DIGITAL HEALTH IN PSYCHIATRIC AFTERCARE – EVALUATION OF THE APP FLOWZONE FOR BRIDGING WAITING TIMES IN TREATMENT OF DEPRESSION

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Background

As the risk of relapse is particularly high after acute treatment for depression, guidelines recommend subsequent outpatient psychotherapy over several months to prevent a recurrence [1]. In contrast, the average waiting time for further outpatient treatment after a (partially) inpatient stay is 19.9 weeks in Germany [2]. Digital health technologies can help support patients at the vulnerable step of changing sectors after (partial) inpatient treatment to further outpatient treatment and to bridge waiting times [3].

Flowzone is a digital communication platform that enables treatment continuity after (partial) inpatient discharge. The present study investigates the extent to which Flowzone contributes to the stabilisation of symptoms during the waiting times for outpatient psychotherapeutic treatment following partial inpatient treatment.

Methods and sample

In a non-randomised, controlled longitudinal study, male patients (n = 27, ♂ 100 %) following day clinic treatment are given 8 weeks of aftercare treatment, either in a once-weekly aftercare group (TAU, CG) or digitally using a digital aftercare plan in Flowzone (IG). The severity of depressive symptoms is measured using the BDI-II and quality of life using the WHOQOL-BREF. Data are collected over four time points: at the start of the day clinic (t_1), at the end of the day clinic (t_2), eight weeks after the end of the day clinic (t_3), and 20 weeks after the day clinic (t_4).

Table 1: Description of sample.

Characteristics		IG (n = 16)	CG (n = 11)	p
Age *M (SD)*		38,88 (2,91)	53,64 (1,95)	0.003 **[1]
Diagnosis	F32.1	5 (31 %)	2 (18 %)	[2]
	F32.2	1 (6 %)	1 (9 %)	
	F33.1	7 (44 %)	8 (73 %)	
	F33.2	3 (19 %)	0 (0 %)	

[1] Mann-Whitney U-Test; [2] cell frequencies < 5, prerequisite for χ2 not fulfiled; ** p > .01

Results

The inferential statistical data analysis was conducted using a mixed-ANOVA with repeated measures. In order to highlight key results for long-term stabilisation during the waiting times, statistically significant differences are only reported if they occur between t_2 and t_4.

There was no statistically significant interaction between time and group of ***BDI-scores*** (Greenhouse-Geisser F (2.696, 67.379) = 0.386, p = 0.742, partial η^2 = .15, generalised η^2 = 0.007).

Moreover, the analysis revealed that there were no statistically significant differences between t_2 and t_4, controlling for group and time.

Chart 1: BDI-II Scores *M* IG & CG.

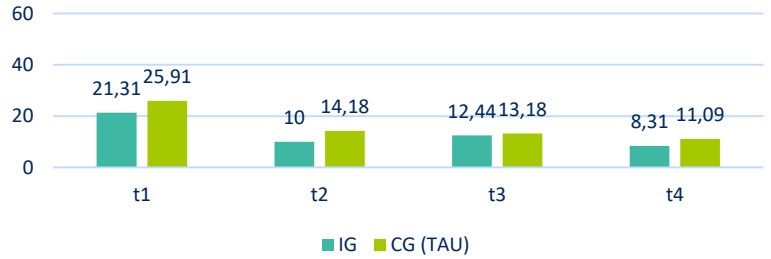
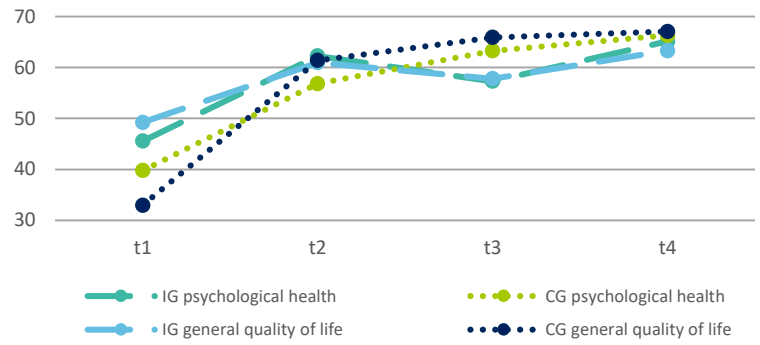


Chart 2: WHOQOL-BREF (0-100) *M* IG & CG.



There was no statistically significant interaction between time and group of ***psychological health*** (Greenhouse-Geisser F (2.770, 69.261) = 1.145, p = 0.335, partial η^2 = .044, generalised η^2 = 0.021) and no statistically significant differences between t_2 and t_4, controlling for group and time.

There ist a statiscally signficant interaction between time and group of ***general quality of life*** (Greenhouse-Geisser F (2.599, 64.978) = 4.789, p = 0.006, partial η^2 = .16, generalised η^2 = 0.080), only in CG but not between t_2 and t_4.

Conclusions

The results suggest that depressive symptoms, general quality of life and psychological health could be stabilized with the use of Flowzone. The treatment effect of Flowzone is therefore comparable to that of TAU for bridging waiting times. In view of the limited quantity of cases reported thus far, there exists a clear necessity for additional data to be collected and analysed.

Literature: [1] Bundesärztekammer (BÄK), Kassenärztliche Bundesvereinigung (KBV), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF). Nationale VersorgungsLeitlinie: Unipolare Depression — Langfassung, Version 3.1. 2022. [2023-03-14]. doi: 10.6101/AZQ/000496. [2] Bundespsychotherapeutenkammer BPtK (2018). Studie – Ein Jahr nach der Reform der Psychotherapie-Richtlinie. Wartezeiten 2018. Abgerufen von: https://www.bptk.de/wp-content/uploads/2019/01/20180411_bptk_studie_wartezeiten_2018.pdf (letzter Zugriff: 12.04.23). [3] Linardon, J., Cuijpers, P., Carlbring, P., Messer, M., & Fuller-Tyszkiewicz, M. (2019). The efficacy of app-supported smartphone interventions for mental health problems: a meta-analysis of randomized controlled trials. World psychiatry: Official journal of the World Psychiatric Association (WPA), 18(3), 325-336. doi: 10.1002/wps.20673.

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