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16. Abstract

In 1976, the Federal Aviation Administration (FAA), in conjunction with the Air ine Pilots Association (ALPA) and several airline companies, initiated a plan for he certification of rehabilitated alcoholic pilots, which has had a surprising rate f success. The program itself and a number of demographic variables are examined for the entire group.

This study involves a survey of medical records for over 500 airline pilots who have been medically certified by the FAA after a diagnosis of alcoholism. The program demonstrates an 85% rate of success since 1976. If a pilot experiences a relapse, he/she is immediately taken off flight duty and recycled back through the program. In no case where there has been a relapse has it been felt that aviation safety was compromised.

The success of this program is due to several unique features, such as the cooperation of the pilots' union, airline companies, and the FAA to identify and treat alcoholic pilots. This program also includes peer identification and referral and an intensive 2-year followup of pilots by all three groups mentioned above.

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ALCOHOL REHABILITATION OF AIRLINE PILOTS

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for issuing medical certificates to all pilots in the United States and some international airmen. Each pilot must have a current medical certificate to validate any pilot certificate he/she may hold. The FAA will medically certify individuals with certain disqualifying medical conditions if a determination is made that such action does not compromise air safety.

Alcoholism is a significant public health problem and is considered a disqualifying disease for medical certification under Federal Aviation Regulations, Part 67. The FAA defines alcoholism as "a condition in which a person's intake of alcohol is great enough to damage his/her physical health or personal or social functioning, or when alcohol has become a prerequisite to normal functioning." It is estimated that the rate of alcoholism in the general population is 7%. In the United States, about 15 million people may be alcoholic (2). The estimated cost of alcohol to the economy is $89.5 billion dollars per year. This includes lost employment, reduced productivity, health care, car accidents, and excess morbidity and mortality (7).

Between 1960 and 1976, 29 pilots reported their alcoholism to the FAA; 14 were medically recertified after being grounded for a minimum of 2 years. The threat of loss of employment caused the pilots and the aviation industry to ignore alcohol abuse until the alcoholic pilot had progressed to the late stages of alcoholism (4).

In 1976 the FAA reevaluated the standards regarding medical certification of alcoholic airline pilots. This review resulted in a change in policy that allows the FAA to issue a medical certificate to a recovering alcoholic airline pilot soon after completing treatment. The pilot's continuing certification is contingent on his/her total abstinence from alcohol and 24 months of favorable reports from several monitoring sources.

The purpose of this study was to describe this population of airline pilots in terms of sociodemographic, treatment, and posttreatment variables. Some possible reasons this program has been so successful are discussed and areas for future research examined.

METHODS

Data for this descriptive research study were obtained by review of special issuance medical records maintained by the Aeromedical Certification Branch of the FAA's Civil Aeromedical Institute in Oklahoma City, Oklahoma. These records include FAA Form 8500-8 (a physical examination report that is submitted periodically during a pilot's career), psychiatric and psychological evaluations, results of psychological tests, hospital records, and monthly and quarterly followup reports.

The medical monitor then submits the following reports to the Federal Air Surgeon for evaluation:

1) Psychiatric and psychological evaluations.
2) Hospital records from inpatient treatment.
3) Report from aftercare program.
4) FAA Form 8500-8, physical examination report.
5) Summary of the case by medical monitor.

A special issuance is received within 1 year of treatment in 80% of the cases (see Figure 2). Monitoring requirements are specified when the special issuance is granted. Monthly reports from the flight operations supervisor of the airline and an ALPA representative attesting to the individual's sobriety are submitted to the medical monitor. Quarterly reports from the aftercare program and annual or semiannual psychiatric evaluations are also required. All followup reports are forwarded to the FAA Aeromedical Certification Branch, by the medical monitor, every 6 months or annually with his/her physical examination (FAA 8500-8). After 24 months, he/she may petition the Federal Air Surgeon to remove the monitoring requirement. The monitoring may continue if the evaluating psychiatrist, aftercare counselor, or medical monitor feels the individual has not achieved stable sobriety.

The remaining 20% of the cases in which a medical certificate is not issued within the first year are often deferred pending receipt of more information. Some airline pilots have residual effects from prolonged alcohol abuse and need more time to recover. Some cases are deferred due to pilots' lack of participation in aftercare.

Since 1976, the FAA has worked cooperatively with ALPA and airline companies to identify and rehabilitate airline pilots who have problems with alcohol abuse. Nearly 600 airline pilots have been granted a special issuance for alcoholism after treatment. The current rate of successful rehabilitation is 85%. An airline pilot was considered rehabilitated if he/she held a valid medical certificate on December 31, 1984, or retired with no relapse. This includes pilots who have relapsed one or more times and regained their medical certification.

There are approximately 39,000 airline pilots in the United States. Those who have been granted a special issuance after treatment for alcoholism probably represent only a small part of the alcohol-related problems in the airline industry.

Very few studies are available that estimate the prevalence of alcoholism among occupational groups. One such study by Mannello and Seaman in 1979 estimated the prevalence of problem drinking among railroad workers to be 19% overall. Among operating personnel (engineers, conductors), 23% were problem drinkers (6). Some occupational factors which are common to railroad conductors, railroad engineers, and pilots are irregular working hours and long layovers away from home. These factors may facilitate excessive drinking and development of addiction in some predisposed individuals.

The onset of alcoholism is slow and insidious. An individual has often alienated friends, family, and coworkers by the time alcoholism is diagnosed. In other words, he/she has effectively destroyed the social network needed to successfully recover from alcoholism (9).

mothers who were heavy drinkers or alcoholic (14% vs. 5%), and alcoholic siblings (17% vs. 9%). Subjects who have an alcoholic family member may find it easier to admit their own alcoholism and consequently have a more favorable treatment outcome. Twenty percent of the success group were under 40 years of age, as opposed to 37% of the relapse group.

Little difference was found regarding physical consequences of drinking between relapse and success groups. The success group reported a higher rate of alcoholic blackouts than the relapse groups (65% vs. 51%). This may indicate that those pilots in the relapse group were less willing to admit to adverse consequences of drinking, thus indicating a strong denial system. The success groups had a lower rate of liver dysfunction than the relapse group (51% vs. 63%). Figure 4 presents the number of special issuances by crew position and relapse status.

SUMMARY

Of the 587 pilots who received special issuances, 380 are still flying; 66 retired at the age of 60 years; 115 dropped out (retired early, relapsed or had other medical complications); 10 are deceased; and 16 are on strike or laid off.

An airline pilot was considered rehabilitated if he/she held a valid medical certificate on December 31, 1984, or had retired with no relapse. This included pilots who relapsed one or more times and regained their medical certification. The overall rate of success is 85%.

Family participation in aftercare and treatment was considered to be a major predictor of successful treatment. This participation included Alanon, Alateen, and family or group therapy at an alcohol treatment center.

The subjects spent an average of 15 months in aftercare programs and 20 months in AA. Extended involvement in aftercare was also considered a major factor in successful treatment. The strong support of ALPA and the interest and encouragement from individual coworkers also helped improve the pilot's chance of successful rehabilitation.

A government regulatory agency (FAA), a large union (ALPA), and the managements of several airline companies have demonstrated the ability of sometimes opposing forces to work together to combat a major public health problem and enhance air safety. In 1980, Zuska and Pursch described the U.S. Navy's experience with alcohol rehabilitation. The FAA hopes that much like the Navy, the growing numbers of recovering alcoholic pilots will set off a "chain reaction of health" and ultimately make it easier for those pilots who come later to have an even greater rate of recovery.

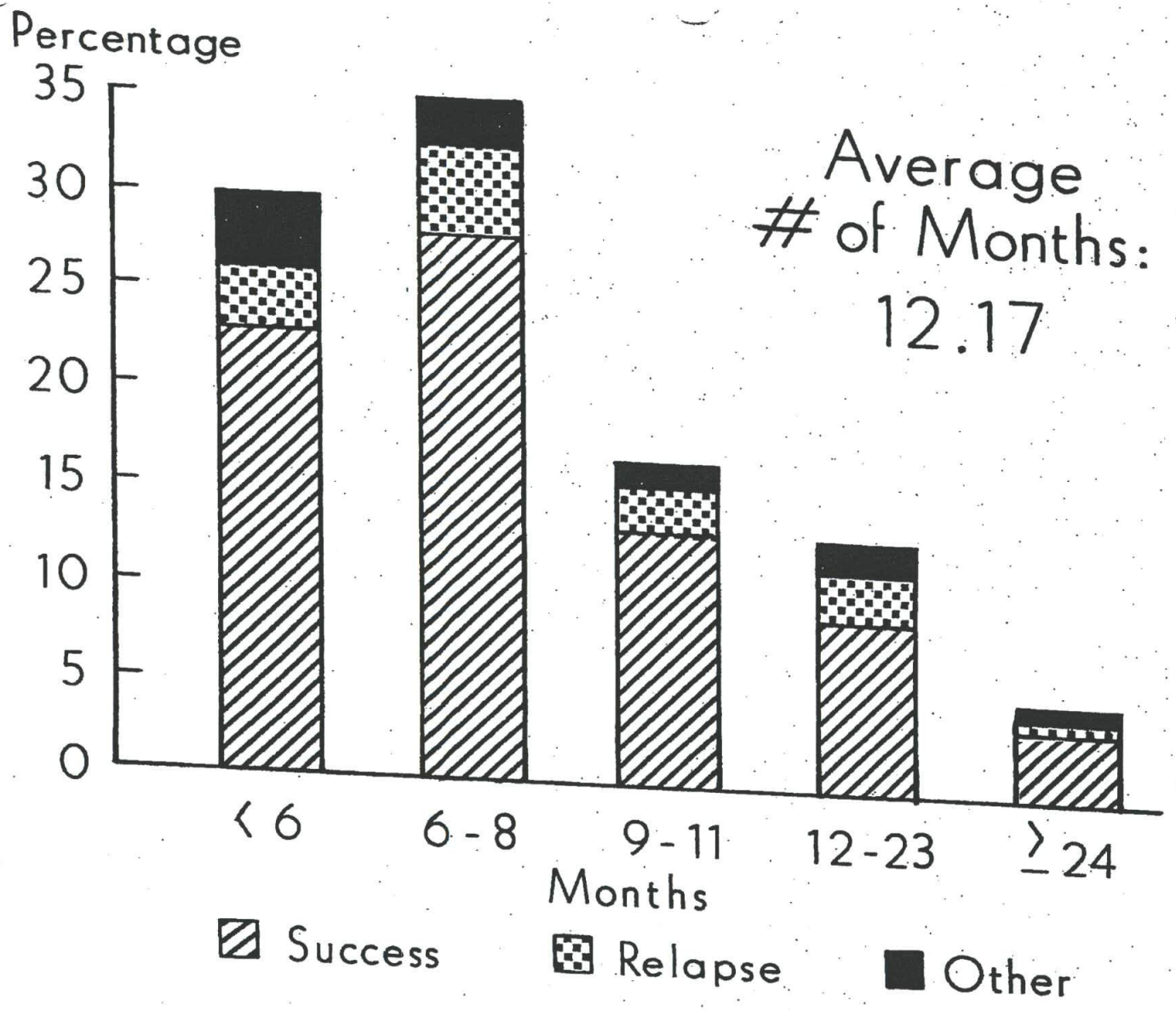

Figure 2. Time off work for airline pilots granted special issuance for alcoholism - months from treatment to special issuance.

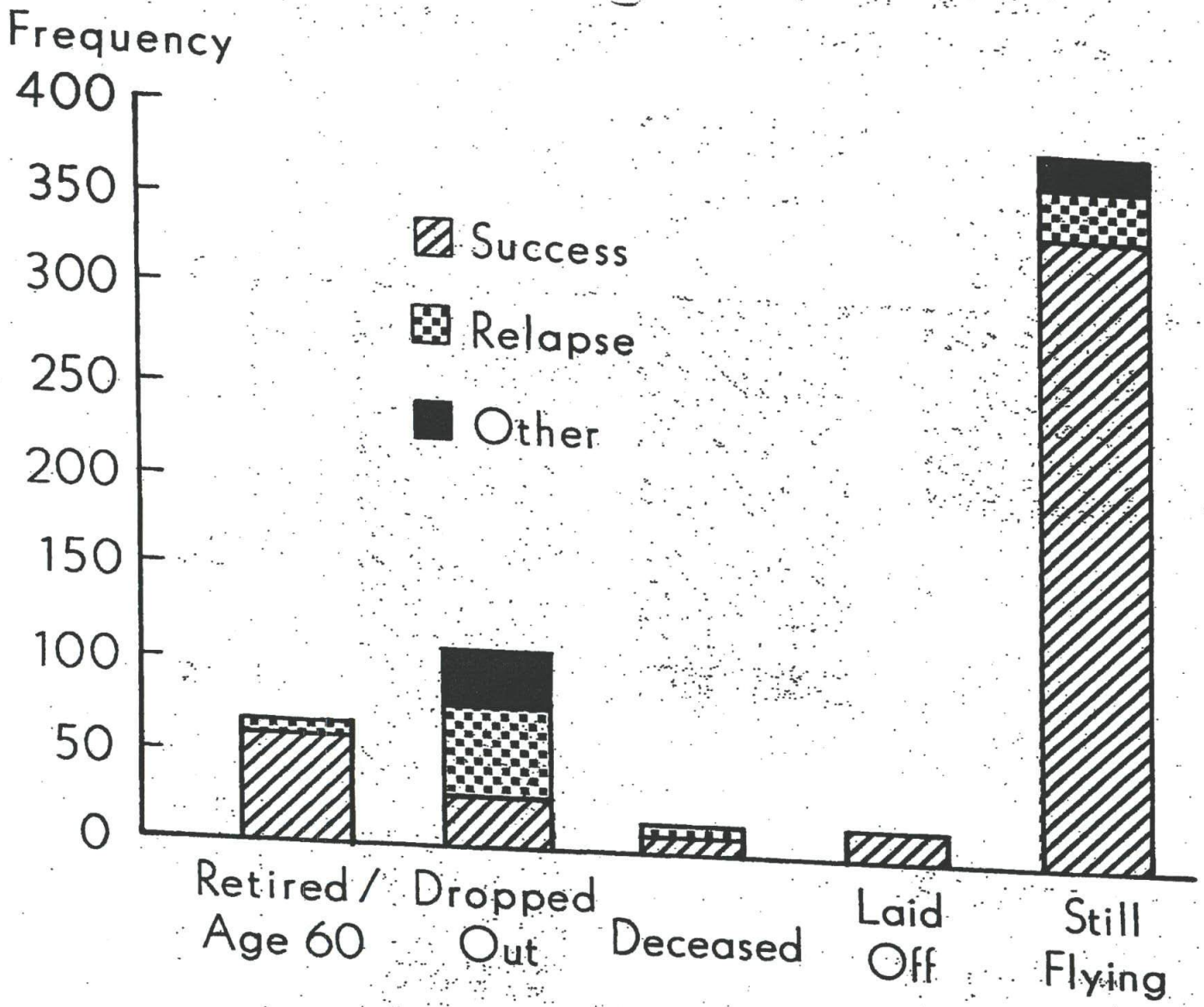

Figure 3. Current employment status of airline pilots granted special issuance for alcoholism.

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