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Management of psychiatric appointments by telephone

Faika Zanjani¹, Tracy Davis², Patrick Newsham³, Tina M Kruger⁴, Niki Munk⁵, Nancy Schoenberg⁶, and Catherine Martin⁷

¹Department of Behavioral and Community Health, University of Maryland, Maryland, USA

²Department of Interdisciplinary Studies, Rutgers University, Stratford, New Jersey, USA

³Institute for Community Sustainability at Indiana State University

⁴Department of Applied Health Sciences, Indiana State University, Terre Haute, Indianapolis, USA

⁵Department of Health Sciences, Indiana University, Indianapolis, USA

⁶Department of Behavioral Sciences, University of Kentucky, Lexington, Kentucky, USA

⁷Department of Psychiatry, University of Kentucky, Lexington, Kentucky, USA

Psychiatric treatments fail to produce positive outcomes when patients miss their appointments. Unfortunately, only about half of all patients needing psychiatric treatment actively engage in recommended treatment regimens.¹ The reasons for non-engagement include stigma, ageism (i.e. mental health problems are perceived to be a normal part of ageing) and absence of patient condition insight (denial).^{2,3} On the other hand, reasons to attend psychiatric appointments are treatment readiness, recognition of treatment benefits, collaborative physicians and positive psychiatric treatment history.⁴ This implies a need for more patient-centred strategies to increase psychiatric treatment engagement. Simple mail and telephone reminders are an efficient way of increasing treatment awareness and subsequently attendance, but treatment attendance rates vary, depending on the source, time frame and level of automation (approximately 6–84% treatment attendance).⁵

Thus, a telephone-based intervention modelled on brief motivational interviewing (BMI⁶) that focuses on individual patient experiences and principles was developed to increase psychiatric treatment engagement. The present study examined a system for psychiatric appointment management (PAM) in community outpatients.

Methods

Participants were recruited from the University of Kentucky Outpatient Psychiatric Clinic (UKOPC) between November 2008 and December 2009. Participants were recruited by telephone. Eligible patients were those not receiving psychiatric care in the previous year,

and having a two-week window between recruitment and first appointment. No other inclusion or exclusion criteria were employed. Participants provided informed consent by telephone. After consent, they were randomized to usual care or the PAM intervention, and subsequently contacted for baseline and six-month follow-up interviews. The study was approved by the appropriate ethics committee.

All participants, regardless of random assignment, followed the standard appointment procedures which entailed patients independently contacting the UKOPC to make an appointment. All patients were then sent a reminder, with directions and paperwork to be completed prior to the initial appointment. No further contact was initiated by UKOPC before the initial appointment.

Intervention

In the two weeks prior to the first appointment and after the baseline interview, each participant in the intervention group was called to conduct a brief motivational interview. The interview (lasting approximately 15–20 min) was provided in booklet form and focused on identifying treatment goals, the patient's life context, and verifying symptomatic behaviours. The discussion then focused on the personal consequences of psychiatric health, the positive consequences of psychiatric symptom reduction/control, and the positive/negative consequences of attending treatment appointments. The interview ended with identifying any barriers (i.e. psychosocial, clinical or structural) to attending the scheduled appointment and a problem-solving discussion for overcoming the reported barriers, all completed with a patient treatment attendance agreement. The completed workbook, containing the signed agreement and an appointment reminder letter, was mailed to the patient for their review. Afterwards, the patients' clinic records were monitored for appointment attendance.

Patients who attended their initial appointment were sent a letter reinforcing their treatment engagement behaviour. Patients who did not attend their appointment were sent a letter asking them to review their completed workbook and examine the factors that contributed to missing their appointment, and consider scheduling a new appointment. This is the same intervention that was used in an earlier study, but without the no-show follow-up for patients who missed their initial appointment, because the earlier study did not identify significant benefits for the follow-up component.^{7,8}

Outcomes

The primary outcomes were attendance at initial appointment, number of appointments attended at 6 and 12 months, and attending three or more appointments. The secondary outcomes were depression,⁹ psychiatric functioning,¹⁰ psychiatric comorbidity,¹¹ quality of life/functioning¹² and perceived treatment barriers.^{13,14}

Data analysis

Primary outcomes were examined with intervention group serving as the independent variable and treatment attendance as the dependent variable. Secondary outcomes were analysed with linear mixed models. The models included time (baseline and 6-month),

treatment group (usual care, PAM), gender and age group (younger than 50 years, 50 years and older) for the dependent variables: depression, psychiatric symptoms, psychiatric comorbidity, quality of life/functioning and perceived treatment barriers.

Results

During the one-year study period, there was an average of 50 intake referrals per month, with an average recruitment of four patients per month. A total of 39 participants (51% male) was recruited, with approximately 75% ($n = 29$) completing baseline assessments and 56% ($n = 22$) completing the 6-month follow-up. Attendance data were collected through chart reviews for all participants. Most participants were white, married, living alone, working full-time, with an average age of 43 years, an average income of \$42,000 and with approximately 15 years of education. There were no significant differences between the two groups.

Primary outcomes

There was a greater likelihood of attending the initial appointment in the intervention group (60% vs. 90%; $P = 0.035$). At 6-months, more participants in the intervention group had attended at least three appointments than in the usual care group (58% vs. 42%), but the difference was not significant. There was no difference between the total number of appointments attended at 6 months and 12 months. There were no intervention-differentiated effects by age or gender, Table 1.

Secondary outcomes

There were no intervention or attendance effects for the secondary outcomes. At 6-months, there was a significant improvement in depression ($P < 0.001$), psychiatric symptoms ($P < 0.001$), psychiatric comorbidity ($P = 0.004$) and mental health functioning ($P < 0.001$). There was no significant improvement in physical health functioning or psychiatric treatment barriers, Table 1.

Discussion

Although the present study was small, there was a significant difference in initial appointment attendance, indicating the success of the intervention. There was an equal distribution of women and a 14% minority racial status in the sample, as opposed to a majority male and 70% minority status in the previous VA study.^{7,8} We concluded that the PAM intervention increased initial appointment rates, although there were no differences in the rates of continued treatment engagement between the groups. There was evidence for improvement in depression, psychiatric symptoms, psychiatric comorbidity and mental health functioning, but no intervention effects, implying that the intervention did not differentially affect psychiatric health.

Attendance at initial appointment was better than was seen in the previous VA study. A difference in the total number of appointments was detected in the VA study, partly due to the high non-attendance rate. However, the control group in the VA study had a lower number of total appointments (approximately 2), whereas the groups in the present study

had a similar number of total appointments (approximately 3). Also the present study differed from other telephone-based psychiatric attendance interventions by providing a more extensive BMI-oriented motivational conversation. At approximately 90% initial engagement, PAM performed as well as the therapist reminder component, and better than the control and other intervention components in Shoffner *et al.*'s study,¹⁵ and performed better than other telephone reminder/prompt and educational treatment attendance interventions. Future research should examine a larger more diverse sample of patients to compare PAM with a telephone contact control group.

In conclusion, the results of the present investigation indicate that supporting patients who seek psychiatric care can improve initial treatment attendance. The PAM intervention increased attendance at the initial psychiatric appointment. It can be tailored to a wide range of individuals and can be incorporated easily into clinical care. However, the feasibility, cost-benefits and generalisability need to be examined further.

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Treatment outcomes. Randomization effects were examined for primary outcomes. Time (change), randomization and time*randomization interaction effects were examined for the secondary outcomes.

Table 1

	Baseline		6-month follow-up		P-value
	Usual care	Intervention	Usual care	Intervention	
Primary outcomes					
Patients attending initial appointment (% Yes)	–	–	60% (n = 12)	90% (n = 17)	0.035
Patients attending more than 3 appointments			42%	58%	0.26
Total number of attended appointments at 6 months			2.5	3.0	0.63
Total number of attended appointments at 12 months			3.2	3.7	0.64
Secondary outcomes					
Depression Symptoms (mean score)	12.1	14.4	7.6	7.3	Time = 0.0004 Random = 0.70 T*R = 0.31
Psychiatric Symptom Severity (mean score)	1.3	1.6	0.8	0.8	Time = 0.0001 Random = 0.61 T*R = 0.15
Psychiatric Comorbidity (mean score)	1.4	1.9	1.0	1.0	Time = 0.0036 Random = 0.55 T*R = 0.27
Physical Functioning (mean score)	42.1	47.1	43.2	43.2	Time = 0.56 Random = 0.65 T*R = 0.30
Mental Functioning (mean score)	34.7	30.0	46.8	44.6	Time = 0.0003 Random = 0.33 T*R = 0.66
Perceived Psychiatric Treatment Barriers (mean score)	2.3	2.1	2.9	2.1	Time = 0.30 Random = 0.06 T*R = 0.40