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Multidisciplinary lifestyle-enhancing treatment for inpatients with severe mental illness (MULTI-study) changes in use of medication

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physical health status is alarming the patient up to 20 years shorter life expectancy severe mental illness (SMI) in long-term Ster 18 months lack of physical activity er forme of MULTI, compared to treatment as usual (TAU) mental healthcare cardiovascular disease poor health status diabetes

aim: evaluate changes

- Use of medication regarding somatic issues
- Use of medication regarding psychiatric disorders

Also, polypharmacy is highly prevalent and dose of antipsychotics only increased last decades ^[1,2]. MULTI recently showed to improve physical health^[3]. Does it contribute in lowering use of medication as well?

methods

Observational cohort study. Medication classified following the Anatomical Therapeutic Chemical (ATC) Classification System of the WHO and converted into daily defined doses (DDD). Analyzed using multilevel linear regression, corrected for baseline measurement and differences between groups (age, diagnosis, illness severity at baseline).

physical health

mental health

psychosocial functioning

MULTI (N=65) 94% schizophrenia or related 66% men **52 years old (31-72) 5 illness severity (CGI-S; 1-7)**

TAU (N=49) 57% schizophrenia or related 55% men **59 years old (29-84) 4 illness severity (CGI-S; 1-7)**

the team

psychiatrist team leader activity coordinators mental health nurses dietitians



overall activation

basis = daily structure



getting up on time



active day program



CHANGES COMPARED **TO TAU AFTER 18 MONTHS**

	B	Ρ	
Medications regarding somatic issues Alimentary tract and metabolism (A), blood and blood forming organs (B), cardiovascular system (C) and respiratory system (R)	-0.38 DDD	0.13	
Medications regarding psychiatric disorders Medications for the nervous system (N)	-0.55 DDD	0.02	

Dose of medication decreased in both groups. A change in psychiatrist who critically reviewed prescriptions at the TAU wards during the 18 months most likely affected results within TAU. Due to skewed distributions and a lack of power, no corrected between-group analyses were possible for subgroups of medication.

SIGNIFICANT CHANGES WITHIN MULTI IN SUBGROUPS OF MEDICATION

	Ζ		Z
Alimentary tract and metabolism (A)	-5.6*	Typical antipsychotics (No5A)	-3.9*
Cardiovascular system (C)	-3.6*	Atypical antipsychotics (No5A)	-6.1*
Respiratory system (R)	-3.4*	Anxiolytics, hypnotics & sedatives (No5B+C)	-5.4*
Antiepileptics (No3)	-3.9*	Psychoanaleptics (No6)	-4.6*
Anti-Parkinson (No4)	-3.9*		
Wilcoxon Signed Ranks Test. * p < 0.01			

In addition to previous reported improvements in physical **health** ^[3] dose reductions were found after 18 months of MULTI

Sustainable change at our fingertips MULTI was implemented using current context and resources

More data will be needed for We encourage further longitudinal research to gain more insight proper between-group analyses within subgroups of medication in the relationship between possible dose reductions and lifestyle changes to improve health out-Despite the limitations, **first steps were taken** to analyze the comes in inpatients with SMI effect of lifestyle improvements on the use of medication in these patients

> References 1. Brett J, et al., Br J Clin Pharmacol 2017 3. Deenik J, et al., 2. Mentzel CL, et al., J Clin Psychiatry 2017 Schizophr Res 2018