Discharges against medical advice: time to address the causes

Richard Saitz

ß See related article page 633

Many hospital patients start asking "How long will I need to be here?" even before the admission process is complete. Others fear that they may be discharged too soon. Both payers and physicians tend to interpret a shorter length of stay as a favourable outcome because of lower short-term costs and reduced exposure to the potential risks of a hospital stay. Furthermore, evidence is accumulating to indicate that many hospital stays last longer than the period of acute illness, with uncertain, if any, additional benefit over shorter stays.[1–3]

Some patients take the hospital discharge decision into their own hands, leaving against medical advice, that is, before the physician has ordered discharge. How prevalent are these decisions, who makes them, and what are the consequences? Anis and colleagues[4] addressed some of these issues in a retrospective cohort study of 981 hospital inpatients with HIV infection, almost half of whom reported injection drug use (see page 633). They found a high rate of discharge against medical advice — 13% overall. Current injection drug use was significantly more common among patients who left hospital against medical advice, and one-fifth of injection drug users left under these circumstances. Furthermore, patients were more likely to leave against medical advice on days when welfare cheques were issued.

Another study of discharges against medical advice examined the question of calendar effects. Weingart and associates[5] found no effect of day of the week, month or season on rates of discharge against medical advice. However, in that study of general medical patients, the prevalence of drug abuse was probably much lower than in the study by Anis and colleagues[4] (income was not reported in either study, which makes it difficult to know whether that factor might explain the different findings). Studies of the "cheque effect" support the hypothesis that receipt of welfare payments can be related to addictive behaviours,[6,7] which may be the mechanism of the "welfare Wednesday" effect found by Anis and colleagues.[4]

Among variables available in discharge abstracts, Anis and colleagues[4] found no other predictors that were significantly associated with discharge against medical advice. In particular, age, sex, housing status and severity of HIV infection were not significant independent predictors, although younger age, male sex, substance abuse, lack of a personal physician and lack of health insurance have been identified in previous studies[5,8,9] as risk factors for discharge against medical advice.

The higher rate of discharge against medical advice in the study by Anis and colleagues[4] than in other general medical hospitals may have been related to the high frequency of a significant risk factor for this type of discharge, injection drug use. Discharge against medical advice may also be more common in HIV-infected adults. In a large study of hospital admissions for pneumonia, patients with HIV infection were much more likely to be discharged against medical advice than those without this infection.[9]

Discharge against medical advice is of concern because it is assumed that these patients are leaving too soon and that adverse consequences will follow. But might these discharges in fact be appropriate? If "soft" admissions (e.g., those for noncardiac chest discomfort) are overrepresented among patients discharged against medical advice, the length of stay as determined by the patients themselves may be more appropriate than what their physicians would recommend. Similarly, patients may recognize their recovery from acute illness before their physicians do. However, data from the current and previous studies indicate that these explanations are unlikely, although few other studies have examined the consequences of discharge against medical advice in as great detail as did Anis and colleagues.[4] These authors found that leaving against medical advice was associated with readmission: 32% of the patients were readmitted within 30 days, whereas only 12% of regular discharges led to readmission within 30 days; these percentages were 62% and 45% respectively at 1 year. Furthermore, patients discharged against medical advice were more likely to have a subsequent admission for the same (or a related) diagnosis in the subsequent month (28% v. 8%) and to have longer stays in hospital for any readmission (median 5 v. 0 days). Both injection drug use and a diagnosis of AIDS were associated with readmission and longer subsequent length of stay. These consequences, coupled with the observation that a diagnosis of AIDS (a marker of disease severity) was not associated with discharge against medical advice, suggest that patients who leave against their physicians' recommendation are ending their hospital stays prematurely. A previous study also found that disease severity was not a predictor of discharge against medical advice.[9]

However, despite the results of this and other well-de-

signed studies, our understanding of discharge against medical advice remains inadequate. Few, if any, large studies have obtained detailed clinical information to better determine the predictors of such discharge, beyond those available in administrative databases. Although severity of illness appears not to predict this type of discharge, it remains possible that the severity of the illness prompting hospital admission could be related to leaving against medical advice. Although the cost consequences of such discharges might appear obvious, they have not been reported in detail. The cost per admission may be lower for stays ending in discharge against medical advice,[10] but utilization patterns such as those identified by Anis and colleagues[4] suggest that the long-term costs would be higher. Mortality rates and disease-specific consequences are additional health outcomes that should be studied.

The most important void in the literature on discharges against medical advice is the lack of understanding of why patients choose to leave. Identifying these reasons is essential to the design of any preventive intervention. The identification of demographic factors associated with discharge against medical advice might help health care administrators to predict such occurrences, but it will not be particularly helpful for clinicians or patients. Patients need to be interviewed to find out what motivates them to leave in the face of medical advice. While we await such studies, one consistently identified risk factor for discharge against medical advice — substance abuse — should be addressed.

Many drug users, particularly injection drug users, do not trust medical care providers, in part because of their experiences with inadequate pain relief and treatment for withdrawal and also because of the attitudes of health care providers toward abusers.[11] This lack of trust interferes with communication about diagnosis, prognosis and appropriate treatment. In addition, these patients may find unbearable what others perceive as merely inconvenient or unpleasant (a hospital stay). Armenian and collaborators[12] found that treatment of opiate withdrawal with clonidine was associated with discharge against medical advice, and clonidine is known as an inadequate treatment for significant symptoms of opiate withdrawal. Substance abusers are also at risk for relapse, particularly if their withdrawal or pain is inadequately managed. Jeremiah and colleagues[8] reported that 8% of patients who left against medical advice said they did so to seek alcohol or drugs.

What should be done now? Anis and colleagues[4] suggest that effective strategies, including the "redesign of welfare benefit policies," be developed. While these strategies are being developed, and while additional studies are done to learn more about this type of discharge and to test new interventions, physician–patient communication skills should be applied to prevent discharge against medical advice. Although unstudied for this specific indication, brief interventions based on stages of readiness to change and the principles of motivational interviewing have proven effective for many health-related behaviours, including medication adherence and one of the key risk factors for discharge against medical advice, addiction.[13–15] Appropriate treatment of withdrawal and pain, brief interventions for addiction, direct communication of the reasons for continuing the hospital stay, involvement of patients in decisions, specific advice about treatment and empathy with the difficulties associated with being in hospital may prevent a few discharges against medical advice and at the same time open a discussion about and even have an impact on an underlying health problem that is often left untreated — alcohol or drug dependence.

Dr. Saitz is from the Boston Medical Center, Boston University Schools of Medicine and Public Health, Boston, Mass.

Competing interests: None declared.

References

1. DeCoster C, Roos NP, Carrière KC, Peterson S. Inappropriate hospital use by patients receiving care for medical conditions: targeting utilization review. *CMAJ* 1997;157:889-96.
2. Kalant N, Berlinguet M, Diodati JG, Dragatakis L, Marcotte F. How valid are utilization review tools in assessing appropriate use of acute care beds? *CMAJ* 2000;162:1809-13.
3. Flintoft VF, Williams JI, Williams RC, Basinski AS, Blackstien-Hirsch P, Naylor CD. The need for acute, subacute and nonacute care at 105 general hospital sites in Ontario. Joint Policy and Planning Committee Non-Acute Hospitalization Project Working Group. *CMAJ* 1998;158:1289-96.
4. Anis AH, Sun H, Guh DP, Palepu A, Schechter MT, O'Shaughnessy MV. Leaving hospital against medical advice among HIV-positive patients. *CMAJ* 2002;167:(6):633-7.
5. Weingart SN, Davis RB, Phillips RS. Patients discharged against medical advice from a general medicine service. *J Gen Intern Med* 1998;13:568-71.
6. Halpern SD, Mechem CC. Declining rate of substance abuse throughout the month. *Am J Med* 2001;110:347-51.
7. Phillips DP, Christenfeld N, Ryan NM. An increase in the number of deaths in the United States in the first week of the month — an association with substance abuse and other causes of death. *N Engl J Med* 1999;341:93-8.
8. Jeremiah J, O'Sullivan P, Stein MD. Who leaves against medical advice? *J Gen Intern Med* 1995;10:403-5.
9. Saitz R, Ghali WA, Moskowitz MA. Characteristics of patients with pneumonia who are discharged from hospitals against medical advice. *Am J Med* 1999; 107:507-9.
10. Saitz R, Ghali WA, Moskowitz MA. The impact of leaving against medical advice on hospital resource utilization. *J Gen Intern Med* 2000;15:103-7.
11. Chappel JN, Schnoll SH. Physician attitudes: effect on the treatment of chemically dependent patients. *JAMA* 1977;237:2318-9.
12. Armenian SH, Chutuape MA, Stitzer ML. Predictors of discharges against medical advice from a short-term hospital detoxification unit. *Drug Alcohol Depend* 1999;56:1-8.
13. Welte JW, Perry P, Longabaugh R, Clifford PR. An outcome evaluation of a hospital-based early intervention program. *Addiction* 1998;93:573-81.
14. Moyer A, Finney JW, Swearingen CE, Vergun P. Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction* 2002;97:279-92.
15. Miller WR, Rollnick S. *Motivational interviewing. Preparing people for change*. 2nd ed. New York: Guilford Press; 2002.

Correspondence to: *Dr. Richard Saitz, Clinical Addiction Research & Education Unit, Boston Medical Center — General Internal Medicine, 91 E Concord St., Suite 200, Boston MA 02118-2393; fax 617 414-4676; rsaitz@bu.edu*