The Problem of Missed Mental Healthcare Appointments

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Abstract

Missed appointments are a problem in all types of outpatient clinics including those providing mental healthcare. A review of literature was conducted to explore the problem of missed appointments in mental health and identify methods that have been used to improve attendance. Study results demonstrate that patients miss appointments for many reasons. Common reasons for missed appointments in the articles reviewed were the interval between scheduling and appointment day, forgetting, being discharged against medical advice, and problems with substance abuse. Effective in reducing no-shows was contact via phone, mail, or text messaging. No articles were found related to the use of positive reinforcement in reducing no-shows, which is an area to consider for further research. Clinicians may identify techniques from this review applicable to their particular clinical setting to improve clinic attendance.

Key Words: Appointments and Schedules, No-Show Patients, Mental Health

Introduction

Missed appointments, often referred to as no-shows, are a problem for any clinic for a variety of reasons. If an appointment is scheduled and not kept it could prevent another patient who might have wanted the appointment time from being scheduled. Missed appointments decrease clinician productivity and may also decrease income. There is always the concern that the patient missing the appointment may be in distress. This is of particular concern in the mental health setting where a missed appointment may indicate worsening depression or the need for a safety check.

It isn't possible to totally eliminate missed appointments, but it is possible to decrease the frequency of their occurrence. A variety of methods have been tried in an effort to decrease the number of missed appointments. It is difficult to compare studies about non-attendance, missed appointments, or no-shows as there are so many factors involved in attending an appointment and samples often differ on important characteristics. This review will consider 22 of the studies which have been conducted and will highlight the complexity of the problem. Literature was obtained using PubMed, Ebscohost, CINAHL, OVID, Psychiatry Online, and BMJ Journals Collection. Older studies were included if the results were considered to add information helpful in delineating the problem or offering solutions. Search terms included no-shows, non-attendance, and missed appointments. Studies were selected based on relevance to outpatient mental health patients. Studies specific to outpatient primary care or other medical specialties were only included if the findings could be directly applied in the mental health setting. Studies will be critically reviewed in an effort to point out the differences between populations and the importance of understanding the needs of the clients being served when planning interventions.

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Submitted: July 4, 2016; Revised: September 5, 2016;
Accepted: September 14, 2016

Background

One type of appointment that may be missed is the first one after discharge from a psychiatric admission (1). In a sample of 221 patients scheduled for a community mental health appointment after discharge—with mean age 38.4 years, 56% female, 84% African American, and 95% unem-

Clinical Implications

Findings from this review reveal that non-attendance at both initial and follow-up appointments is a problem in the mental health setting that is complicated and impacted by a variety of factors. Common factors associated with non-attendance are forgetting (5, 7, 9), longer scheduling interval (3), and leaving against medical advice (1, 11). Other factors were more specific to a particular population. Phone reminders (15), text messaging reminders (13, 14, 20), and pre-appointment letters (17, 20) have demonstrated some effect on improving attendance. Some scheduling approaches that have been employed in primary care may be applicable in the mental health setting.

It is clear from the studies reviewed that missed clinic appointments present a complex problem that is impacted by a large variety of factors. Therefore, staff in each clinic should consider the needs of their patients and what method or methods might be most effective in helping them keep their clinic appointments or cancel them in a timely manner. Based on the studies reviewed, clinic attendance may be improved by scheduling appointments post hospitalization within two weeks, paying special attention to those at higher risk of missing appointments (those who left against medical advice or with an involuntary discharge, those with a problem related to a primary support group, those without an established clinician, those with alcohol or substance abuse problems). Providing patients with clinician contact information prior to discharge may improve comfort and willingness to attend. It is also important to be sure that patient contact information is up-to-date and that their preferred method of communication has been noted. Since forgetting leads to a large number of missed appointments, clinicians may want to make use of more than one type of reminder.

ployed—36% kept the first clinic appointment and 64% of patients did not attend. The patients had been diagnosed with a variety of conditions, with 64% having a primary diagnosis of schizophrenia or other psychotic disorder and 45% a secondary diagnosis of substance use disorder. Of note, of those who kept their appointments 44% already had an established clinician compared to 26% of those who did not keep their appointments.

Four factors predicted lack of appointment attendance. In order of strength of prediction these included: 1) having an involuntary discharge or having left against medical advice, 2) the absence of an established clinician, 3) a problem related to a primary support group including things such as death of a family member, health problems, and similar problems and, 4) the interval of days from discharge to appointment time, with each additional day increasing the odds of non-attendance by 4%.

The study has important implications to consider in scheduling appointments post hospitalization. The authors suggest that the outpatient provider be included in the patient's discharge planning with an introduction to the clinician and a tour of the outpatient facility. Due to differences in proximity it may not always be possible to introduce the clinician to the patient face-to-face or tour the facility. However, the patient can certainly be made aware of the outpatient provider's contact information so that phone contact is possible.

Attention to the types of patients who tend to miss scheduled primary care appointments may also be useful in terms of being alert to the presence of mental health problems (2). In a sample of 209 patients between 15–35 years of age attending a clinic in Oxford, England, those who did not keep their appointment were more likely to have a history of mental health problems or to present with a mental health problem within 12 months after the missed appointment. However, of those who missed their appointment, 36% did make and keep an appointment within two weeks. The authors suggest that the results of their study be used to consider non-attendance as a way to help identify those who might be experiencing mental health problems and allow for earlier intervention.

In a retrospective study of 180 missed appointments for psychiatric consultations in a general medical clinic (3), it was also found that those who had to wait longer between the time of the referral and the appointment time were more likely to miss the appointment. Based on chart review, other predictors were those patients whose distress was mild and those who were significantly resistant to seeing a psychiatrist. Patients who expressed significant resistance to seeing a psychiatrist had a 100% no-show rate, but this only included 7 patients. Sixty-six patients whose distress level was mild had a 66% no-show rate. In this sample of 49 males and 131 females, there were 58 White, 42 Black, 72 Hispanic, and 2 Asian or other patients, with no significance in demographics between those who did or did not attend appointments.

The authors suggest that efforts to decrease the time between referral and appointment time may help increase attendance. They also suggest that some referrals may not have been necessary if the symptoms were mild and might resolve without intervention. Finally, education regarding the meaning and benefits of psychiatric care may help decrease resistance and increase attendance.

Other predictors of missed first psychiatric appointments have been identified (4). In a sample of 313 patients, 36% did not attend their scheduled appointments at a psychiatric outpatient clinic affiliated with a medical school. The researchers identified 6 variables in the multivariate model

that were related to attendance. Those positively associated with attendance were age 35 to 49 or 50 to 64 as opposed to younger age groups, family receiving financial support, and antipsychotic medication usage. Those with health insurance and of Hispanic ethnicity were less likely to attend. The authors suggest that those who had health insurance might have selected other treatment options. This study points out the need to be familiar with the demographics of the clinic population so that special efforts may be utilized to engage patients and improve attendance.

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Others have found that patients not attending psychiatric follow-up appointments missed most frequently—27% of the time—due to forgetting the appointment and 14% of the time due to feeling too psychiatrically unwell (5). Those who were newly referred missed 17% of the time due to not being happy with the referral, 14% of the time due to a clerical error, and 14% of the time due to feeling unwell. This sample of 224 patients, with mean age of 39 years and 78% described as White European, included a variety of psychiatric disorders with the greatest numbers being depressive disorder, anxiety disorder, bipolar affective disorder, and schizophrenia/schizoaffective disorders.

Importantly, those who were new patients missing appointments were more likely to miss further appointments, drop out of outpatient care, and require admission. Therefore, absence from the first appointment may indicate the need to make special efforts to prevent loss to treatment.

Somewhat different considerations may be relevant when looking at missed psychotherapy appointments (6). The researchers found that over a 3-month period, 13% of 2,338 individual psychotherapy appointments were not attended as defined by cancelling with less than 24 hours notice or not coming at all. Reasons for missing were categorized as clinical problems accounting for 28% of the missed appointments and included physical or psychiatric problems, most often physical illness. For another 26%, practical matters, such as work conflict, were the cause for missing. Problems with motivation were the source of 17% of missed appointments and negative reactions to treatment another 13%.

In a study of 142 missed psychiatric appointments comprised of 86% male patients with average age of 48.3 years conducted in a VA mental health clinic, patients who missed appointments most frequently did so due to making a mistake such as forgetting or confusing the date or sleeping too late (7). Those patients with a diagnosis of PTSD or substance abuse were more likely to miss their appointments, while those with a diagnosis of depression and those involved in more intensive treatments were less likely to miss. Of those patients who missed appointments, 71.1% of patients rescheduled their missed appointments on their own, most within two weeks and all within four months. Based on their findings, the authors question the value of routinely following up by phone or written contact since this takes time and no adverse events related to missed appointments were found in the study. However, the avoidance of adverse events is not the only concern when an appointment is missed. Ensuring that the patient receives optimal care is also important.

When Veterans were interviewed to identify what they perceived to be barriers to obtaining healthcare, a variety of personal factors were found to be the most significant barriers for the 136 mental health patients included who were 90% male, 43% Caucasian, and 57% African American (8). The most often reported was having forgotten the appointment followed by having a personal crisis, an inability to explain oneself, and lacking the knowledge to make an appointment. Patients also identified problems with transportation in terms of lack of transportation and distance from care. There were problems with the logistics of getting care and financial constraints. It was interesting that 20 of the patients reported concerns about what their provider might say to them and 6 were concerned that they would be yelled at by their provider. These findings certainly have implications for making sure that Veterans understand how to obtain or reschedule their appointments. It also speaks to the importance of all who interact with Veterans providing excellent customer service. The authors note that while all reporting were Veterans, barriers to care might have included care they sought to obtain both within and outside of the Veterans Administration System.

Missed psychiatric appointments in a public healthcare setting in the United Kingdom were studied (9). Both

initial (9,511) and follow-up appointments (7,700) were examined. The appointments were for a variety of psychiatric services. Of the initial appointments, 16.3% were missed. Of the follow-up appointments, 15.4% were missed. Of the initial appointments, those most often missed were for alcohol problems (36.9%), drug problems (25.3%), general adult psychiatry (24.9%), forensic psychiatry (19.6%), and eating disorders (19.5%). Missed initial appointments for geriatric psychiatry (3.4%), geriatric psychiatry (5%), and cognitive-behavioral therapy (5.1%) were low. This study points out the need to consider increasing efforts to assist patients receiving certain psychiatric services to attend their appointments.

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The importance of considering differences in culture was identified in a study of missed first psychiatric appointments at a clinic in Nigeria (10). In this sample, the mean age was 34.3 years, 52.9% male, 53.5% unemployed, 89.7% not living alone. For the purpose of the study a missed appointment was one not kept within 2 weeks after the scheduled date. The process was determined based on the logistics and financial constraints that patients and their relatives might encounter in Nigeria. Based on this criteria, 32.6% of the patients missed their appointment. Based on the results of correlation and logistic regression analysis, those more likely to miss their first appointment were more aggressive, lived alone, and had a psychiatric disorder. Those less likely to miss their first appointment had previously received treatment at the facility and had medical comorbidity. Importantly, 93.2% of the 310 patients in the study were accompanied by a relative to their appointment.

Based on record review, Cheng et al. (11) found that schizophrenic patients in a sample where 58% of the subjects were male, mean age 37.3 years, were most likely to miss the first appointment after hospitalization if they had left against medical advice or had comorbid alcohol abuse or dependence followed by being male or having typical antipsychotic medications prescribed. However, this study only examined 12 variables that could be identified by record review; therefore, other important factors may not have been considered. The authors suggest the need for better understanding of the risk factors related to missed appointments and the development of interventions to improve attendance.

Appointment Reminders

Text messaging is a newer method of providing patients with reminders of their clinic appointments. This method was studied (12) in a group of 20 homeless Veterans who were 81% male, 62% White, with mean age 55 years. Veterans found text message reminders to be useful and only one participant did not want to continue receiving the messages. The only statistically significant finding in this study was a reduction in emergency department visits. However, the sample was small and larger studies are indicated.

A systematic review (60 studies) of the use of text message reminders in a variety of healthcare settings was conducted (13). Many of the studies were conducted with patients having a chronic illness and sample size varied. The researchers looked at studies in terms of the purpose of the study, description of the intervention, the dose, and the timing of the intervention. Some of the studies addressed clinic attendance rates, but others were concerned with physiological measures such as adherence to treatment. Other studies addressed patient satisfaction with the text messaging method of reminders. The researchers concluded that 77% of the studies demonstrated improved outcomes, with 18% showing improved attendance/decreased non-attendance. The authors call for additional controlled studies.

Use of text message reminders was studied for mental health clinic appointments in 4 community mental health clinics in London (14). The sample consisted of 2,817 appointments in 1,256 patients who had been diagnosed with a variety of psychiatric disorders. Three study periods were compared including: 1) no text message sent, 2) text messages sent 7 and 5 days pre-appointment, and 3) text messages sent 7 and 3 days before an appointment. Both reminder time frames led to a 25–28% relative risk reduction in non-attendance, with no difference in appointment attendance between time frames. This study identifies a relatively simple method that may be employed to help improve clinic attendance. Importantly, the researchers did not contact patients by text messaging if they declined to participate. Some phone plans have limited text messaging, with the potential for an additional message to impose a fee for the patient and this should be considered.

Reminding patients of clinic appointments by telephone calls is a standard method used to try to improve attendance. This method was studied for patients in Appalachia scheduled for intake and therapy appointments at a community mental health center (15). Patients received: 1) no reminder call, 2) call by a therapist, or 3) call by a staff member. After cancellations, 381 appointments were included consisting of 254 therapy appointments and 127 intake appointments. Contacts were classified as direct if someone spoke to the patient and indirect if a message was left. Find-

ings demonstrated no significant improvement in number of appointments attended except for direct therapist contact prior to an intake appointment, when 94% of patients contacted directly by their therapist attended compared to only 43% attendance when there was no contact. Findings were not robust for therapy appointments where 79% of appointments were kept with no contact, 82% with indirect staff contact, 84% with direct staff contact, 83% with therapist indirect contact, and 89% with direct therapist contact. The researchers suggest additional studies to determine at which point in treatment reminder calls are more effective, studies with larger samples, others factors interfering with keeping appointments, and examining characteristics of the agency and behaviors of clinicians that may affect attendance.

The most often reported barriers were having forgotten the appointment followed by having a personal crisis, an inability to explain oneself, and lacking the knowledge to make an appointment. Patients also identified problems with transportation in terms of lack of transportation and distance from care.

Wang et al. (16) used survey data to explore what patients preferred when reminded of clinic appointments in ambulatory psychiatric clinics. There were variations between preferences based on type of treatment population (referred to as study groups) and demographics. Across all groups, 76% of patients surveyed thought appointment reminders were useful and wanted to receive them in the future and 89% of the patients wanted to be contacted if they missed an appointment. The preferred method for receiving reminders was by phone call 2 days before the appointment. However, in the chemical dependency/methadone groups, the preference was for reminders by mail 1 week in advance. Interviews with treatment staff suggested that members of the chemical dependency/methadone group might have a greater need to protect their privacy, therefore preferring mailed to phone reminders. Other differences between groups were demonstrated in a logistic regression analysis leading the researchers to suggest that one single type of reminder method may not meet the needs of every patient. To the extent possible, it may be helpful to customize reminder method to patient preferences.

Some Solutions to the Problem

Pre-appointment letters were found to decrease nonattendance for patients scheduled for an initial psychiatric appointment (17). In the study, all patients received a usual care pre-appointment card up to 13 weeks before the appointment. The intervention group also received a brief orientation letter mailed 72 hours prior to the scheduled appointment to arrive 24–48 hours prior to the appointment. The letter contained information regarding appointment time, doctor's name, brief description of the clinic and the clinic routine, a map, and patients were asked to bring in their medications as well as either a friend or family member.

The sample included 764 patients. The intervention group included 206 males and 182 females, mean age 36.6. The usual care included 195 males and 181 females, mean age 36.5. There was a 7% absolute risk reduction for nonattendance in the group receiving the pre-appointment letters. The results were confounded by almost half of each group being involved in a standard opt-in partial booking system in which the new patients were sent a letter requesting them to confirm that they were interested in having an appointment. Those who declined or did not reply at all did not receive an appointment.

There is also concern regarding the time between scheduling and the appointment date and its effect on clinic attendance. This was explored (18) in a large study that included 154 hospitals and 875 satellite clinics in the Veterans Health Administration System. The researchers looked at individual appointments with clinics for one year. Appointments were determined to be kept, missed, cancelled by the patient, or cancelled by the clinic. Scheduling interval was examined using the difference in days between the time the appointment was originated and the appointment date. There was an increase in missed appointments based on scheduling interval from 12% at Day 1 to 20.3% at Day 15. As scheduling intervals became longer, the missed appointment rates over 12 months ranged from 14.6% to 20.8%, with the lowest percentage at 7 months and the highest at 3 months. The researchers concluded, based on the data, that reducing scheduling intervals did not have a robust effect and was only observed when intervals were less than 2 weeks.

A combination of approaches were found to decrease the rate of no-shows in an urban primary care residency clinic in Wisconsin (19). Those who missed appointments in the clinic tended to have more chronic medical and psychosocial problems as well as being African American/Black, female, and on Medicaid. After interviewing both staff in the clinic and patients from the cohort of no-shows, factors consistent with the literature on missed appointments were found to exist. After implementing an intervention that included educating patients about the effect of no-shows on the clinics, modified double-booking, and modified advanced access scheduling, no-show rates decreased for both the total clinic (10% to 7.06%) and the no-show cohort (33.26%

to 17.71%). The authors suggest that engaging the no-show patients prior to the implementation of the intervention may have contributed to changes in behavior. These interventions may be appropriate for mental health settings as well.

A systematic review (42 studies) examining methods to decrease non-attendance in a variety of outpatient settings (20) included mail reminders (7 studies), telephone reminders (25 studies), text messaging (12 studies), e-mail and open-access scheduling (5 studies). Text messaging was found to be the most cost effective reminder, but may not be available to all populations.

A systematic review (42 studies) examining methods to decrease non-attendance in a variety of outpatient settings (20) included mail reminders (7 studies), telephone reminders (25 studies), text messaging (12 studies), e-mail and open-access scheduling (5 studies). Five of the studies included interventions in more than one category. All of the methods had some effect on reducing missed appointments, with overall reductions greatest with telephone reminders, then text message, and e-mail reminders. Text messaging was found to be the most cost effective reminder, but may not be available to all populations.

The communication between general practitioners, psychiatrists, and patients was studied in relationship to attendance and non-attendance at psychiatric outpatient clinics (21). Findings were that communication seemed adequate at the point of referral but lapsed between general practitioners and psychiatrists after clinic attendance and especially after non-attendance. These findings point to the importance of ongoing communication between providers in the provision of care and coordination of appointments.

Modalsky (22) reports on an experience in a psychiatric practice using an open-access model where scheduled appointments were infrequently used and instead patients were provided with times that the clinic would be open for walk-in visits where patients were seen on a first-come, first-served basis unless there was an emergency or the patient needed only a signature or prescription. Two days of the week were designated for the walk-in clinic. Based on the number of appointment slots that would have been available had scheduled appointments been provided, utilization was 83% for one day and 75% for the other based on data from September 2003 to December 2005. The author reports generally favorable responses to the system, but that those who preferred to be given an appointment were still offered that option with the knowledge that fewer regular appointment times would be available. This is not a scheduling option that has been studied in mental health and is worthy of further research.

Conclusions

Findings from this review reveal that non-attendance at both initial and follow-up appointments is a problem in the mental health setting that is complicated and impacted by a variety of factors. Common factors associated with non-attendance are forgetting (5, 7, 9), longer scheduling interval (3), and leaving against medical advice (1, 11). Other factors were more specific to a particular population. Phone reminders (15), text messaging reminders (13, 14, 20), and pre-appointment letters (17, 20) have demonstrated some effect on improving attendance. Some scheduling approaches that have been employed in primary care may be applicable in the mental health setting.

It is clear from the studies reviewed that missed clinic appointments present a complex problem that is impacted by a large variety of factors. Therefore, staff in each clinic should consider the needs of their patients and what method or methods might be most effective in helping them keep their clinic appointments or cancel them in a timely manner. Based on the studies reviewed, clinic attendance may be improved by scheduling appointments post hospitalization within two weeks, paying special attention to those at higher risk of missing appointments (those who left against medical advice or with an involuntary discharge, those with a problem related to a primary support group, those without an established clinician, those with alcohol or substance abuse problems). Providing patients with clinician contact information prior to discharge may improve comfort and willingness to attend. It is also important to be sure that patient contact information is up-to-date and that their preferred method of communication has been noted. Since forgetting leads to a large number of missed appointments, clinicians may want to make use of more than one type of reminder.

If providers choose to communicate with patients by means of telephone, text messaging, or e-mail, it is also important that providers be aware of the requirements for privacy and security under HIPAA (Health Insurance Portability and Insurance Act). Providers are allowed to leave messages for patients on their telephones, but should limit the information to only what is needed, such as the caller's

name and number, information required to confirm the appointment or request for a call back from the patient. If the provider chooses to leave information with another person who answers the phone, it should be limited to only that considered to be in the individual's best interest and discretion should be employed. Should a patient request only confidential communications, such as e-mail, mail in a closed envelope rather than a post card, mail sent to an alternate address, or calls at a number other than a home phone, the provider must try to meet the request (23). Providers are allowed to communicate with patients via e-mail, but must use caution to ensure that the e-mail address is correct. If e-mail is not encrypted, providers should be careful to limit the types of information that are disclosed and be sure that patients understand the potential risks related to the use of unencrypted e-mail and have the opportunity to choose whether or not they would like to communicate in that manner (24). Greene (25) reviews considerations related to the use of text messaging and concludes that each organization needs to consider the risks related to the use of text messaging in light of the inability for information technology departments to monitor texts sent to patients, and the potential for those other than the intended recipient to access messages without a password. Phones may also be lost, stolen, or recycled … compromising privacy. Issues related to communication and privacy are complex and each organization needs to have policies in place to protect patients and comply with HIPAA.

Buppert (26) offers suggestions for coping with missed appointments from a legal standpoint. She recommends that there be a specific policy regarding no-shows that is shared with patients. Some practices may choose to bill the patient for not keeping an appointment, but cannot bill Medicare or another insurance. It is stressed that review of clinic operations be done before implementing policy that will create more problems. The example given is that of trying to penalize patients for being 15 minutes late when the clinicians are always behind. Therefore, it is important to see patients on time. Other recommendations are to remind patients by phone of appointments and call those who do not report to find out the cause of non-attendance. It is also suggested that no-show statistics be analyzed to look for patterns that might be addressed.

Studies have focused on ways to prevent or cope with missed appointments. Creative scheduling options, such as open-access clinics, are an area in need of further exploration. The literature also does not address incentives for keeping healthcare appointments, which is an area worthy of research.

References

1. Compton MT, Rudisch BE, Craw J, Thompson T, Owens DA. Predictors of missed appointments at community mental health centers after psychiatric hospitalization. Psychiatr Serv 2006;57(4):531-537.
2. Moscrop A, Siskind D, Stevens R. Mental health of young adult patients who do not attend appointments in primary care: a retrospective cohort study. Fam Pract 2012;29:24-29.
3. Grunebaum M, Luber P, Callahan M, Leon AC, Olfson M, Portera L. Predictors of health care appointments missed for psychiatric consultations in a primary care clinic. Psychiatr Serv 1996;47(8):848-852.
4. Kruse GR, Rohland BM, Wu X. Factors associated with missed first appointments at a psychiatric clinic. Psychiatr Serv 2002;53(9):1173-1176.
5. Killaspy H, Banerjee S, King M, Lloyd M. Prospective controlled study of psychiatric out-patient non-attendance. Br J Psychiatry 2000;176:160-165.
6. Defife JA, Conklin CZ, Smith JM, Poole J. Brief reports: psychotherapy appointment no-shows: rates and reasons. Psychotherapy, Theory, Research, Practice, Training 2010;47(3):413-417.
7. Sparr LF, Moffitt MC, Ward MF. Missed psychiatric appointments: who returns and who stays away. Am J Psychiatry 1993;150(5):801-805.
8. Drapalski AL, Milford J, Goldberg RW, Brown CH, Dixon LB. Perceived barriers to medical care and mental health care among Veterans with serious mental illness. Psychiatr Serv 2008;59(8):921-924.
9. Mitchell AJ, Selmes TA. Comparative survey of missed initial and follow-up appointments in psychiatric specialties in the United Kingdom. Psychiatr Serv 2007;58(6):868-871.
10. Akhigbe SI, Morakinyo O, Lawani AO, James BO, Omoaregba JO. Prevalence and correlates of missed first appointments among outpatients at a psychiatric hospital in Nigeria. Ann Med Health Sci Res 2014;4(5):763-768. doi: 10.4103/2141-9248.141550.
11. Cheng KD, Huang CJ, Tsang HY, Lin CH. Factors related to missed first appointments after discharge among patients with schizophrenia in Taiwan. J Formos Med Assoc 2014;113:436-441.
12. McInnes DK, Petrakis BA, Gifford AL, Rao SR, Houston TK, Asch SM, et al. Retaining homeless veterans in outpatient care: a pilot study of mobile phone text message appointment reminders. Am J Public Health 2014;104 Suppl 4:S588-S594.
13. Kannisto KA, Koivunen MH, Välimäki MA. Use of mobile phone test message reminders in health care services: a narrative literature review. J Med Internet Res 2014;16(10):e222. doi: 10.2196/jmir.3442.
14. Sims H, Sanghara H, Hayes D, Wandiembe S, Finch M, Jakobsen H, et al. Text message reminders of appointments: a pilot intervention at four community mental health clinics in London. Psychiatr Serv 2012;63(2):161-168.
15. Shoffner J, Staudt M, Marcus S, Kapp S. Using telephone reminders to increase attendance at psychiatric appointments: findings of a pilot study in rural Appalachia. Psychiatr Serv 2007;58(6):872-875.
16. Wang D, Crilly J, Jaeger LA, Palmer G. Assessing patient preferences for delivery of reminders on scheduled visits in a psychiatric ambulatory service. AMA 2007 Symposium Proceedings 2007;776-780.
17. Kitcheman J, Adams CE, Pervaiz A, Kader I, Mohandas D, Brookes G. Does an encouraging letter encourage attendance at psychiatric out-patient clinics? The Leeds PROMPTS randomized study. Psychol Med 2008;38:717-723.
18. Whittle J, Schectman G, Lu N, Baar B, Mayo-Smith MF. Relationship of scheduling interval to missed and cancelled clinic appointments. J Ambul Care Manage 2008;31(4):290-302.
19. DuMontier C, Rindfleisch K, Pruszynski J, Frey JJ. A multi-method intervention to reduce no-shows in an urban residency clinic. Fam Med 2013;45(9):634-641.
20. Stubbs ND, Geraci SA, Stephenson PL, Jones DB, Sanders S. Methods to reduce outpatient non-attendance. Am J Med Sci 2012;344(3):211-219.
21. Killaspy H, Banerjee S, King M, Lloyd M. Non-attendance at psychiatric outpatient clinics: communication and implications for primary care. Br J Gen Prac 1999;49:880-883.

22. Modalsky RJ. Applying an open-access model to a psychiatric practice. Perm J 2007;11(1):33-36.

23. HIPPA. May physicians' offices or pharmacist leave messages for patients at their homes, either on an answering machine or with a family member, to remind them of appointments or to inform them that a prescription is ready? May providers continue to mail appointment or prescription refill reminders to patients' homes? [Created 2002 Dec 19]. Available from: http://www.hhs.gov/hipaa/for-professionals/faq/198/may-health-care-providers-leave-messages/

24. HIPPA. Does the HIPPA privacy rule permit health care providers to use e-mail to discuss health issues and treatment with their patient? [Created 2008 Dec 15]. Available from: http://www.hhs.gov/hipaa/for-professionals/faq/570/does-hipaa-permit-health-care-providers-to-use-email-to-discuss-health-issues-with-patients/index.html

25. Greene AH. HIPAA compliance for clinician texting. J AHIMA 2012;21(4):34-36. Retrieved from http://search.proquest.com/docreview/947996500?accountid=35812

26. Buppert C. How to deal with missed appointments. Dermatol Nurs 2009;21(4):207-208.