Proceedings of the Nutrition Society (2023), **82 (OCE3)**, E213 doi:10.1017/S0029665123002835

Scottish Section Conference 2023, 28–29 March 2023, Diet and health inequalities

A mixed methods programme of study exploring weight management in adult secure mental health settings

S. Mills[1,2], I. McKinnon[1,2], E. Kaner[1] and S. Ramsay[1]
[1]*Population Health Sciences Institute, Newcastle University, Newcastle upon Tyne, UK. and*
[2]*Cumbria, Northumberland, Tyne & Wear NHS Foundation Trust, Newcastle upon Tyne, UK.*

Patients with severe mental illness (SMI, including schizophrenia and bipolar disorder) die on average 15–20 years earlier than the general population[(1)]. This is primarily due to physical health conditions, strongly influenced by living with overweight and obesity[(2)]. Excess weight is most extreme in secure mental health setting (patients who have committed a crime or have threatening behaviour), where over 80% of patients are generally affected[(3)].

This study aimed to use mixed-methods and stakeholder engagement to generate a novel evidence base, to inform future co-production of weight management interventions in secure mental health services.

Four integrated workstreams were undertaken in secure services at an NHS mental health trust in North East UK:

1. An electronic, anonymous survey of all staff was conducted to explore views and experiences of weight management.
2. An ethnography was undertaken on an inpatient ward over six months, with observations encompassing different food and exercise behaviours and activities.
3. Focus groups were carried out with current and former patients, carers and multidisciplinary staff. Semi-structured interviews were also conducted with multidisciplinary staff at a second complementary NHS trust.
4. Data triangulation of empirical findings was undertaken by a diverse working group, using Triangulation Protocol.

Ethics approval was received from NHS Research Ethics Committee London – Bromley, reference 22/PR/0100.

A total of 79 staff survey responses (16.2% response rate) were received, representative of the different professional groups and clinical teams in secure services. In-person observations spanning 22.5 hours over 14 sessions were undertaken, with nine focus groups and 11 interviews conducted. Seven key themes were identified using Triangulation Protocol. Medication, particularly anti- psychotics, was highlighted as an initial precipitator of weight gain, subsequently perpetuated by insufficient staffing levels to facilitate physical activity and health promotion. Sedentary lifestyle due to limited exercise opportunities and low patient engagement was highlighted. Hospital food was very poorly perceived, leading to limited consumption at communal mealtimes and reciprocal increased intake of high fat, salt and sugar foods purchased from alternative outlets and/or brought in by others. Low patient motivation to eat well and exercise was widely experienced, primarily as a facet of living with SMI and institutionalisation. Ward culture was generally perceived to centre around unhealthy food, with limited staff authority to mandate healthier choices. Most staff felt weight management was not effectively addressed in secure services, and wanted to facilitate a healthier setting. However, others preferred to prioritise patient choice, particularly given the already restricted secure environment.

Factors driving excess weight amongst patients living with SMI in secure services are multifaceted and embedded into current approaches to SMI management and healthcare culture. Long-term complex interventions involving wide ranging stakeholders are likely to be required.

Acknowledgments

Research relating to this abstract was funded by the Academy of Medical Sciences, through a Starter Grant for Clinical Lecturers SGL025\1005. The lead author is funded by a National Institute for Health and Care Research Clinical Lectureship. The views expressed are those of the authors and not necessarily those of the NIHR, NHS or the UK Department of Health and Social Care.

References

1. Chesney E, Goodwin GM & Fazel S (2014) *World Psychiatry* **13**, 153–160.
2. Olfson M, Gerhard T, Huang C *et al.* (2015) *JAMA Psychiatry* **72**(12), 1172–1181.
3. Public Health England (2017) Working together to address obesity in adult mental health secure [Available at: https://assets.publishing.service.gov.uk/government/uploads/system/attachment_data/file/591875/obesity_in_mental_health_secure_units.pdf]