JMC’s Interdisciplinary Smoking Cessation Program

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Tobacco smoking is the leading cause of preventable death in the United States, accounting for more than 400,000 deaths per year.\(^1\) This is an astounding figure, equivalent to three 747 airliner crashes per day, each day for the entire year. Despite these risks, the prevalence of smoking remains quite high, with approximately 25% of the adult US population currently smoking cigarettes.\(^2\) Of all of the attributable smoking related diseases, lung cancer remains one of the leading sources of major morbidity and mortality within the population, and a significant source of healthcare resource expenditure, especially among economically disadvantaged cohorts.\(^3\) Such sobering statistics belie the fact that about 70% of smokers express a desire to quit, and 50% make some attempt at cessation annually.\(^4\) Yet long term success remains elusive for the vast majority of smokers.

In order to significantly improve these dismal rates, a successful smoking cessation intervention may require intensive staffing resources, for example, providing patient counseling and arranging periodic follow-up visits, resources most primary care physicians, the traditional providers of cessation services, may not have at their disposal. A seeming contradiction emerges, given that treating a patient for smoking cessation is inexpensive, estimated at less than $2,000 per quality adjusted life year (QALY) saved.\(^5\)

Recognizing that nicotine addiction intervention can be an extremely resource intensive undertaking; and perceiving significant limitations with commercially available cessation programs, several faculty and staff from a number of departments and divisions within JMC (The Comprehensive Center for Tobacco Research and Treatment) pooled their individual expertise to create an innovative, interdisciplinary smoking cessation intervention, the Jefferson Tobacco Intervention Program (JeffTIP). JeffTIP, launched in July 1998, was designed to address several key elements that are emerging as critical to long term cessation: patient-centered, intensive provider interaction and followup, and an interdisciplinary, "one-stop shopping" setting that facilitates optimal patient treatment and management. Based at Thomas Jefferson University Hospital (TJUH), the program offers a unique integration of medical evaluation and management with intensive individual psychological counseling, group educational seminars and combination pharmacotherapy to create a medical model of addiction treatment. Patient education and relapse prevention form the philosophical foundation of the program. JeffTIP is open to patients in the community as well as to physician-referrals. JeffTIP is designed to offer particularly intensive resources for the most severely addicted patients, those who have experienced frequent relapses and who suffer from significant co-morbidity.

JeffTIP aims to take the knowledge gleaned about costeffective pharmacologic treatments to the next level. The research question in this context becomes how to stratify the population into type of smoker (i.e., based on motivational level, severity of addiction, psychosocial barriers to success, etc.), and developing the appropriate intervention. Multidisciplinary input becomes imperative. The Agency for Health Care Policy and Research (AHCPR) has made great strides in removing and reducing barriers to effective physician treatment of nicotine addiction through its Smoking Cessation Clinical Practice Guideline.\(^6\) A successive AHCPR document on designing effective nicotine addiction programs is forthcoming.
Patients wishing to receive treatment, or physicians wishing to refer a patient can call JeffTIP at (215) 955-STOP. Once registered, patients receive a complete evaluation. Psychologic and physiologic measurements are taken, such as severity of the nicotine dependency, readiness to quit, ability to cope with cravings, past quit attempts, etc. A quit strategy is individually tailored, including pharmacologic therapy. Patients are then invited to the JeffTIP educational seminar onsite, which runs concurrently. Patients visit TJUH weekly for the first six to eight weeks, then are followed every few months, for a year. Throughout the initial program period, patients receive periodic follow-up visits with the physician and psychologists, and receive individual counseling with a nurse practitioner. Despite the adverse patient selection, JeffTIP has experienced an excellent completion rate (approximately 85% to date) and has received consistently excellent satisfaction ratings from its patients. Clinical outcome data suggest a 63% three-month continuous abstinence rate.

A remaining challenge for the program is that JeffTIP services remain unreimbursable for providers; no area insurers directly cover the cost of care. Therefore, patients' access to the service remains limited. However many patients are eligible for reimbursement after sustaining the out-of-pocket expense, and payment schedules are considered on an as-needed basis. To learn more about JeffTIP call (215) 955-STOP, or by searching “Tobacco” on Jefferson’s Web site: http://www.jeffersonhealth.org

Currently, the Comprehensive Center for Tobacco Research and Treatment is undertaking a number of research studies that examine the basic inheritable risk for nicotine dependence. Research to date on the subject suggests that inheritable "hard-wiring" plays an important role in determining a person's risk for developing dependency behaviors. One Center study that has received national attention attempts to shed light on the genetic determinants of severe nicotine dependence by identifying the genetic loci responsible for this effect. As the lead organization in this multi-center trial, Jefferson's investigators will be responsible for recruiting 400 pairs of siblings into the study over the next two years. Research examining the relationship between twin sibling smoking status and their environment suggests that such an inheritable factor may indeed influence risk for tobacco use.

REFERENCES


**About the Authors**

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