

7 PHYSICAL HEALTH PROFILE

7.1 Physical morbidity

The poor physical health of people with psychosis has been well-documented in Australia and elsewhere^{11, 12}. In particular, elevated levels of metabolic and cardiovascular risk factors have been observed in this population, resulting in increased physical health morbidity and mortality. Contributing factors to these risks include medication side effects, lifestyle and genetic predisposition. For people with psychosis, poor physical health compounds the heavy burden already associated with their mental illness.

Participants underwent a comprehensive physical health examination with measurement of blood pressure, height, weight and waist circumference. During the interview, they were also asked about conditions diagnosed by their general practitioner and medical assessments that they had undergone, as well as questions about their diet and level of physical activity. Participants were also asked to provide a fasting blood sample for analysis of high density lipoprotein, triglyceride and plasma glucose levels. Cardiometabolic risk factors and the presence of metabolic syndrome were assessed using International Diabetes Federation criteria. The Framingham risk equation was used to calculate the absolute risk of cardiovascular disease within five years of interview.

Participant reports of physical health morbidity, as diagnosed or assessed by their doctors at any time in the past, covered a wide range of conditions. Rates for all conditions except cancer were higher in people with psychosis compared to the general population (Figure 7-1).

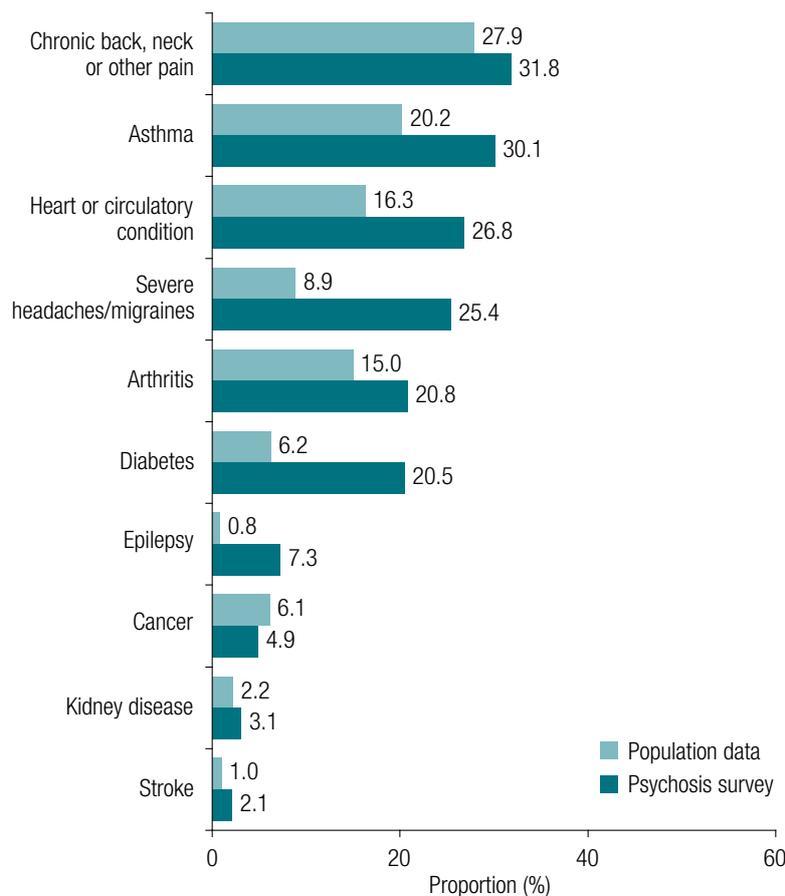
One third of participants (31.8%) experienced chronic back, neck or other pain and one quarter (25.4%) experienced frequent and/or severe headaches and migraines.

Just over one quarter (26.8%) had heart or circulatory conditions.

One-fifth (20.5%) of people had diabetes. This is over three times the rate in the general population.

Other physical health issues included asthma (30.1%), allergies (26.0%), arthritis (20.8%) and respiratory problems (18.0%). Notable, although less common, were hepatitis (11.2%), eating disorders (8.0%) and epilepsy (7.3%).

In addition, 31.7% reported memory problems and 22.0% reported a past head injury leading to loss of consciousness. A small number (2.7%) said they had a congenital disorder.

Figure 7-1. Lifetime physical morbidity, and population comparison⁸

7.2 Cardiometabolic risk factors

Three quarters (76.2%) of participants gave blood for metabolic analysis. These participants were assessed for key cardiometabolic risk factors: abdominal obesity, high blood pressure, fasting high density lipoproteins, fasting triglycerides and fasting plasma glucose.

People were determined to be at risk where they were found to have readings at or above widely used International Diabetes Federation at risk levels (see Appendix 7 for risk criteria). The proportion meeting criteria for being at risk within the individual cardiometabolic measures are given in Table 7-1.

Four out of five (82.1%) participants met at-risk criteria for abdominal obesity. Half had at risk levels of high density lipoproteins, blood pressure or triglycerides (49.7%, 48.8% and 48.0% respectively), and approximately one quarter (28.6%) had elevated plasma glucose, which is commonly associated with diabetes.

Metabolic syndrome is a cluster of the most dangerous risk factors for cardiovascular disease. It is defined as at-risk abdominal obesity plus at-risk status in at least two other cardiometabolic measures.¹³ Half the participants (49.9%) met the criteria for metabolic syndrome.

Table 7-1. Metabolic syndrome and cardiometabolic measures

	Proportion (%)
Met criteria for metabolic syndrome*	49.9
Met 'at-risk' criteria for individual cardiometabolic measures:	
Abdominal obesity	82.1
High density lipoproteins†	49.7
Blood pressure	48.8
Triglycerides†	48.0
Plasma glucose†	28.6

* International Diabetes Federation metabolic syndrome consensus criteria¹³ applied to those with no missing data

† Fasting

7.3 Risk of cardiovascular disease

Absolute risk calculations use multiple risk factors rather than relying on single risk factors to determine the likelihood of a cardiovascular event within a specified period. The Framingham risk equation, widely used in Australia and elsewhere,^{15, 16} was used to calculate absolute risk of cardiovascular disease within the next five years among participants. In keeping with guidelines, high risk was assumed automatically for those with any of the following:

- pre-existing cardiovascular disease;
- aged over 60 years and a diagnosis of diabetes;
- systolic blood pressure of 180 mmHg or more;
- diastolic blood pressure of 110 mmHg or more; or
- total serum cholesterol higher than 7.5 mmol/L.

Almost one third (31.2%) of participants who were assessed met criteria for absolute risk of a cardiovascular event within five years, with 7.2% of the total at medium risk and 24.0% at high risk (Table 7-2).

The one quarter of participants at high risk can be disaggregated into 2.4% at high risk but without pre-existing conditions that automatically place them in the high risk category and 21.6% in the high risk category due to pre-existing cardiovascular disease or high risk medical conditions.

Altogether, 43.7% of the older age group (35-64 years) met medium or high risk criteria for a cardiovascular event within five years.

Table 7-2. Absolute 5-year risk of cardiovascular disease

	Proportion (%)		
	18-34 years	35-64 years	Persons
Low risk	87.2	56.3	68.8
Medium risk	0.0	12.0	7.2
High risk	12.8	31.7	24.0

* Framingham risk equation¹⁵⁻¹⁶ applied to those with no missing data

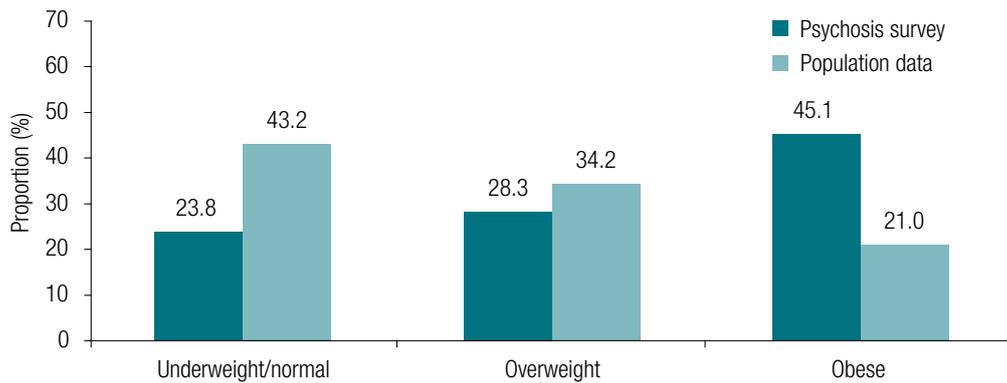
The Framingham risk equation is not normally used with people under 35 years of age. However, there were 12.8% in the younger age group who met risk criteria. In all cases, this was due to pre-existing cardiovascular disease or other high risk medical conditions.

7.4 Body weight and physical activity

Medications used to treat psychotic illness, in particular, atypical antipsychotics, have been associated with weight gain and consequent risk of poor physical health outcomes, especially metabolic disorders and cardiovascular disease. Their impact is exacerbated by limited physical exercise, poor diet and family history of diabetes and cardiovascular disease.

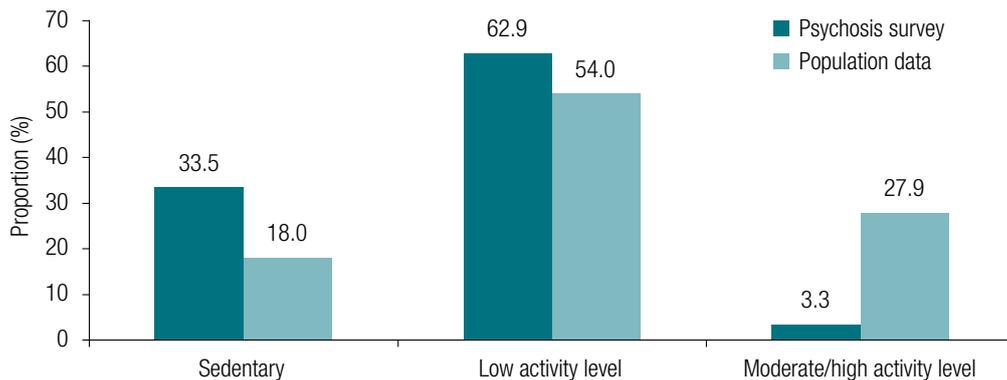
Three quarters of participants (73.4%) had a body mass index¹⁷ in the overweight or obese range, with almost half (45.1%) assessed in the obese range. By comparison, data from the 2007 National Survey of Mental Health and Wellbeing showed that 34.2% of the general population were overweight and 21.0% were obese (Figure 7-2).

Figure 7-2. Body mass index and population comparison¹⁹



The level of physical activity that participants had undertaken in the seven days prior to interview was measured using the International Physical Activity Questionnaire.¹⁸ One third of participants (33.5%) were classified as sedentary, that is inactive or with very low levels of activity, while the other two-thirds were classified as having a low level of activity (Figure 7-3).

Figure 7-3. Level of physical activity in past week and population comparison¹⁹



Levels of physical activity were similar for males and females. Those in the older group aged 35-64 years were more likely to be in the sedentary category compared to the younger age group (18-34 years).

The most commonly reported barriers to being physically active were lack of motivation (36.4%), tiredness (19.2%) and pain or discomfort (15.8%).

7.5 Nutrition

Data were collected on nutrition in the four weeks prior to interview. One third of participants (33.4%) did not have breakfast on any day of the week. Almost half (48.3%) had only one serve or less of fruit a day and another quarter (22.8%) did not eat fruit at all. Two-fifths (41.5%) had only one serve or less of vegetables a day and 7.1% did not eat vegetables at all.

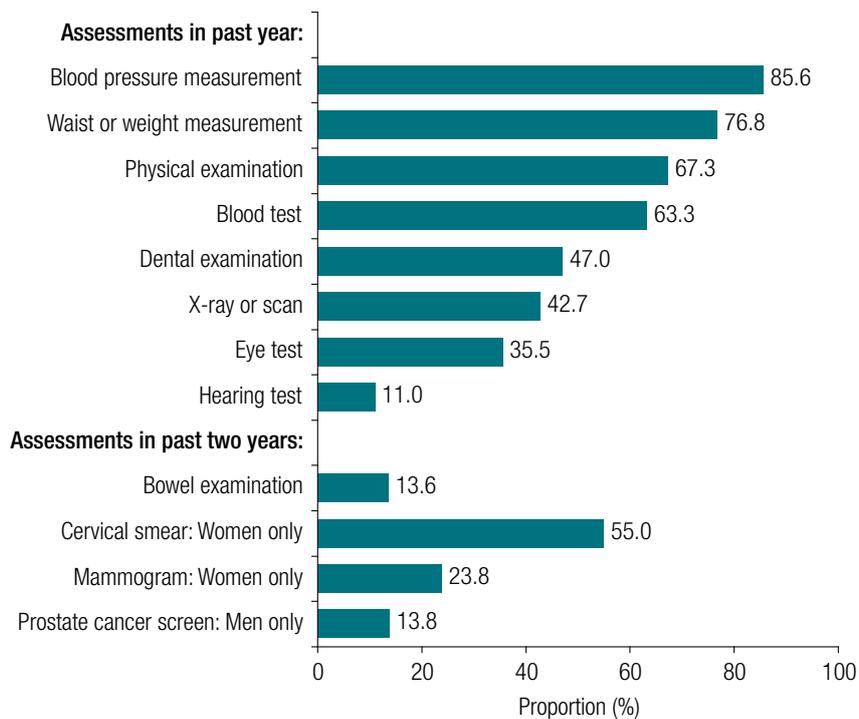
Reflecting on the past year, over a quarter (28.4%) of participants said that they had run out of food one or more times.

7.6 Monitoring physical health

In the course of the year, almost all participants (97.4%) had undergone one or more of eight different types of assessments to monitor the status of their physical health. The majority had had at least four physical assessments of some kind.

For most people (85.6%) this was a more simple blood pressure measurement and three quarters (76.8%) had waist or weight measurements taken. However, two thirds (67.3%) had had a physical examination in the past year and 63.3% had had a blood test (Figure 7-4).

Figure 7-4. Physical health assessments



Participants were also asked about routine screening. Given that the sample covered those aged 18-64 years, the proportions having bowel examinations, mammograms and prostate cancer screening, which are routinely recommended only for older persons, would not be expected to be particularly high.

