# Successful Physician Interventions With Hospitalized Alcoholic Patients

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Despite high morbidity and mortality rates of alcoholism, physicians fail to diagnose alcoholism in up to 50 percent of alcoholic patients and offer adequate treatment to only 5 to 15 percent.[1-4] Physicians' pessimistic attitudes toward alcoholism treatment are believed to be a major contributor to this problem. Many physicians manage the complications of alcoholism without addressing the underlying disease, assuming that patients are not interested in treatment, that they as physicians lack the time or skills needed to intervene with alcoholic patients, or that treatment itself will be of little benefit.[5,6] The assumption, however, that interventions with alcoholic patients are "doomed to failure" is largely untested. Only two previous studies have examined the effectiveness of attempted interventions with hospitalized alcoholic patients, and neither of these involved physician interventions.[7,8]

A pilot study was undertaken to explore three different methods for referring hospitalized alcoholic patients for treatment.

## Methods

The study was conducted on the internal medicine service of a county hospital in the southeastern United States. Family practice residents providing care for a racially mixed indigent patient population diagnosed alcoholism in patients based on an alcohol-related admitting diagnosis plus a history of recent alcohol consumption or the occurrence of alcohol withdrawal symptoms during hospitalization. An investigator from this study attended morning report with the residents and attending physician each weekday to encourage the diagnosis of alcoholism and to enroll alcoholic patients in the study.

### *Interventions*

Each patient was enrolled in one of three specific intervention tracks: family intervention, physician intervention, or Alcohol Rehabilitation Clinic (ARC).

Family interventions were organized according to the design described by Johnson.[9] Physicians referred family members to a counselor to learn about alcoholism and the intervention process. Families wishing to participate conducted a controlled confrontation with the patient with the assistance of the physician and counselor about the time of hospital discharge. Patients were urged to agree to immediate transfer to a nearby inpatient alcohol treatment center.

Physician interventions consisted of an interview by the physician. Physicians were instructed to inform patients that their drinking problems were life-threatening and to urge immediate transfer to an alcohol treatment center. No special physician training was provided.

The ARC intervention began with the physician informing patients that they would be visited by a hospital social worker or a counselor. The counselor described services offered by ARC, a publicly funded outpatient program that enrolled patients in weekly group meetings for a period of at least 90 days, and encouraged attendance after discharge.

### *Patient Assignment*

Patient assignments to these three tracks were based on bed availability (Figure 1). Each time a patient was enrolled in the study, nearby treatment centers were contacted and informed of the patient's sex and insurance coverage. If beds were available, patients were initially assigned to the family intervention track. If no beds were available, patients were assigned to ARC.

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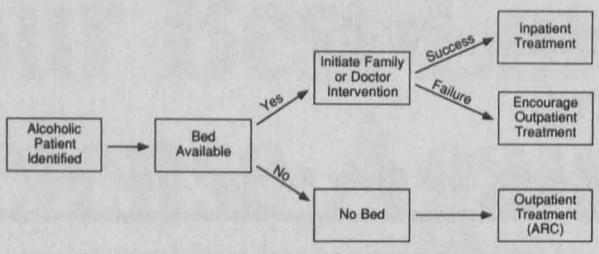


**Figure 1. Patient assignment protocol.**

During the initial 4 months of the study, family interventions were extremely time-consuming and minimally productive. During months 5 through 15, family interventions were replaced by simpler, more efficient physician interventions.

### *Follow-Up*

Follow-up data were obtained by telephone contact with the patient, family members, and inpatient and outpatient treatment facilities. Hospital and emergency department records were reviewed for evidence of active drinking or alcohol-related complaints. Copies of death certificates were obtained for deceased patients, and death certificates were sought for all patients lost to follow-up.

## Results

Sixty patients were enrolled during the 15-month study. The mean age was 43.3 years; 37 patients (62 percent) were men, and 43 (72 percent) were black. Primary diagnoses included pancreatitis, alcoholic liver disease, fluid-electrolyte abnormality, pneumonia, gastrointestinal bleeding, and seizures. There were no significant differences in age, race, sex, employment status, previous alcoholism treatment, or primary diagnosis among the three study groups. Only 16.7 percent of patients were employed. Although 29 patients (48 percent) reported previous alcoholism treatment, most (18 patients, or 30 percent) reported only detoxification admissions. Eight patients (14 percent) reported previous inpatient treatment, 4 (7 percent) were previously involved with ARC, and 2 (4 percent) were previously involved with Alcoholics Anonymous.

Physician interventions resulted in 54 percent of patients agreeing to alcoholism treatment, whereas family and ARC interventions resulted in only 10 percent and 19 percent, respectively (Figure 2). Among physician intervention patients, 42 percent completed a treatment program lasting 4 to 6 weeks, whereas among family intervention and ARC patients, completion rates (at least 28 days of treatment) were 10 percent and 4 percent.

Among physician intervention patients, 19 (79 percent) initially agreed to inpatient treatment. Six patients changed their minds and refused admission, including 2 patients who later returned and enrolled in inpatient treatment.

Among 10 family intervention patients, only 2 families followed through with family interventions. Six families decided not to intervene after meeting with a counselor, and 2 refused to meet with a counselor. One family intervention resulted in successful inpatient treatment; the other met with initial success (the patient agreed to go to treatment, but then backed out).

Of the 26 patients enrolled in the ARC group, 5 (19 percent) made contact with ARC, and only 1 remained actively involved for more than 4 weeks.

From available abstinence data (Table 1), there were no major differences between the physician and family intervention patients at 12 months (71 percent follow-up) or 40 months (91 percent follow-up). Abstinence data were not available for the ARC group.

After 40 months, the combined mortality for all groups was 18 percent (11/60). Thirty-six percent (5/14) of physician intervention patients who failed to complete inpatient treatment had died within 40 months, whereas none of the physician intervention patients completing inpatient treatment died.

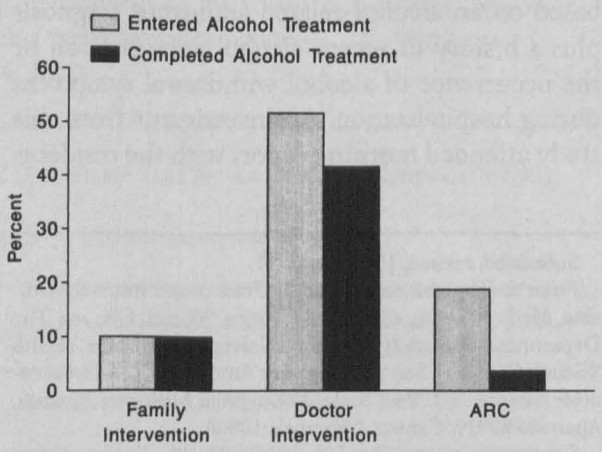


**Figure 2. Percentage of patients entering and completing alcoholism treatment.**



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**Table 1. Patient Abstinence Following Intervention for Alcoholism.**

| Intervention Group | Number of Patients | Percent Abstinence | |
|---|---|---|---|
| | | After 12 Months | After 40 Months |
| Family intervention | 10 | 12.5 | 16.7 |
| Physician intervention | 24 | 13.3 | 5.9 |

## Discussion

Our study finds considerable motivation toward treatment among hospitalized alcoholics, as well as the efficacy of physician intervention in initiating inpatient treatment. A reduction in mortality was noted for physician intervention patients who completed inpatient treatment, a finding consistent with that of previous studies reporting a reduction in mortality to 2 percent or less per year following alcoholism treatment.[10] Keys to the success of physician interventions might include (1) the establishment of a referral system that encouraged identification of alcoholism and intervention for alcoholic patients and that located available hospital beds, (2) the primary role of physicians in persuading patients to accept treatment, and (3) an emphasis on alcoholism as a fatal disease needing urgent treatment.

We have found family interventions to be ineffective, primarily because of the families' unwillingness to participate. Our results are similar to those of Liepman, et al., who reported only 28 percent of families of outpatient alcoholics willing to conduct family interventions.[11] These findings contrast with those of Gentilello, et al., who found 89 percent (17/19) of families of hospitalized trauma patients willing to participate in interventions.[12] Problems in our study could have included the inexperience of our intervention counselors and the peripheral role of the physician in family recruitment. Gentilello and colleagues'[12] use of 1 experienced intervention counselor, the primary role of the physician in recruiting families using family conferences, and the physician's emphasis on alcoholism as a fatal disease requiring urgent treatment appeared to be key elements to the success of their study.

Referral for outpatient alcoholism treatment also met with only limited success in our study. The small number of patients contacting the outpatient treatment agency (5 of 26, or 19 percent) is consistent with the finding by Elvy, et al.[7] that only 23 percent (19/84) of problem drinkers kept appointments with alcoholism counselors after hospital discharge. In light of this outcome, referral for inpatient treatment would seem to have a greater chance of ensuring adequate alcoholism treatment for hospitalized alcoholics.

Limitations of this study include the small sample size, the nonrandom assignment of patients, and the change in the patient assignment protocol made during the study. The medical crisis that resulted in hospitalization of these patients appears to have played an important role in decreasing denial and making patients more open to treatment, at least temporarily. Generalizability of these findings beyond the indigent inpatient population studied here requires further study.

## Conclusion

Whereas physicians are often pessimistic regarding their effectiveness in referring alcoholic patients, our study finds these patients to be highly amenable to referral for treatment. The most effective intervention was direct referral for inpatient treatment, which resulted in lower mortality for those completing treatment.

Family intervention, a more complex procedure involving greater commitment of time and resources, remains a potentially useful approach deserving further study. A randomized, prospective study comparing physician and family interventions and offering state-of-the-art training to both physicians and intervention counselors appears warranted.

The high overall mortality rate in this study underscores the severity of this disease and the importance of continuing research to define optimal management of alcoholic patients.

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