

The physical health of people with a serious mental illness and/or addiction

Evidence summary

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Te Pou
o Te Whakaaro Nui

Overview

It has been claimed that enough descriptive research has been undertaken to identify the extent of health disparities for people who experience serious mental illness and/or addiction, and it is time to address this. The development and resourcing of evidence-based interventions aimed at reducing excess mortality amongst this population group must now become a priority (Thornicroft, 2013). The findings of this review strongly support this claim.

There is much to learn from the work of the Mental and Physical Health Platform (2013)¹, which brought together partnerships with various associations across European countries in a call to action. Their aim was to raise awareness of the issues and change mind sets, in order to address the personal, social and economic consequences of ignoring the physical health of people with mental health and addiction problems.

In the UK, a cross-government national strategy supported by nearly 30 agencies, *No Health Without Mental Health*, (HM Government, 2011) included the improvement of physical health for people with mental health problems as one of six priorities in its own call to action statement.

In 2013, a group of psychiatrists, including Jackie Curtis of the Bondi Early Psychosis Programme in Sydney, launched an international consensus statement focusing on early intervention to improve the physical health outcomes of young people diagnosed with psychosis. *Healthy Active Lives (HeAL)* attempts to minimise the complications of obesity through regular review of medication and the provision of a range of supports to enable young people to lead healthy, active lives.

These examples provide a way forward for a national, systemic approach. There are many examples of good practice within New Zealand that demonstrate recovery-based, individualised wellbeing programmes and localised solutions that enable better access to preventative health care and treatment.

This review has found that there is sufficient evidence to inform action at multiple levels. The important next step is to involve all those who can effect change to work together to improve the physical health outcomes of people who experience mental health and/or addiction problems, and to monitor mortality and morbidity rates on a routine basis to understand the impact of these changes (Cunningham et al., 2014).

¹ Quotation is from a brochure launching the Mental and Physical Health Charter, retrieved 20 April 2014 from http://ec.europa.eu/health/mental_health/eu_compass/policy_recommendations_declarations/mh_charter_acti on_en.pdf

Suggested areas for action - informed by evidence

The actions outlined in this document are informed by the findings of the evidence review. They provide a starting point for developing a national programme of work to improve the physical health of people with experience of mental health and/or addiction problems in New Zealand.

Policy

1. Make people with experience of mental health and addiction problems visible as a priority group in national and regional policies impacting on health outcomes. This includes policy in sectors outside health, such as housing and employment. Prioritise funding to implement these policies, for example through district health board annual planning processes.
2. Ensure that effective monitoring and screening procedures for physical health are part of the quality frameworks for mental health and addiction services.
3. Develop guidelines on the roles and responsibilities of health professionals in monitoring, screening and on-going management of the physical health of this group, particularly the complementary roles of primary and secondary services.
4. Address the stigma and discrimination experienced by people in accessing health care. Include health professionals as a key audience in anti-discrimination campaigns.

Practice

5. Strengthen linkages between primary care and mental health services, and build the confidence and capability of the workforce across both sectors to better manage physical health problems amongst this group.
6. Provide routine monitoring of the physical health of mental health service users, and screening for physical health problems, especially those associated with the use of psychotropic medication.
7. Invest in early intervention in psychosis services that provide evidence-based weight management support, especially for people first prescribed psychotropic medication.
8. Provide comprehensive, personalised wellness programmes, which include appropriate behavioural therapy alongside physical activity and healthy nutrition.
9. Ensure compliance with smoke-free policies, and routinely offer effective smoking cessation support to people with mental health and addiction problems who smoke.
10. Improve access to dental health services for mental health and addiction service users.
11. Reduce the impact of lowered socio-economic status, through supporting access to employment and suitable housing.

Research and evaluation

12. Trial alternative and complementary treatment options to minimise the side effects of antipsychotic medication. Options include psychological therapies and comprehensive wellness programmes with structured physical activity, using evaluation and quality improvement methods to develop best practice.

13. Monitor and report on the morbidity and premature mortality rates to provide better information on trends, and enable the measurement of improvements in the health of this population.
14. Undertake qualitative research to better understand effective interventions from the perspectives of people with experience of mental health and addiction problems.

Introduction

It is well-established that people with experience of serious mental illness (SMI) and/or addiction² have a shorter life expectancy than their general population counterparts, and are at greater risk of a range of chronic health conditions (De Hert, Correll, et al., 2011; Handiside, 2004; Lawrence et al., 2010). There is also evidence that the gap may be widening (Saha et al., 2007; Scott & Happell, 2011). Similarly, alcohol or drug addiction is associated with a number of concurrent physical health issues.

Despite this, there has been limited focus to date on the physical health needs of this population group as a priority for policy and research within New Zealand. There has been good work undertaken at a service level, but much of this has not been formally evaluated.

This review draws primarily on recent review studies and meta-analyses, as well as relevant New Zealand data published by the Ministry of Health, with a focus on publications from 2000 onwards. It also includes recent New Zealand and international studies of direct relevance to the research questions, as follows:

1. What are the main findings from recent international research³ on physical health outcomes amongst people with serious mental illness and/or addiction, and how does this compare with general population health outcomes and findings available from New Zealand research?
2. What is the extent of physical health outcome disparity between the general population and people with serious mental illness and/or addiction living in New Zealand?
3. What are the main reasons identified in the literature which explain this disparity?
4. What evidence can be found for effective interventions to improve health outcomes for people with serious mental illness and/or addiction?

² The definition of 'people with serious mental illness and/or addiction' used was: people who have been severely impacted by mental illness and/or addiction, including those who have been diagnosed with schizophrenia, major depressive disorder, bipolar disorder, schizoaffective disorder and/or addiction.

³ This refers mainly to research published since 2000, within OECD countries.

Key findings

Mortality and morbidity

The international literature shows a significant gap in mortality between people with SMI and the general population. Life expectancy of those with SMI has been estimated to be up to 25 years shorter (Thornicroft, 2013; World Health Organization, 2013). Higher rates of suicide account for some of the disparity; however, deaths in this population are mainly due to diabetes, respiratory illness, cardiovascular disease and cancer (De Hert, Correll et al., 2011; Robson & Gray, 2007). Recent research has identified a similar mortality gap within New Zealand. Overall, people using mental health services have more than twice the mortality rate of the general population. The disparity is even more pronounced for people with a psychotic illness, who have more than three times the overall risk of premature death. As with the international literature, the majority of deaths are due to treatable physical illnesses, with cancer and cardiovascular disease accounting for the most deaths (Cunningham et al., 2014).

Alcohol has been causally linked to more than 60 medical conditions, including a range of gastrointestinal diseases and cancers, central nervous system effects, coronary heart disease, and sexually transmitted infections (Jones et al., 2011; Mannelli & Pae, 2007; Room et al., 2005). Around one-quarter of alcohol-related deaths in New Zealand are due to cancer, and another quarter due to other chronic diseases (Connor et al., 2005).

For those with an illicit drug addiction, mortality risk increases with the frequency of drug use, and is more pronounced among opioid users (Degenhardt & Hall, 2012; Jones et al., 2011). Recent analysis of mortality amongst New Zealand users of mental health services identified that people with a primary substance use diagnosis had premature mortality rates over two and a half times that of the population as a whole (Cunningham et al., 2014).

People with an addiction are also at increased risk of a range of physical health conditions. Methamphetamine addiction is linked with heart disease, cerebrovascular complications, oral health diseases, and increased risk of transmission of blood-borne viruses (Darke et al., 2008; Petit et al., 2012). Chronic cannabis use has been linked to bronchitis and impaired respiratory function, respiratory cancers, cardiovascular disease, lung damage and reproductive disorders (Degenhardt & Hall, 2012; Hall, 2009; Jones et al., 2011). Rates of intravenous drug use in New Zealand are low; however, high rates of hepatitis C have been found among people who inject substances including those in opioid treatment (Deering et al., 2004).

International literature has identified significantly higher rates of a range of major physical illnesses amongst people with mental illness than their counterparts in the general population. These include metabolic syndrome, viral and oral health diseases, and a range of respiratory diseases (Collins et al., 2012; De Hert, Correll et al., 2011; Robson & Gray, 2007). Diabetes is reported as being up to four times more prevalent, and cardiovascular disease has been identified as the most common cause of death amongst people with SMI (De Hert, Correll et al., 2011; Scott & Happell, 2011). The evidence

with regard to cancer is mixed, with limited evidence of elevated rates. However, case fatality rates are higher amongst people with SMI, compared with the general population, indicating unequal access to diagnosis and treatment of the disease (Lawrence et al., 2010; Scott & Happell, 2011).

New Zealand research indicates some differences across ethnic groups. Higher rates of respiratory conditions and chronic pain have been identified amongst Māori with any mental disorder, compared with Māori with no mental disorder (Oakley-Browne et al., 2006). The overall alcohol-related death rate for Māori is four times that of non-Māori (Connor et al., 2005). A study of mental health service users in Auckland found that Māori and Pacific service users had a higher body mass index (BMI) than their European/Other and Asian counterparts (Wheeler et al., 2013). Māori users of mental health services have higher mortality rates than the general Māori population, but the size of this difference is less for Māori than non-Māori (Cunningham et al., 2014).

Drivers of relatively poor health

Relatively poor health amongst people with mental illness and addiction can be explained by:

1. greater exposure to known risk factors – low socio-economic status, high rates of smoking, alcohol and other drug use, reduced physical activity and poor nutrition
2. psychotropic medication effects – their contribution to obesity, metabolic syndrome, cardiovascular disease and type 2 diabetes
3. reduced access to and quality of healthcare – due to financial barriers, stigma and discrimination. Systemic issues in healthcare delivery also make an important contribution to poor outcomes and include the separation of physical and mental health services, and a need for more clarity regarding roles and responsibilities for the physical healthcare of people with SMI and/or addiction.

The links between socio-economic status and mental health have been widely reported (Collins et al., 2012). Robson and Gray (2007) note that socio-economic consequences associated with SMI also impact on the physical health of this population group. These consequences include issues such as restricted access to employment, social stigma and isolation, poverty, and poor housing. While these factors alone do not fully explain the disparities in health status between people with SMI and those of the general population, they are important to acknowledge, given evidence that policy interventions that address the social determinants of health can be effective in improving health outcomes for vulnerable or at-risk groups (Bambra et al., 2009; Jones et al., 2009; Marmot, 2013).

Greater exposure to known risk factors for chronic physical illnesses, such as smoking, poor nutrition and low levels of physical activity, also contribute to relatively poor health. While such behaviours are often described as poor individual 'lifestyle' choices, it has been found that socio-economic and clinical influences can have a significant impact on health behaviours. Indeed, Robson and Gray (2007) argue against such factors being choices, and rather that they are a result of a range of social, environmental, physical and psychological consequences of SMI.

The very high rates of smoking amongst this population is a key area of concern, particularly given that this review did not identify much evidence to date of a reduction in smoking prevalence, as currently seen for the general population. Yet stopping smoking is likely to provide both physical and mental health benefits, countering the widely held belief amongst smokers and non-smokers that smoking itself has mental health benefits (Taylor et al., 2014).

The scope of this review did not permit an in-depth analysis of the relationship between psychotropic medications and physical health outcomes; however, a number of studies have identified a negative impact on physical health, due to the contribution of antipsychotic medications to obesity, cardiovascular disease, poor oral health and type 2 diabetes (Collins et al., 2012). There are conflicting reports with regard to the links between specific drugs and actual levels of weight gain, and some authors argue that there is limited ability to accurately isolate the effect of antipsychotics on weight gain, because of the combined long-term effects of having a chronic illness (Álvarez-Jiménez, Gonzalez-Blanch, et al., 2008). However, there is strong evidence overall that antipsychotic medication contributes to obesity levels. A recent meta-analysis comparing people with schizophrenia and the general population found that people with schizophrenia who have multiple episodes and are on medication are at a more than four-fold increased risk for abdominal obesity, compared to general population controls; and that this group is also at significantly increased risk for developing cardio-metabolic abnormalities, compared with first-episode and drug-free patients (Vancampfort et al., 2013).

It is clear that not only do people with SMI and/or addiction face barriers in accessing healthcare due to stigma and discrimination; it would appear that a lack of clear responsibility for the physical health needs of this population is a key contributor to the current situation. Moreover, both internationally and within New Zealand, limited skills and confidence amongst the health workforce in addressing the issue have been identified.

A systematic review of research examining the quality of medical care received by people with SMI and/or addiction identified disparities in the level of healthcare delivered to this group (Mitchell et al., 2009). This was despite people having similar or higher levels of contact with medical professionals, compared with the general population. Of note, is that disparities in healthcare were most evident in relation to general medicine and cardiovascular care, but may also be present in cancer and diabetes care (Mitchell et al., 2009).

Promising interventions

Few published studies of successful attempts to improve the poor physical health of people with SMI or those with an addiction were found. There is however an emerging body of literature about promising interventions, and this is divided into two main types of intervention: systems-level, and individual behaviour change models which seek to reduce exposure to risk factors.

Systems-level interventions

Policy interventions

It has been noted that people with a mental illness and addiction are largely invisible within national and global strategies, even though various other ‘at risk’ populations are commonly identified (Burti et al., 2013). This lack of visibility as a priority group with legitimate high needs is clearly problematic in terms of improving health outcomes.

There is good evidence that broader health-related policy has been effective at improving the health status of specific groups and reducing health disparities.

Specific actions to address the social determinants of health and wellbeing amongst marginalised populations include:

- avoid focusing on the individual attributes and behaviours of those who are socially excluded
- focus on actions across the social gradient in health that are proportionate to need, rather than the gap in health between the most – and least – disadvantaged groups
- focus actions on releasing capacity within organisations, professional groups and disadvantaged groups, to achieve long-term improvements in resilience and in how those who are socially excluded are able to live their lives
- empower disadvantaged groups in their relationships with the societal systems that they have contact with (Marmot, 2013).

Healthcare service delivery

Integrated care models are considered promising with regard to improving the physical healthcare of people with SMI and/or addiction. One systematic review of interventions designed to improve the physical healthcare of this group (Reilly et al., 2013) found some significant improvement in the primary care linkage⁴ as a result of the intervention, and all studies that assessed the quality of primary care reported a significant improvement in the intervention group. This included increased rates of diagnosis for some common medical problems, improved care and treatment, and improved performance.

Moves towards structural integration in the New Zealand policy context were signalled in *Better, Sooner, More Convenient Health Care in the Community* (Ministry of Health, 2011) and discussed in *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012-2017* (Ministry of Health, 2012) and *Blueprint II: How things need to be* (Mental Health Commission, 2012). The strengthening of linkages between primary care and mental health services was also a

⁴ Linkage with primary care was defined as “one or more appointments with a general medical provider” (Reilly et al., 2013, p. 148).

recommendation from the metabolic working group initiative (New Zealand Mental Health Metabolic Working Group, 2008).

It is acknowledged that a number of practical barriers need to be addressed, and thus priority actions for the next five years, as outlined in *Rising to the Challenge* (Ministry of Health, 2012), include developing an integrated IT system, enhancing the collection and reporting of primary care information, and building the confidence and capability of the primary care workforce in this area. It is also proposed that space for on-site delivery of specialist services within primary care locations will be provided.

Both the primary and secondary care workforces (across both physical and mental health specialist services) have a fundamental role to play in improving the physical health of people with SMI and/or addiction, and training may be required to increase skill and confidence levels in both settings. There is support within the literature for staff working within both primary and secondary healthcare settings to take on responsibility for monitoring and screening procedures related to the physical health of this population group (Ministerial Advisory Committee on Mental Health, 2011). This review did not identify clear evidence regarding the level and frequency with which monitoring and screening should be undertaken, but a range of guidelines provide recommendations as to which health aspects require monitoring (Curtis et al., 2012).

National Institute for Clinical Excellence (NICE) guidelines (2009) recommend that primary healthcare professionals monitor the physical health of people with schizophrenia at least once a year, and the metabolic working group suggests a range of monitoring timeframes for people treated with antipsychotic medications, depending on the specific medication and the aspect of health being monitored (New Zealand Mental Health Metabolic Working Group, 2008).

Some research indicates that mental health nurses have a key role to play within multidisciplinary teams, and are well suited to bridging the gap between mental and physical healthcare systems (Vreeland, 2007).

Individual behaviour change interventions

The evidence on behaviour change interventions tends to be weakened by methodological limitations inherent in many of the studies undertaken (Bradshaw et al., 2005; Cabassa et al., 2010). However, a number of approaches have been identified as showing promise, particularly when provided during the early stages of antipsychotic treatment (Álvarez-Jiménez, Hetrick, et al., 2008; Roberts & Bailey, 2011, Curtis et al., 2012).

Wellbeing interventions, such as physical activity and nutrition promotion, and smoking cessation initiatives, support and strengthen a therapeutic focus on recovery. Findings from evaluations of nutrition and exercise programmes indicate that the following characteristics are likely to facilitate greater success:

- build on existing, and promote further, therapeutic alliance

- incorporate both cognitive and behavioural strategies; combine exercise, dietary counselling and health promotion
- have realistic or modest outcome targets
- be flexible in accommodating individual needs and differences
- look to the long-term and provide ongoing support beyond the initial intervention
- include a group or social component
- acknowledge and take into account possible barriers faced by people with SMI in participating in such programmes (Kemp et al., 2009).

Roberts & Bailey (2011) found improved effectiveness in programmes with a peer component, alongside staff support and active participation.

Smoke-free policies provide a supportive context for smoking cessation programmes in mental health services. Programmes that incorporate nicotine replacement therapy, and provide more intensive personal support are likely to be more effective (Bhikha, 2008; Clinical Trials Research Unit, University of Auckland, 2008); and quitting smoking has not been found to worsen the mental health of people with SMI (Banham & Gilbody, 2010; Bradshaw et al., 2005; Happell et al., 2012). A recent systematic review of smoking cessation interventions (Taylor et al., 2014) concluded that stopping smoking is actually likely to provide mental health benefits, in the general population as well as for people with SMI, countering the widely held belief amongst smokers that quitting smoking will be detrimental to their mental health.

For specific sub-populations of people with an illicit drug addiction, opioid substitution treatment and needle exchange programmes have been found to be effective in reducing health-related harms (Strang et al., 2012; Wodak & Cooney, 2005).

This review found very limited published information about either the impact of ethnicity on the physical health of people with SMI, or the effectiveness of interventions attempting to meet the needs of different ethnic groups. The absence of evaluated interventions for different ethnic groups is problematic and needs to be addressed.

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