

Semaglutide: An effective weight loss adjunct for mental health consumers utilising an innovative metabolic **clinic?**

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Background

People suffering from severe mental illness (SMI) have an estimated twenty-year mortality gap compared to the general population. (Nielsen 2021, Hoang et al 2013).

We introduced a pilot multidisciplinary clinic with the aim of reducing long term cardiometabolic risk for clients suffering from SMI. Evaluation involved assessing the effectiveness of the clinic in improving the cardiovascular risk factors, including changes in health-related outcomes.

One strategy used to assist with weight loss was semaglutide.

Multi-disciplinary team members



Endocrinologist
Clinical lead
Prescriber



Dietician
Group education
and one on one support



Exercise physiologist
Group exercise sessions & individual programs



Smoking cessation practitioner
Quitline smoking cessation program



Pharmacist
Access to medications
Education

Results

The 16-week program was in high demand and serviced cohorts of between 20 & 25 patients.

Three cohorts were included in this pilot. 53 of 79 patients offered a place on the program accepted. Eight patients dropped out of the program. Overall session attendance was 60%.

A total of 16 patients started semaglutide and used it for between 6 and 52 weeks.

Number of patients starting program	Number starting semaglutide	Number ceasing semaglutide	% continuing semaglutide
53	16	3: 1 adverse reaction, 1 moved away, 1 failed to attend	82%
Age (years)	Gender mix	Number with T2DM	
Mean 43 (23-61)	9 M 7 F	4	
Average weight loss/ week (kg)	Minimum weight loss (kg)	Maximum weight loss (kg)	
1.75	1	15	

Other parameters recorded- Blood pressure, Hb1AC, blood lipids, waist circumference, number of cigarettes smoked, body composition, & number of sedentary days. (Framingham risk score)

Actions of semaglutide

Brain	Stomach	Liver	Kidney	Adipose tissue
Increased satiety	Delayed gastric emptying	Increased insulin secretion	Increased diuresis	Increased energy production
Decreased hunger		Decreased glucagon secretion		
Decreased thirst				

Ghrelin (produced in stomach): Signals hunger. Stimulates appetite and adiposity. Actions antagonised by GLP-1 agonists.

Leptin (produced by adipose tissue): Signals satiety. Inhibits food intake. Actions stimulated by GLP-1 agonists

Conclusion & the Future

Semaglutide was shown to be an effective adjunct to lifestyle and dietary advice to assist with weight loss in clients living with mental illness.

Additional data regarding key parameters that were monitored is available.

The clinic was initially funded for one year. Demand for the service is high and it is continuing.

Initial analysis and feedback from consumers has identified areas where the program can be improved to be more specific to the population studied.

Future work will focus on analysing and improving the service and ensuring benefits are maintained.

Pharmacist's role

Accessing semaglutide (& other medications used by clinic).

Governance of medication usage.

Patient education on use of medication(s).

Limitations

COVID restrictions reduced the number of cohorts attending the clinic.

Supply issues with semaglutide limited the availability of the product to patients.

Weight loss was not solely attributable to semaglutide.

Literature cited

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Acknowledgments

Dr N Nandi (endocrinologist)
Dr S Chaubey (endocrinologist)
L Mercer (dietician)
N Roberts (smoking cessation)
J Kugelman (exercise physiologist)

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