

Profile of Patients Signing Against Medical Advice

James P. Long, MD, and Anibal Marin, MD
Yonkers, New York

The hospital patient who signs against medical advice has been the subject of few studies. This study was undertaken to determine if there are any trends evident in who signs against medical advice, when someone signs, and for what reasons.

Methods

This study was performed at St. Joseph's Medical Center, Yonkers, New York, a 185-bed general community hospital in the center of the city. The medical center contains the inpatient services of medicine, surgery, pediatrics, psychiatry, and medical and surgical intensive care units. The medical center also has a residency program in family practice.

The study period covered 12 months from July 1, 1978, to June 30, 1979, during which time there were 4,468 hospital admissions. Information on discharges that were against medical advice was obtained from a log book maintained by the Medical Records Department. During this period there were 134 such discharges. One hundred twenty-eight charts were found and analyzed. All the charts were reviewed by the same investigator.

The following data were collected: the age and sex of the patient signing against medical advice, the hospital service to which the patient was admitted, the patient's residence, the length of stay up to the time of discharge against medical advice, the time of day the patient was admitted and dis-

charged, whether the patient had previously been admitted to the hospital and, if so, whether the patient had previously been discharged against medical advice, the patient's final diagnosis, the apparent physical condition on discharge, and the reason for signing out, if any, listed on the chart.

Results

Of all the age groups studied, the 21- to 30-year-old age group signed out against medical advice most frequently. The next largest group comprised the 31- to 40-year-old patients. Interestingly, 3 percent of the patients who signed out were 0 to 10 years of age and 2 percent were 81 to 90 years of age.

Of the 128 patients who were discharged against medical advice, male patients represented 61.7 percent of discharges while accounting for 50.9 percent of hospital admissions.

During the study period, 52.3 percent of the patients examined were admitted to the medical service and 29.7 percent were admitted to the psychiatry service. For this period, medicine and psychiatry accounted for 45.7 percent and 9.5 percent of all admissions, respectively.

Yonkers was the home address listed by 82 percent of people signing out against medical advice, whereas 10.9 percent came from adjacent New York City. Only 0.8 percent listed no residence.

The majority (52 percent) were in the medical center for less than 24 hours before signing out. The emergency room accounted for 78.9 percent of those admitted who signed out, with 21.1 percent of admissions being direct admissions.

No reason was given by patients for signing out against medical advice 64.8 percent of the time.

From the Family Practice Residency Program, St. Joseph's Medical Center, Yonkers, New York. Requests for reprints should be addressed to Dr. James P. Long, Medical Associates of Beloit, Beloit, WI 53511.

Continued on page 556

0094-3509/82/090551-02\$00.50
© 1982 Appleton-Century-Crofts

K-Lyte® DS (Each effervescent tablet in solution supplies 50 mEq potassium as bicarbonate and citrate.)

K-Lyte® (Each effervescent tablet in solution supplies 25 mEq potassium as bicarbonate and citrate.)

Description: K-Lyte DS and K-Lyte are oral potassium supplements. Each K-Lyte DS tablet in solution provides 50 mEq potassium as supplied by 2.5 gm potassium bicarbonate and 2.7 gm potassium citrate with 2.1 gm citric acid, saccharin, artificial flavor and color. Each K-Lyte tablet in solution provides 25 mEq potassium as supplied by 2.5 gm potassium bicarbonate and 2.1 gm citric acid, saccharin, artificial flavor and color.

Indications and Usage: All K-Lyte® products are used for therapy or prophylaxis of potassium deficiency. They are useful when thiazide diuretics, corticosteroids, or diarrhea cause excessive potassium loss; and when dietary potassium is low. These products may also be useful when potassium therapy is indicated in digitalis intoxication.

Contraindications: Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: chronic renal impairment, metabolic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns or adrenal insufficiency. Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene), since the simultaneous administration of these agents can produce severe hyperkalemia.

Warnings: In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and may be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Precautions: *General precautions*—The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. When interpreting the serum potassium level, the physician should bear in mind that acute alkalosis *per se* can produce hypokalemia in the absence of a deficit in total body potassium, while acute acidosis *per se* can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. Therefore, the treatment of potassium depletion requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the ECG, and the clinical status of the patient.

Information for patients—To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water.

Laboratory tests—Frequent clinical evaluation of the patient should include ECG and serum potassium determinations.

Drug interactions—The simultaneous administration of potassium supplements and a potassium-sparing diuretic can produce severe hyperkalemia (see Contraindications). Potassium supplements should be used cautiously in patients who are using salt substitutes because most of the latter contain substantial amounts of potassium. Such concomitant use could result in hyperkalemia.

Usage in pregnancy—Pregnancy Category C—Animal reproduction studies have not been conducted with any of the K-Lyte products. It is also not known whether these products can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. They should be given to a pregnant woman only if clearly needed.

Nursing mothers—Many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from oral potassium supplements, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

Usage in children—Safety and effectiveness in children have not been established.

Adverse Reactions: The most common adverse reactions to oral potassium supplements are nausea, vomiting, diarrhea and abdominal discomfort. These side effects occur more frequently when the medication is not taken with food or is not diluted properly or dissolved completely.

Hyperkalemia occurs only rarely in patients with normal renal function receiving potassium supplements orally. Signs and symptoms of hyperkalemia are cardiac arrhythmias, mental confusion, unexplained anxiety, numbness or tingling in hands, feet or lips, shortness of breath or difficult breathing, unusual tiredness or weakness and weakness or heaviness of legs (see Contraindications, Warnings and Overdosage).

Dosage and Administration: *Adults*—One (1) K-Lyte DS tablet (50 mEq potassium) completely dissolved in 6 to 8 ounces of cold or ice water, 1 to 2 times daily, depending on the requirements of the patient. One (1) K-Lyte tablet (25 mEq potassium) completely dissolved in 3 to 4 ounces of cold or ice water, 2 to 4 times daily, depending on the requirements of the patient.

Note: It is suggested that all K-Lyte products be taken with meals and sipped slowly over a 5 to 10 minute period.

How Supplied: K-Lyte® Effervescent Tablets (orange or lime flavors) are available in cartons of 30, 100 and 250. K-Lyte® DS effervescent tablets (orange or lime flavors) are available in cartons of 30 and 100. Each tablet is individually foil wrapped.

SIGNING AGAINST MEDICAL ADVICE

Continued from page 551

When reasons were given (in 40 percent of cases), the patient was upset over the treatment being received or the management of the case.

From the information gathered, 82.8 percent of patients signing out against medical advice appeared to be in no apparent physical danger at the time of leaving. Seven percent of the cases indicated possible acute dangers (eg, preoperative medication previously administered, abnormal lung scan, unsteady on feet).

Almost one fourth (24.7 percent) of those who signed the hospital's discharge form against medical advice had a psychiatric diagnosis. The use and abuse of alcohol or drugs accounted for 17.3 percent and 9.3 percent of discharge diagnoses, respectively.

Comment

The incidence of patients discharging themselves from a hospital against medical advice has ranged from 0.7 percent to 21 percent in several studies.¹⁻⁴ The lowest incidence was found in the university general hospital, and the highest, in an open psychiatric inpatient service. In this study the rate of signing out against medical advice was 3.0 percent of the total population discharged and involved a disproportionate number of men.

On the basis of this study, the person who is at the greatest risk of signing out against medical advice is a young adult man who is admitted through the emergency room between noon and mid evening. He has a diagnosis of a psychiatric problem or one relating to the use of drugs or alcohol. He is admitted to the psychiatry service and leaves within the first day. Most likely, if he has left against medical advice once, he will sign out against medical advice again.

References

1. Jankowski CB, Drum DE: Diagnostic correlation of discharge against medical advice. *Arch Gen Psychiatry* 34: 153, 1977
2. Jones AM, Himmelstein DU: Leaving a county hospital against medical advice, letter. *JAMA* 242:2758, 1979
3. Schlauch RW, Reich P, Kelly MJ: Leaving the hospital against medical advice. *N Engl J Med* 300:22, 1979
4. Withersty DJ: Patient responsibility and the AMA discharge: A one year follow-up study. *Am J Psychiatry* 134:1442, 1977