia led by Professor Brian Kelly is examining a number of these issues, some of which have international implications. Any societal factor that increases social isolation or family breakdown, fragments community connectedness or undermines social inclusion is likely to have negative impacts on mental health, which is why the Newcastle researchers are conducting an epidemiological investigation into many important predictors of mental health deterioration.

The broad expertise of the group enables them to take a multidisciplinary approach to these issues, combining community studies with a close understanding of individuals. With greater knowledge of brain function and the specific pathways associated with different diseases, treatment has been improving, and a sophisticated understanding of the interaction between biological pathways and social factors has been achieved. However, despite this level of understanding at the cutting edge of research, there is still a large amount of social stigma associated with mental health, which the Newcastle scientists address in their work. Because stigma can limit social inclusion, it may have a powerful influence on recovery from mental health problems. The project's findings show the benefits of social support in prompting mental health and wellbeing. These benefits include personal support as well as a greater feeling of connection with the community. Conversely, anything which leads to feelings of isolation and exclusion from the community is likely to have a negative impact on mental health as a whole. Kelly's team has been aiming to connect this information with each specific rural setting they are approaching.

LOCAL REPRESENTATIVES

Recruitment of community members to longitudinal mental health research is challenging. As a consequence of the impacts of stigma, a large part of the group's work for

this project has involved engaging individuals and communities to take part in their longitudinal mental health research. In order to achieve this, the researchers have hosted four rural sites, every one of which provides a local base for promoting the study in those local communities. The team first conducted pilot work, in order to refine their study and gauge the most effective way to move forwards. They are now conducting a full longitudinal study of rural mental health. Kelly reflects on the important role that the University of Newcastle Centre for Rural and Remote Mental Health's Community Advisory Committee has played in their work: "The Committee has provided critical guidance to the study, including identifying new and emerging issues that could be addressed in each wave of data collection, and appropriate methods for community promotion of the study". What is significant is the amount of communication between the project team and community representatives this has allowed, building those relationships which are essential for the completion of the work. This has been key to addressing the stigma of mental health problems in rural populations at the community level.

> Any societal factor that increases social isolation or family breakdown, fragments community connectedness or undermines social inclusion is likely to have negative impacts on mental health

DETECTING DEPRESSION

The Australian National Survey of Mental Health and Wellbeing recently revealed the problems which surround the under-detection of depression in urban and, to a lesser extent, rural settings, and Kelly's group's work is building the rural and remote picture. Efforts to improve the recognition and treatment of individuals need to be implemented by all stakeholders, whether they are healthcare professionals or members of the community. Furthermore, the differences which numerous studies have found between depression in rural and urban environments fail to take into account the diverse range of national and international geographic settings that these terms can cover. By clustering data from a wide range of rural communities, important detail may be lost, and part of the work being done by the Newcastle team is to unpick these broad generalisations and offer more nuanced analyses.

A feature of the study is the inclusion of individual, family and community-level factors in the investigation of mental health outcomes. Kelly points out that the decision to focus on rural regions has the potential to provide valuable insights with wider implications internationally: "Rural regions lend themselves to studies of environmental and community influences on mental health since it can be easier to define the characteristics of the place in which people both live and work, as compared with the complexity of living and working patterns in major cities".

ESSENTIAL SERVICES

Since the range of services available in rural areas is more limited, and given that there are many practical barriers for individuals to access these services, it is important to improve links to primary care in these areas. As such, general practitioners (GPs) play a key role in connecting individuals with local healthcare services. Yet with limited numbers practising in rural areas, even these front-line connections are altered by the landscape they appear in. The team has also been able to identify other important rural services, which Kelly has found essential for rural health infrastructure: "We have demonstrated the role of services as important first points of initial contact for people in distress, including rural welfare agencies, agricultural services and financial assistance services". Each of these plays an essential role in their communities, especially as mental health problems may be triggered by a series of shared community experiences; one such example might be chronic strain induced as a result of the drought that has been ongoing for many years in rural Australia.

COMMUNITY CONNECTIONS

After early progress, the project's work continues, but one of the major questions underpinning their investigations is how they can develop better connections between the individual, doctor and society in communities that are widely dispersed and often relatively inaccessible. A large part of the solution to this may come in the form of social networks and communities, with the group aiming to examine such questions in specific studies across rural Australia. With the GP acting as a lynchpin for the community, the services available to GPs are essential if better mental health outcomes are to be achieved within this environment. By encouraging health practitioners to have a broader community perspective on health issues, Kelly and his collaborators hope that their research will help to improve the lives of those who live in rural areas.

LIVING IN A RURAL COMMUNITY: A LONGITUDINAL STUDY OF THE COURSE AND OUTCOME OF MENTAL HEALTH AND WELLBEING

OBJECTIVES

Examining changes over a longer period of time to understand the development and outcomes of mental health problems and the impact on people, with a major focus on building capacity in mental health research in rural regions.

KEY COLLABORATORS

Associate Professor Helen Stain; **Professor Prasuna Reddy**; **Mr Terry Lewin**, University of Newcastle, Australia • **Professor Vaughan Carr**, University of New South Wales and Schizophrenia Research Institute, Australia • **Associate Professor David Perkins**; **Professor David Lyle**; **Associate Professor Lyn Fragar**, University of Sydney, Australia • **Professor Jeffrey Fuller**, Flinders University and University of Sydney, Australia • **Professor John Beard**, Honorary Professor, University of Sydney, and Adjunct Professor, Southern Cross University, Australia

Associate Investigators:

Dr Russell Roberts, Director of Mental Health, Western Area Local Health District, Orange, New South Wales (NSW) • **Dr Richard Buss**, Director of Mental Health, Northern Coast Area Health Service, Lismore, NSW • **Dr Dinesh Arya**, Director of Mental Health, Hunter-New England Local Health District, Newcastle, NSW • **Tom Brideson**, NSW Aboriginal Mental Health Workforce Program, Western NSW Local Health Network

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CONTACT

Professor Brian Kelly
Project leader

Faculty of Health
School of Medicine and Public Health
McAuley Building
The Mater Hospital
PO Box 833
Newcastle, NSW 2300
Australia

T +61 2 403 35690
F +61 2 403 35692
E brian.kelly@newcastle.edu.au

PROFESSOR BRIAN KELLY is an internationally-respected mental health authority who is consistently one of the University of Newcastle's highest recipients of external research grants. He has held career-long interests in the psychosocial aspects of palliative care, particularly within an oncology setting, alongside interests in population mental health and rural health.