

Factors Related to Missed Appointment at Psychiatric Clinic in Songklanagarind Hospital

Wanna Charupanit RN*

* Department of Nursing, Songklanagarind Hospital, Hat Yai, Songkhla, Thailand

Objective: To determine the associated factors of missed appointments among psychiatric clients

Material and Method: All medical records of the psychiatric patients in the year 2007, age more than 15 years old, were reviewed retrospectively. The variables included age, occupation, disease/condition, type of medical welfare, distance from hospital, attending physician category, and number of visit scheduled and completed.

Results: Around one-fifth of 11,753 (2,423)(20.6%) were missed appointments. Types of therapist (psychiatric residents), non-welfare clients, and distance from the hospital of more than 50 kilometers significantly ($p < 0.01$) increased the rate of missed appointment.

Conclusion: The surveillance of the appointment system implied the visit/non-visit rate, and adherence to the follow-up appointment, as well as had indirectly reflected the client's satisfaction, and barriers of medical services.

Keywords: Psychiatric client, Missed appointment, Factors related

J Med Assoc Thai 2009; 92 (10): 1367-9

Full text. e-Journal: <http://www.mat.or.th/journal>

Missed appointments with the psychiatric clinic, Songklanagarind Hospital, between 2005 and 2007 were 30.52%, 23.87%, and 23.23% respectively, averaging 25.88%. Many studies have reported the proportions of missed, cancelled, or rescheduled initial appointment vary from 20 to 60%⁽¹⁻³⁾. The variety of predictors and factors include the lack of a telephone number for contact, the time lapse before the appointment⁽¹⁾, active military duty⁽²⁾, patients' forgetfulness, inconvenient time of appointment⁽⁴⁾, patient with mild distress, resistant to seeing the psychiatrist⁽⁵⁾, younger age, history of missed appointments, distance from the hospital⁽⁶⁾, lower socio-economic status⁽⁷⁾, and a complex mixture of influences rather than adherence to a readily definable "standard of care"⁽³⁾. However, calling or sending a letter in the days just before the appointment, were found to encourage attendance⁽⁸⁾. The present study aimed at conducting a descriptive study factors influencing appointment.

Correspondence to: Charupanit W, Department of Nursing, Songklanagarind Hospital, Hat Yai, Songkhla 90110, Thailand. Phone: 074-451-766, Fax: 074-429-922, E-mail: cwanna@medicine.psu.ac.th

Material and Method

A retrospective review of the 2007 medical record was conducted using the hospital information system. Only subject aged 15 years or older were included. The variables included type of medical welfare, missed appointment, distance from hospital, types of therapists, number of achieved visits. The condition of mental illness, interval of appointment, and reschedule within 6 months were described. The present study was approved by the Ethic Committee, Faculty of Medicine, Prince of Songkla University. Statistical analyses for number, mean, standard deviation (SD), and Chi-square, were performed using Program R.

Results

Of the 11,753 appointments, 9,330 (79.3%) visits were completed and 2,423 (20.6%) were missed. Most of the psychiatric visits (37.6%) were for mood disorder. The average appointment interval was 9.2 weeks (6.2 weeks SD), and rescheduled visit were done in 59.7% of the patients at an average of 5.9 weeks (5.7 weeks SD).

Among welfare system on-visit group, the missed rates were 19.7, 17.8, and 17.1% in government medical welfare, social medical welfare, and universal medical coverage, respectively, with the average of 18.5%. Those were statistically significant ($p < 0.01$) lower than the 25.8% in the non-welfare population. The type of therapists was one of the key factors and was significant. The rate of missed visit toward psychiatric specialist was 18.7%, compared with 24.7% toward non-specialist and trainee (p -value < 0.01). In the end, the visit adherences were highly significant between the on-visit group ($p < 0.01$); 28.9% had 10 or less visits and 17.4% had more than 10 visits. The distance from the hospital of more than 50 kilometers was a negative factor, and had statistical significance ($p < 0.01$) in missed visits. All are showed in Table 1.

Discussion

Missed appointment visit waste national resource such as medical services and gives poor access to medical care with deteriorated clinical outcome. In addition, these may disrupt the client flow of service, resulting in low productivity, misused of resource, and longer waiting list⁽⁹⁾.

The present study found that one-fifth of the psychiatric clients missed appointments. This study focused on the epidemiology of missed appointment. Many of the patients' characteristics are not associated with non-visit rate (not ordered by significance) such as age, occupation, and disease/condition. The welfare scheme (usually paid by the third party), hospital-house distance (possibly convenient travel

time), and attending physician (probably trust and physician-client relationship) were the key factors as positive encouragement for attending regularly scheduled visit.

The main weakness of the present study is the lack of in-depth interview with the patients and relatives to determine their rationalization response, personal limitations & difficulties, and consequences of inadequate care.

The important lesson learned from the present study is to develop a booking system that includes a systematic focus on the solutions that are likely to get the patient to respond efficiently and appropriately. The most common reason to miss a follow-up appointment is because of forgetfulness, and being too psychiatrically unwell⁽¹⁰⁾. An active reminder seem to be successful such as a telephone call and/or letter reminder⁽¹¹⁾, and message left on an answer phone⁽¹²⁾. Generally, notices to reduce the overall missed appointment rate should be given appropriately. In addition, patients missing a visit should identify the reasons for the missed, cancelled, and postponed appointment, and be reminded to maintain the continuation of clinical care. Those are the important implications for continuous quality improvement of the psychiatric services of Songklanagarind Hospital.

In conclusion, the visit/non-visit rate and adherence to the follow-up appointment indirectly reflect the patients' satisfaction, and barriers of medical services. Therefore, the surveillance of the non-visit rate gives a good indication of the quality of the care.

Table 1. The rate of missed on appointment, distribution by the variables

Items (n = 11,753)	Missed appointment (%)	On appointment (%)	p-value
Medical welfare			<0.01*
Welfare	1,534 (18.5)	6,772 (81.5)	
Non-welfare	889 (25.8)	2,558 (74.2)	
Distance from hospital			<0.01*
Within 50 kilometers	1,302 (21.6)	4,720 (78.4)	
More than 50 kilometers	1,121 (19.6)	4,610 (80.4)	
Attending physician category			<0.01*
Psychiatric specialist	1,507 (18.7)	6,534 (81.3)	
Non-specialist or trainee	916 (24.7)	2,796 (75.3)	
Number of visit achievement			<0.01*
10 or less	950 (28.9)	2,336 (71.1)	
More than 10	1,473 (17.4)	6,994 (82.6)	

* Highly statistical significance $p < 0.01$

Acknowledgements

The author wishes to thank Dr. Verapol Chandeying, Routine to Research Unit, Research Affairs, Faculty of Medicine, Prince of Songkla University, for his valuable advice in the manuscript preparation.

References

1. Livianos-Aldana L, Vila-Gomez M, Rojo-Moreno L, Luengo-Lopez MA. Patients who miss initial appointments in community psychiatry? A Spanish community analysis. *Int J Soc Psychiatry* 1999; 45: 198-206.
2. Dotter JF, Labbate LA. Missed and canceled appointments at a military psychiatry clinic. *Mil Med* 1998; 163: 58-60.
3. Smoller JW, McLean RY, Otto MW, Pollack MH. How do clinicians respond to patients who miss appointments? *J Clin Psychiatry* 1998; 59: 330-8.
4. Neal RD, Hussain-Gambles M, Allgar VL, Lawlor DA, Dempsey O. Reasons for and consequences of missed appointments in general practice in the UK: questionnaire survey and prospective review of medical records. *BMC Fam Pract* 2005; 6: 47.
5. Grunebaum M, Lubner P, Callahan M, Leon AC, Olfson M, Portera L. Predictors of missed appointments for psychiatric consultations in a primary care clinic. *Psychiatr Serv* 1996; 47: 848-52.
6. Campbell B, Staley D, Matas M. Who misses appointments? An empirical analysis. *Can J Psychiatry* 1991; 36: 223-5.
7. Berrigan LP, Garfield SL. Relationship of missed psychotherapy appointments to premature termination and social class. *Br J Clin Psychol* 1981; 20: 239-42.
8. Reda S, Makhoul S. Prompts to encourage appointment attendance for people with serious mental illness. *Cochrane Database Syst Rev* 2001; (2): CD002085.
9. Bech M. The economics of non-attendance and the expected effect of charging a fine on non-attendees. *Health Policy* 2005; 74: 181-91.
10. Killaspy H, Banerjee S, King M, Lloyd M. Prospective controlled study of psychiatric out-patient non-attendance. Characteristics and outcome. *Br J Psychiatry* 2000; 176: 160-5.
11. Boswell PC, Brauzer B, Postlethwaite N, LaRuffa A. Improving aftercare patients' compliance with appointments through phone calls and letters. *Hosp Community Psychiatry* 1983; 34: 358-60.
12. Conduit T, Byrne S, Court J, Stefanovic S. Non-attendance at a university-based psychology clinic: telephone appointment reminders versus no reminders. *Aust Psychol* 2004; 39: 68-75.

ปัจจัยเกี่ยวข้องกับการผิดนัด ณ คลินิกจิตเวช โรงพยาบาลสงขลานครินทร์

วรรณภา จารุพานิช

วัตถุประสงค์: เพื่อทราบถึงปัจจัยเกี่ยวข้องกับการผิดนัดของผู้รับบริการจิตเวช

วัสดุและวิธีการ: ทบทวนย้อนหลังบันทึกทางการแพทย์ผู้รับบริการจิตเวชอายุมากกว่า 15 ปี ตลอดปี พ.ศ. 2550 ตัวแปรประกอบด้วย อายุ อาชีพ โรค/ภาวะ ชนิดของการคุ้มครองสุขภาพ ระยะทางจากโรงพยาบาล ประเภทแพทย์ผู้ดูแล และจำนวนครั้งตรวจตามนัด

ผลการศึกษา: ราวหนึ่งในห้าของผู้รับบริการ 2,423 ใน 11,753 ครั้ง (ร้อยละ 20.6) ผิดนัดประเภทของแพทย์ผู้รักษา (จิตแพทย์/แพทย์ระหว่างการอบรม) ผู้รับบริการที่ไม่อยู่ในการคุ้มครองสุขภาพ ระยะทางจากโรงพยาบาลมากกว่า 50 กิโลเมตร มีความแตกต่างสูงอย่างมีนัยสำคัญ ($p < 0.01$) ในการเพิ่มอัตราการผิดนัด

สรุป: การเฝ้าระวังระบบการนัดแสดงนัยถึงอัตราการมาตามนัด/ผิดนัดและการยึดติดกับการนัดติดตามผล เช่นเดียวกับสะท้อนทางอ้อมถึงความพึงพอใจของผู้รับบริการและอุปสรรคต่อการบริการทางการแพทย์