Adult Education: References

(1) ABELIN, T. Working with professional groups to increase priorities in smoking education. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 443-451.

(2) THE ADULT PERFORMANCE LEVEL PROJECT. Adult Functional Competency: A Summary. Austin, University of Texas at Austin, 1975, 24 pp.

(3) ALTHAFER, C.A. The San Diego story, an adventure in smoking education. Bulletin of the National Tuberculosis and Respiratory Disease Association 55(10): 13-16, November 1970.

(4) ARONOW, W.S. Smoking, carbon monoxide, and coronary heart disease. Circulation 48(6): 1169-1172, December 1973.

(5) BALL, K.P. Cigarette diseases: The most preventable epidemic. Royal Society of Health Journal 90(1): 40-42, January/February 1970.

(6) BERGEVIN, P. Philosophy for Adult Education. New York, Seabury Press, 1967, pp. 29-49.

(7) BOONE, E.J. The cooperative extension service. In: Smith, R.M., Aker, G.F., Kidd, J.R. (Editors). Handbook of Adult Education. New York, Macmillan, 1970, pp. 265-281.

(8) BORLAND, B.L., RUDOLPH, J.P. Relative effects of low socioeconomic status, parental smoking and poor scholastic performance on smoking among high school students. Social Service and Medicine 9(1): 27-30, January 1975.

(9) BUREAU OF HEALTH EDUCATION. The School Health Curriculum Project. U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, Bureau of Health Education, HEW Publication No. (CDC) 78-8359, December 1977, 52 pp.

(10) BURGESS, A.M., JR., CASEY, D.B., TIERNEY, J.T. Cigarette smoking by Rhode Island physicians, 1963-1973: Comparison with lawyers and other adult males. American Journal of Public Health 68(1): 63-65, January 1978.

(11) BURK, M.F., NILSON, G.T. Student nurses and smoking. A survey. Journal of the Maine Medical Association 66(10): 271-273, October 1975.

(12) BURKE, F.G. Stopping smoking is a family affair. Medical Opinion 3(1): 57, 59-60, 62, January 1974.

(13) CHEN, T.L., RAKIP, W.R. The effect of the teachers' smoking behavior on their involvement in smoking education in the schools. Journal of School Health 45(8): 455-461, October 1975.

(14) CURRAN, W.J. Legal imagination and education in smoking control. American Journal of Public Health 66(12): 1206-1207, December 1976.

(15) DAVIS, J.M. Exemplarmanship. Pennsylvania School Journal 118(2): 133-135, December 1969.

(16) DEROOS, K.K., CODER, R. Assessing low income health concepts. Health Education 8(3): 29-31, May/June 1977.

(17) DIVISION OF LUNG DISEASES, NATIONAL HEART, LUNG, AND BLOOD INSTITUTE. Respiratory Diseases. Task Force Report on Prevention, Control, Education. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, DHEW Publication No. (NIH) 77-1248, March 1977, 137 pp.

(18) DUBREN, R. Evaluation of a televised stop-smoking clinic. Public Health Reports 92(1): 81-84, January/February 1977.

(19) EVANS, M.W. The Avdel smoking project. Health Education Journal 32(3): 76-81, 1973.

(20) FAGERBERG, S., HOLYOAK, O.J. The APL program in health and safety education. Health Education 9(2): 8-9, March/April 1978.

(21) FISHER, D.W. Adult education theory necessary in health education practice. International Journal of Health Education 19(2): 129-135, 1976.

(22) FLAHERTY, J.F. An Assessment of the Functional Education Needs of Adult Basic Education Students. Paper presented at the American Educational Research Association Conference, Toronto, March 28, 1978. 13 pp.

(23) GARRETT, N. Smoking: Now and then. Canadian Nurse 69(11): 22-26, November 1973.

(24) GLOVER, E.D. Modeling—A powerful change agent. Journal of School Health 48(3): 175-176, March 1978.

(25) GOODROW, B. Does time change the health concerns of college students? Health Education 8(3): 34-35, May/June 1977.

(26) GRABOWSKI, S.M. Training Teachers of Adults: Models and Innovative Programs. Publications in Continuing Education, Syracuse University, National Association for Public Continuing and Adult Education, Eric Clearinghouse in Career Education, Occasional Papers, Number 46, 1976, 4 pp.

(27) GREEN, L.W., GREEN, P.F. Intervening in social systems to make smoking education more effective. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 393-401.

(28) HEALTH ACTIVITIES PROJECT NEWSLETTER. Berkeley, University of California, May 1976, 4 pp.

(29) HEALTH ACTIVITIES PROJECT NEWSLETTER. Berkeley, University of California, October 1977, 4 pp.

(30) HIEMSTRA, R. Lifelong Learning. Lincoln, Nebraska, Professional Educators Publications, Inc., 1976, 114 pp.

(31) HORN, D. The cigarette smoking picture — Bright spots and shadows. Bulletin of the National Tuberculosis and Respiratory Disease Association 36(10): 7-9, November 1970.

(32) HORN, D. Current smoking among teenagers. Public Health Reports 83(6): 458-460, June 1968.

(33) HORN, D. A model for the study of personal choice health behaviour. International Journal of Health Education 19(2): 89-98, 1976.

(34) JAMES, W.G. For a healthy tomorrow. Journal of School Health 47(3): 180-183, March 1977.

(35) JERRICK, S.J. From challenge to action. PTA promotes health education at national conference in Chicago. Journal of School Health 48(4): 243-244, April 1978.

(36) KAY, E.R. Adult Education in Community Organizations. U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, 1974, 80 pp.

(37) KEEVE, J.P. Smoking habits and attitudes of 3,057 public school students and their families (Newburgh, New York). Journal of School Health 35(10): 458-459, December 1965.

(38) KELSON, S.R., PULLELLA, J.L., OTTERLAND, A. The growing epidemic: A survey of smoking habits and attitudes toward smoking among students in grades 7 through 12 in Toledo and Lucas County (Ohio) public schools—1964 and 1971. American Journal of Public Health 65(9): 923-938, September 1975.

(39) KLONGLAN, G.E., WARREN, R.D., WINKELPLECK, J.M. Cigarette smoking and the role of dentists. Iowa Dental Journal 58: 43-44, February 1972.

(40) KNOWLES, M.S. What do we know about the field of adult education? Adult Education 14(2): 67-79, Winter 1964.
(41) LANESE, R.R., BANKS, F.R., KELLER, M.D. Smoking behavior in a teenage population: A multivariate conceptual approach. American Journal of Public Health 62(6): 807-813, June 1972.
(42) LENTZ, J.C., JR. The road ahead—Challenges for cooperative action. Health Education Monographs 3(1): 115-119, Spring 1975.
(43) LEVITT, E.E., DEWITT, K.N. A survey of smoking behavior and attitudes of Indiana physicians. Journal of the Indiana State Medical Association 63(4): 336-339, April 1970.
(44) LEWIS, J. Today It's the 3 R's and HBP: A description of the Georgia Heart Association's high blood pressure education program for schools. Atlanta, Georgia Heart Association, Inc., 1976, 36 pp.
(45) MACCOBY, N. The Stanford heart disease prevention program. In: Newman, I. M. (Editor). Consumer Behavior in the Health Marketplace. A Symposium Proceedings, 1976. Lincoln, University of Nebraska, 1976, pp. 31-44.
(46) MCFARLAND, J.W., BERGLUND, E.-L., ALBRECHT, C.E. Present status of 5 day plans to stop smoking. In: A Summary of Proceedings, National Conference on Smoking and Health, San Diego, September 9-11, 1970. New York, National Interagency Council on Smoking and Health, 1970, pp. 82-93.
(47) METTLIN, C. Peer and other influences on smoking behavior. Journal of School Health 46(9): 529-536, November 1976.
(48) METTLIN, C. Smoking as behavior: Applying a social psychological theory. Journal of Health and Social Behavior 14(2): 144-152, June 1973.
(49) MEZIROW, J., DARKENWALD, G.G., KNOX, A.B. Last Gamble on Education: Dynamics of Adult Basic Education. Washington, D.C., Adult Education Association of the U.S.A., 1975, 206 pp.
(50) MICO, P. R. An introduction to policy for health educators. Health Education Monographs 6 (Supplement 1): 7-17, 1978.
(51) MORRIS, J.F., TICHY, M.W. Smoking habits and attitudes of Oregon secondary school coaches. American Journal of Public Health 60(7): 1271-1277, July 1970.
(52) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. Smokers' Self-Testing Kit. U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, National Clearinghouse for Smoking and Health, DHEW Publication No. (CDC) 74-8716, December, 1973, 11 pp.
(53) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. State Legislation on Smoking and Health, 1976. U.S. Department of Health, Education, and Welfare, Center for Disease Control, Bureau of Health Education, National Clearinghouse for Smoking and Health, December 1976, 73 pp.
(54) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. State Legislation on Smoking and Health, 1977. U.S. Department of Health, Education and Welfare, Center for Disease Control, Bureau of Health Education, National Clearinghouse for Smoking and Health, HEW Publication No. (CDC) 78-8331, January 1978, 79 pp.
(55) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. Teenage Self Test: Cigarette Smoking. U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, National Clearinghouse for Smoking and Health, DHEW Publication No. (CDC) 76-8723, 1975, 15 pp.

(56) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. Teenage Smoking: National Patterns of Cigarette Smoking, Ages 12 Through 18, in 1968 and 1970. U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration, DHEW Publication No. (HSM) 72-7508, 1972. 140 pp.

(57) NATIONAL INTERAGENCY COUNCIL ON SMOKING AND HEALTH. A Committee Report. Guidelines for Research on the Effectiveness of Smoking Cessation Programs. National Interagency Council on Smoking and Health. October 1974, 46 pp.

(58) NEWMAN, A.N. How teachers see themselves in the exemplar role in smoking education as evidenced by their attitudes and practices. Journal of School Health 41(5): 275-279, May 1971.

(59) NEWMAN, I.M. Peer pressure hypothesis for adolescent cigarette smoking. School Health Review 1(2): 15-18, April 1970.

(60) NOLL, C.E. Health Professionals and the Problems of Smoking and Health. Report 3. Physicians' Behavior, Beliefs and Attitudes Toward Smoking and Health. Report on NORC Survey 4001. Chicago, University of Chicago, National Opinion Research Center, November 1969, 105 pp.

(61) O'KEEFE, M.T. The anti-smoking commercials: A study of television's impact on behavior. Public Opinion Quarterly 35(2): 242-248, Summer 1971.

(62) OKES, I.E. Participation in Adult Education, Initial Report. U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, 1971, 151 pp.

(63) OLSEN, L.K., STONE, D.B., SAUNDERS, J.A. Inservice training for elementary school health education. Health Education 7(2): 27-29, March/April 1976.

(64) OWEN, S.L. The three R's and HBP: A unique approach to school health and high blood pressure education. Image 8(1): 13-19, February 1976.

(65) PARKE, D.W. This doctor is firm: I advise my patients not to smoke. American Lung Association Bulletin 61(4): 7-9, May 1975.

(66) PEDIATRIC NEWS. Doctors could dissuade youths from smoking. Pediatric News 4(2): 24, February 1970.

(67) PORTER, F.T.H. Assessing public reaction to an anti-smoking campaign. Ontario Medical Review 48(5): 217-221, 224, May 1969.

(68) PRENDERGAST, T. J. Consumer behavior: An epidemiological perspective. In: Newman, I.M. (Editor). Consumer Behavior in the Health Marketplace. Lincoln, University of Nebraska, 1976, pp. 94-104.

(69) PRICE, J.L., COLLINS, J.R. Smoking among baccalaureate nursing students. Nursing Research 22(4): 347-350, July/August 1973.

(70) PURVIS, J.M., SMITH, D.L. Smoking among medical students. Southern Medical Journal 69(4): 413-416, April 1976.

(71) RABINOWITZ, H.S., ZIMMERLI, W.H. Teacher-learning mechanisms in consumer health education. Public Health Reports 91(3): 211-217, May/June 1976.

(72) RAMSTROM, L.M. Public education—Its role in smoking cessation. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 525-532.

(73) READ, C.R. The teenager looks at cigarette smoking. In: UICC Technical Report Series. Volume 6. Public Education About Cancer. Recent Research and Current Programmes, 1969. Geneva, Union Internationale Contre Le Cancer, pp. 97-104.

(74) ROZOVSKY, L.E. Smoking and the law. Dimensions in Health Service 52 (10): 58-60, October 1975.

(75) RUSSELL, M.A.H. Cigarette dependence: II. Doctor's role in management. British Medical Journal 2(5758): 393-395, May 15, 1971.

(76) SALBER, E.J., WELSH, B., TAYLOR, S.V. Reasons for smoking given by secondary school children. Journal of Health and Human Behavior 4(2): 118-129, Summer 1963.

(77) SCHWARTZ, J.L. A critical review and evaluation of smoking control methods. Public Health Reports 84(6): 483-506, June 1969.

(78) SCHWARTZ, J.L. Smoking cures: Ways to kick an unhealthy habit. In: Jarvik, M.E., Cullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. (Editors). Research on Smoking Behavior. NIDA Research Monograph 17. U.S. Department of Health, Education, and Welfare, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute on Drug Abuse, DHEW Publication No. (ADM) 78-581, December 1977, pp. 308-337.

(79) SCHWARTZ, J.L., DUBITZKY, M. Expressed willingness of smokers to try 10 smoking withdrawal methods. Public Health Reports 82(10): 855-861, October 1967.

(80) SCHWARTZ, J.L., RIDER, G. Smoking cessation methods in the United States and Canada: 1969-1974. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 695-732.

(81) SCOTT, B.T. Physicians' attitude survey: Doctor's smoking and drinking habits. Medical Opinion 3(1): 49, 51, 54, January 1974.

(82) SHEATS, P.H. Introduction. In: Smith, R.M., Aker, G.F., Kidd, J.R. (Editors). Handbook of Adult Education. New York, Macmillan, 1970, pp. XXV-XXX.

(83) SMITH, L. The D-day story. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 409-413.

(84) SOMERS, A.R. (Editor). Promoting Health: Consumer Education and National Policy. Germantown, Maryland, Aspen Systems Corporation, 1976, 264 pp.

(85) SOMERS, A.R., HAYDEN, M.C. Rights and responsibilities in prevention. Health Education 9(1): 37-39, January/February 1978.

(86) STONE, D.B., HUFFMAN, W.J. A replication of the Horn study on youth smoking in 1967. In: Creswell, J.M., Creswell, W.H., Jr. (Editors). Youth Smoking Behavior Characteristics and Their Educational Implications. A report of The University of Illinois Anti-Smoking Education Study. Champaign, University of Illinois, June 30, 1970, pp. 11-24.

(87) TANDY, R.E. Smoking among teenagers: Effects of programmed instruction on attitudes, behaviour and knowledge. International Journal of Health Education 15(2): 106-112, 1972.

(88) THOMPSON, E.L. Smoking Education Programs 1960-1976. American Journal of Public Health 68(3): 250-257, March 1978.

(89) TOUGH, A. The Adult's Learning Projects. A Fresh Approach to Theory and Practice in Adult Learning. Research in Education Series No. 1. Toronto, The Ontario Institute for Studies in Education, 1971, 191 pp.

(90) TUCKER, A.H., JR. New goals in smoking and health education for youth. Pennsylvania's Health 33(2): 7-9, Summer 1972.

(91) U.S. CONGRESS, Public Law 91-750, November 3, 1966, Title III, 80 Stat. 1191.

(*92*) U.S. CONGRESS, Public Law 93-380, August 21, 1974, Title VI, Part A, 88 Stat. 576.

(*93*) VANDERSLICE, J. State laws on smoking in public places. American Lung Association Bulletin 62(1): 8-10, January/February 1976.

(*94*) VIVIAN, V., WESLEY, W.A. Report from the Congress on the quality of life—The later years. Health Education 6(4): 16–18, July/August 1975.

(*95*) WALLACE, B.C. Aging: Health education's responsibility. Health Education 6(4): 8-10, July/August, 1975.

(*96*) WARNER, K.E. The effects of the anti-smoking campaign on cigarette consumption. American Journal of Public Health 67(7): 645-650, July 1977.

(*97*) WILLIAMS, C.L., WYNDER, E.L. A blind spot in preventive medicine. Journal of the American Medical Association 236(19): 2196-2197, November 8, 1976.

(*98*) WINDSOR, R.A. Smoking habits and attitudes of 4-H youth in Illinois, Ages 9-12. Journal of School Health 42(9): 558-560, November 1972.

(*99*) WORDEN, J.K., SWEENEY, R.R., WALLER, J.A. Audience interest in mass media messages about lung disease in Vermont. American Journal of Public Health 68(4): 378-382, April 1978.

(*100*) WORLD HEALTH ORGANIZATION. Legislative action to combat smoking around the world. A survey of existing legislation. International Digest of Health Legislation 27(3): 493-517, 1976.

(*101*) YEP, B. A framework for the study of the role of cooperative extension service in the health field. Health Education Monographs 3(1): 31-40, Spring 1975.

22. THE ROLE OF HEALTH CARE PROVIDERS.

CONTENTS

Introduction 5
Definition of Health Care Providers 5
Possible Roles of Health Care Providers 5

Health Care Providers as Exemplars 6
Attitudes Toward the Role of Exemplar 6
Actions as Exemplars 9
Smoking Habits of Doctors 9
Smoking Habits of Dentists 12
Smoking Habits of Nurses 12
Smoking Habits of Pharmacists 12
Smoking Habits of Other Health Care Providers 13
Smoking in the Presence of Patients or Customers 13

Health Care Providers as Health Educators 14
Attitudes Toward the Role of Health Educator 14
Actions as Health Educators 16
Effectiveness as Health Educators 18

Health Care Providers as Managers in the Control of Smoking in Health Care Settings 19
Attitudes Toward Controlling Smoking 20
Actions to Control Smoking 20

Conclusions 23

References 25

LIST OF TABLES

Table 1.—Percentage of persons in four health professions who agreed that persons in their profession should set a good example by not smoking, 1967-1969 and 1975 8

Table 2.—Percentage of the membership of two public health associations who agreed their membership had a responsibility to set a good example by not smoking 8

Table 3.—Smoking habits of doctors as reported in studies carried out between the years 1949 and 1975 10

Table 4.—Proportion of cigarette-smoking health professionals who said they never smoked in front of patients, students, or patrons, 1967–1969 and 1975 13

Table 5.—Percentages of health professionals who agreed with statements about their responsibilities in the role of teacher, 1967–1969, and 1975 15

Table 6.—Percentages of the membership of the American Public Health Association and the Canadian Public Health Association agreeing with statements about their role of teacher, 1972 and 1974 15

Table 7.—Smoking regulations reported by Connecticut hospitals in 1973 21

Introduction

Health professionals and the public have reciprocal expectations that health professionals should be authorities on good health practices and should be perceived as such. This interdependent relationship puts health professionals in a strategic position to influence the public's smoking habits.

The public's attitude toward health professionals may extend to those who are not themselves professionals but who work with health professionals or in health care settings or health-oriented occupations. These persons, therefore, may also be in a position to have a more than ordinary influence on the smoking habits of others. For these reasons, this chapter extends beyond the role of health professionals to all health care providers in preventing the hazards of smoking.

Definition of Health Care Providers

For the purposes of this chapter, a health care provider is defined as anyone who (1) provides health care directly (e.g., doctors in active practice, nurses, podiatrists, dentists, midwives); (2) provides a service related to health care (e.g., pharmacists, X-ray technicians); (3) works in a health care setting (e.g., maids in hospitals, dietitians in nursing homes, receptionists in doctors' offices); or (4) works for a health-related agency or institution (e.g., employees of a State health department, teaching staff in a medical school, staff of a voluntary health agency).

In 1976, about 4.3 million of the work force of 87.5 million people were employed in health-related occupations, approximately 5 percent of employees in all occupations (*67*). Distribution of employment among health occupations was as follows: health practitioners, 13 percent; nursing occupations, 57 percent; health technologists, technicians, and assistants, 20 percent; therapy and rehabilitation, 2 percent; and other health occupations, 8 percent. Hospitals employ about half of all workers in the health field; the other half work in clinics, laboratories, pharmacies, mental health centers, private offices, and patients' homes.

Possible Roles of Health Care Providers

Health care providers may affect the smoking habits of the public in several ways:

1. They may act as exemplars in their own smoking habits.
2. They may act as health educators by informing individuals of the hazards of smoking and by advising them to stop smoking.
3. They may, as managers, control smoking practices in health care settings.

The remainder of this chapter describes the results of a search of the literature pertaining to health care providers in each of these three

roles. Based on these findings, recommendations are made for appropriate ways in which health care providers may help prevent the hazards of smoking.

Health Care Providers as Exemplars

Attitudes Toward The Role of Exemplar

The importance of the exemplar role of health care providers was recognized in a 1972 agreement between the Danish Ministry of the Interior and the Danish tobacco industry. That agreement prohibited cigarette advertisements showing "persons who are or appear to be physicians,[1] dentists, nurses, midwives, or as belonging to other categories within the hospital or health services" (*75*).

A U.S. survey for the National Clearinghouse for Smoking and Health in 1970 found that most of the public expects persons in the health professions to act as exemplars (*41*): 72 percent of adult males and 79 percent of adult females agreed with a statement that persons in the health professions should set a good example by not smoking cigarettes. A similar survey of adults in 1975 found that about the same proportions (76 percent of males, 82 percent of females) agreed with this statement (*42*).

The same surveys (*41*, *42*) gathered data on how respondents perceived the smoking habits of their family doctors and those of 20 adults they knew. Of adults with a family doctor, 73 percent in each survey responded when asked if their doctor smoked cigarettes and, of these, the proportion who said their doctor smoked cigarettes decreased from 32 percent in 1970 to 27 percent in 1975. In both years, the respondents perceived as cigarette smokers about half of 20 adults they knew (the mean number of cigarette smokers estimated among 20 adults was 11.2 in 1970 and 10.8 in 1975). Respondents in the two surveys apparently perceived their family doctors as setting a better example in their smoking habits than the 20 other adults they knew.

That an adult's perception of a doctor's smoking habits may be influenced by his own was indicated in the surveys discussed above (*41*, *42*): they found that cigarette smokers were more likely than nonsmokers to report that their family doctor smoked cigarettes. It may be that some cigarette smokers, in order to feel less anxious about their own smoking, believe that their doctors also smoke. Another explanation for this trend in the data may be that if doctors who smoke are less likely to advise patients not to smoke, or be less successful in getting them to stop smoking, then smoking doctors may accumulate a larger proportion of smoking patients than do nonsmoking doctors.

---

[1]Throughout this chapter the terms "physician" and "doctor" are used synonymously. This is in contrast to the term "physician" as it is used in some British Commonwealth countries to distinguish between surgeons and other doctors.

On the other hand, public perceptions of how well health care providers act as exemplars may be influenced by expectations. A 1969 nationwide sample of teenagers placed doctors and nurses among the four types of persons they considered least likely to smoke (*57*). During that period a much lower proportion of physicians smoked cigarettes than adult males in general (*41*, *49*), but nurses had a higher rate of cigarette smoking than adult females in the general population (*41*, *51*).

Even those in a position to observe the smoking practices of health providers may not estimate them accurately. Baric, et al. (*6*) reported in 1976 that there was no difference between medical and other students at the University of Manchester in their perception of the smoking habits of doctors. More than half of both groups, in estimating the proportion of doctors who smoke, gave a figure that would have been correct for the general adult population, but was an overestimation for doctors. The smoking habits of the students were not related to their estimates of the doctors' smoking practices. The authors do not speculate on the cause of the medical students' overestimation, but they do report that the medical students were more likely than the others to agree with a statement that doctors should not smoke. Perhaps the medical students, having high standards for doctors, tended to be more aware of doctors who smoked than of doctors who did not and thus overestimated the proportion of doctors who smoke; other students, having lower standards for doctors, may have assumed doctors were like everyone else and thus also overestimated the proportion who smoked.

Although a 1972 national survey in Sweden (*72*) found that only 34 percent of physicians surveyed believed that public smoking habits would be affected if physicians were to stop smoking, other studies indicate that a majority of health care providers agree with the public that they should act as exemplars by not smoking. The National Clearinghouse for Smoking and Health sponsored a series of surveys of doctors, dentists, pharmacists, and nurses in the late 1960's (48–51), which were repeated in 1975 (*46*). The percentage of the respondents agreeing that their profession should set a good example by not smoking is shown in Table 1.

The National Clearinghouse for Smoking and Health also supported a 1972 survey of a random sample of the membership of the American Public Health Association which asked the same question (*1*). Matthews, et al. (*33*) carried out a similar survey of the entire membership of the Canadian Public Health Association in 1974. The percentages of the members of these two associations of health professionals with a positive attitude toward their responsibility to set a good example are presented in Table 2.

The data shown in Tables 1 and 2 indicate that a major proportion of health professionals in the early 1970's felt that members of their

TABLE 1.—Percentage of persons in four health professions who agreed that persons in their profession should set a good example by not smoking, 1967–1969 and 1975

Professional group	Year of survey	
	1967–1969[1]	1975[2]
Doctors	78	91
Dentists	72	88
Pharmacists	62	73
Nurses	82	87

[1]SOURCE: Noll, C.E. (*48–51*).
[2]SOURCE: National Clearinghouse for Smoking and Health (*46*).

TABLE 2.—Percentage of the membership of two public health associations who agreed their membership had a responsibility to set a good example by not smoking

Association	Percent agreeing
American Public Health Association	
All members	85[1]
Female members of public health nursing section	81.3[2]
Female members of other section	73.9[2]
Canadian Public Health Association	89.6[3]

[1]SOURCE: Atwater, J.B. (*3*).
[2]SOURCE: Eyres, S.J. (*20*).
[3]SOURCE: Matthews, V.L. (*33*).

profession should act as exemplars, and that this attitude toward the exemplar role gained support between 1967 and 1975. Pharmacists and female members of sections other than the Public Health Nursing Section of the American Public Health Association had the lowest proportion of members who felt it was a responsibility of their respective professions to set a good example by not smoking; even so, almost three-fourths of these believed they should act as exemplars.

In 1967, Coe and Brehm (*13*) studied a nationwide stratified sample of 1,591 general practitioners and internists interviewed about the routine preventive health services they provided their patients. In the area of smoking, the interviewers asked many of the questions used in the national surveys sponsored by the National Clearinghouse for Smoking and Health. On the question of the physician's responsibility to set a good example, they found that 80 percent of the doctors agreed that physicians did have a responsibility to set a good example by not smoking. This finding agrees with the 1967 survey reported by Noll (*49*) and shown in Table 1, above.

Pharmacists have considered the conflict between their exemplar role as health professionals and their sale of cigarettes as businessmen. The American Pharmaceutical Association's House of Delegates recommended in 1971 that tobacco products not be sold in pharmacies (*61*). Some State associations, however, had already passed such resolutions. For example, the Iowa Pharmaceutical Association passed a resolution in 1969 that pharmacists discontinue selling cigarettes (*69*). When Vlassis (*69*) surveyed the Iowa state membership shortly afterward, however, he found that 51 percent of those responding believed the State association should not take a position on the sale of cigarettes. Fifty-two percent also said that ethics should not enter into the sale of cigarettes, and an additional 15 percent expressed uncertainty on this point.

Actions as Exemplar

Many studies have examined the smoking habits of health care providers, but one problem with these studies is the inconsistency in the definitions of smoking behavior. Because the data reported by different researchers are not entirely comparable, findings reported here should be examined with that limitation in mind.

Smoking Habits of Doctors

Researchers have paid a great deal of attention to the smoking habits of doctors, and their studies indicate that there have indeed been changes in the smoking practices of physicians during the past 20 years. Table 3 presents some of the data from these studies, some of which is discussed in the following pages.

Vaillant, et al. (*68*) reported a longitudinal study which periodically questioned a group of 258 men who were first studied as sophomores at a liberal arts college. Part of the information gathered was about their smoking habits. The authors compared the smoking habits of the 45 men who became medical doctors with those of their classmates. Their data cover the period from the early 1940's until 1967. It thus fortuitously provides prospective data on changes in the smoking habits of a group of doctors during the period when a major change in attitudes toward smoking took place in the United States.

The study found that, initially, there was a lower proportion of smokers among students who later became doctors than among their classmates; when the men were about 28 years of age, however, a much higher percentage of the doctors (65 percent) were smoking cigarettes in contrast to 45 percent of the other men, and a somewhat higher proportion of the doctors were smokers of all tobacco products (almost 70 percent as compared with about 60 percent). During the 1950's, the proportion of smokers of all tobacco products in both groups

TABLE 3.—Smoking habits of doctors as reported in studies carried out between the years 1949 and 1975; data in percentages

Year and author of survey	Smokers		Former smokers	Nonsmokers	
	Cigarette	All forms		All	Never smoked
1949					
Vaillant, G.E. (*68*)	60	60			
1954					
Snegireff, L.S. (*62*)	51.1			32.9	16.4
1959					
Snegireff, L.S. (*63*)	38.5			44.5	
Garfinkel, L. (*24*)	39.6				
1961					
Garfinkel, L. (*24*)	38.3				
1963					
Burgess, A.M., Jr. (*9*)	38				
Garfinkel, L. (24)	32.6				
1964					
Modern Medicine (36)	22.5	47.8	31.8	52.2	20.4
Tate, C.I. (*65*)	30		45[a]	70[a]	25[a]
Vaillant, G.E. (*68*)	35[b]	60[b]			
Weitman, M. (*70*)		39.2	27.2	60.8	33.6
1966					
Modern Medicine (*35*)		41.2		58.8	
1967					
Coe, R.M. (*13*)	26.8-32.6		33.4-39.3		33.9-34.0
Garfinkel, L. (24)	29				
Noll, C.E. (*49*)	30		36[a]		35[a]
Vaillant, G.E. (*68*)	32[b]	60[b]			
1968					
Monson, R.R. (*39*)	24		37.8[a]		14.2[a]
Burgess, A.M. Jr. (*9*)	25.5				
Westling-Wikstrand, H. (*71*)	35.8[c]		13.6[a,c]		42.0[a,c]
1969					
Greenwald, P. (*26*)		24	40		30
Levitt, E.E. (*31*)	16.8[a]			83.2[a]	
1970					
Modern Medicine (37)		36.9		63.1	
1971					
Lipp, M.R. (*32*)	21		40[a]		39[a]
1972					
Fulghum, J.E. (*22*)	18		45[a]		37[a]
Garfinkel, L. (25)	19.5				
1975					
National Clearinghouse for Smoking and Health (*46*)	21		37[a]	79[a]	42[a]

[a]Of cigarettes only.
[b]Approximately.
[c]Women only.

was about 60 percent and of cigarette smokers about 45 percent; the doctors, however, had a lower proportion of heavy cigarette smokers.

During the 1960's, neither group gave up smoking in large numbers, with the proportion of doctors who smoked any tobacco product remaining at about 60 percent and the smokers among their former classmates dropping to somewhat less than 50 percent. The proportion of cigarette smokers in both groups, however, did decrease sharply: in 1967 only about half the smokers in each group smoked cigarettes. The number of cigarettes smoked also reflected the pattern set in the 1950's: in 1967 less than 15 percent of the doctors smoked more than 10 cigarettes a day while 20 percent of their former classmates were smoking more than a pack a day.

The American Cancer Society's prospective study (*25*) of a cohort of 5,000 physicians in 25 States found that, of those 2,899 doctors who were in all four surveys, the percentage who were cigarette smokers declined from 38.6 percent in 1959 to 19.5 percent in 1972.

Three separate studies of Massachusetts physicians found that cigarette smokers made up 51.8 percent of the state's doctors in 1954 (*62*), 38.5 percent in 1959 (*63*), and only 24 percent in 1968 (*39*).

The 1960's produced a flurry of studies and polls on the smoking habits of physicians that may well have reflected concern about their role as exemplars.

Modern Medicine carried out three surveys of physicians in the United States (*35, 36, 37*). In 1964, when questionnaires were sent to all physicians in active practice, 47.8 percent of the physicians responding said they smoked tobacco in some form and 22.5 percent said they were cigarette smokers (*36*). (As can be seen in Table 3, the latter figure seems very much out of line with other surveys at that time and may underestimate the proportion of cigarette smokers among practicing physicians.) In 1966, when only a small sample of physicians was polled, 41.2 percent of the doctors said they smoked (*35*). All active physicians were again questioned in 1970, and only 36.9 percent of those responding said they smoked (*37*).

The response rates for the two large surveys by *Modern Medicine* were only 31.4 percent in 1964 and 16.6 percent in 1970, and the data they reported may therefore be particularly susceptible to a tendency reported by Burgess and Tierney (*9*) for cigarette smokers to be underrepresented among physicians who respond to mailed questionnaires. When these authors contacted a sample of the 13.3 percent of physicians in Rhode Island who had not responded to two mailed questionnaires, they found that, although only 22.6 percent of those responding by mail said they smoked cigarettes, 45.5 percent of their sample of nonrespondents were cigarette smokers. The authors applied their finding to data they had already reported (*10, 40*) on the smoking habits of Rhode Island physicians and estimated the correct percentages of cigarette smokers to have been 38 percent in 1963 and 25.5 percent in 1968 (*9*).

The data in the national surveys of physicians carried out for the National Clearinghouse for Smoking and Health were based on responses to questionnaires mailed to two different samples of 5,000 medical doctors and on responses obtained in a telephone survey of samples of nonrespondents (*46, 49*) to the mailed questionnaire. These surveys indicated that the proportion of physicians smoking cigarettes decreased from 30 percent in 1967 to 21 percent in 1975. The latter figure agrees with the finding of Lipp and Benson in 1971 (*32*) that 21 percent of 1,314 physicians chosen at random from four geographical areas smoked cigarettes.

Smoking Habits of Dentists

Two major studies on the smoking habits of dentists have been carried out for the National Clearinghouse for Smoking and Health. A 1967 study by Noll (*48*) reported that 34 percent of dentists were currently smoking cigarettes; in a similar survey in 1975 the proportion of dentists smoking cigarettes had decreased to 23 percent (*46*).

Smoking Habits of Nurses

A 1969 national survey of a sample of 6,003 nurses for the National Clearinghouse for Smoking and Health found that 36.9 percent of the nurses smoked cigarettes (*51*).

Phillips (*52*), on the other hand, reported that a 1970 survey of Canadian nurses found that only 28.7 percent were smokers. This finding may underestimate the true percentage of smokers among Canadian nurses, however, because only 53 percent of the sample responded and there was no follow-up of nonrespondents. Noll (*51*) reported that, in his U.S. survey, the proportion of nurses who said they smoked increased from 31 percent of those who responded to a first mailing of the questionnaire to 42 percent of those who, having failed to respond to four mailed questionnaires, were reached by telephone.

A national survey of nurses carried out for the National Clearinghouse for Smoking and Health (*46*) reported that 39 percent were smokers in 1975.

Smoking Habits of Pharmacists

Two national surveys carried out for the National Clearinghouse for Smoking and Health reported that, of the pharmacists sampled, 34.5 percent in 1969 (*50*) and 28 percent in 1975 (*46*) were cigarette smokers. A study in Iowa of a smaller number of pharmacists reported that 32 percent smoked cigarettes in 1969 (*69*).

TABLE 4.—Proportion of cigarette-smoking health professionals who said they never smoked in front of patients, students, or patrons, 1967–1969 and 1975

Professional group	Year of survey	
	1967–1969[1]	1975[2]
Doctors	39	54
Dentists	50	65
Pharmacists	22	41
Nurses	75	89

[1]SOURCE: Noll C.E. (*48-51*).
[2]SOURCE: National Clearinghouse for Smoking and Health (*46*).

Smoking Habits of Other Health Care Providers

There are few studies of the smoking habits of other health care providers. However, there was a 1972 survey of nursing home administrators and 34 percent smoked (*38*).

In summary, as of 1975, proportionately more doctors and dentists than other health care providers are setting a good example by not smoking cigarettes. By contrast, nurses as a group in 1975 have proportionately more smokers (39 percent) than the general female population (29 percent) and equal the proportion of smokers among adult males (39 percent) (*42, 46*). Since persons in the nursing occupations make up more than half the employees in health occupations (*67*), this failure on the part of the nursing profession to act as nonsmoking exemplars has potentially great impact.

Smoking in the Presence of Patients or Customers

Those health care providers who smoke may still act as exemplars if they do not smoke in the presence of patients or customers. In the several national surveys conducted for the National Clearinghouse for Smoking and Health (*46, 48-51*), the respondents were asked if they smoked in front of patients, students, or patrons (customers). Table 4 summarizes the findings of these surveys on this question.

From Table 4 it appears that, of health professionals who smoke, nurses are much better than doctors at not smoking in front of the public when they are functioning as health care providers. Whether this is due to their desire to set a good example or to the nature of their job and work setting is not clear. The 1969 survey (*51*), however, found a smaller proportion of smokers among nurses who worked in the community, in nursing education, in schools, or in doctors' offices. The author hypothesized that the low rates of cigarette smoking (24 to 28 percent) among nurses who work in these settings might be due to their awareness of their exemplar role.

Eisinger (*19*) compared pediatricians with the other physicians in the 1967 national survey of doctors (*49*) and reported that 30 percent of the pediatricians and 44 percent of the other doctors who smoked cigarettes did so in front of patients. Apparently pediatricians were more aware of their exemplar role; their actions in this regard, however, were not as likely to extend to their own smoking habits as were those of other doctors: 36 percent of pediatricians and 30 percent of all doctors smoked cigarettes in 1967 (*49*).

In the surveys described above (*46, 48-51*), the question on smoking in front of students was asked only of nurses. Although the exemplar role of health professionals in medical, dental, and other schools in which future health professionals are being trained would appear to be an important one, little research has been done on the role of the faculty of these institutions as exemplars.

In Ireland, Herity, et al. (*27*) surveyed the smoking behavior of the faculty of University College, Dublin. They did not ask about smoking in front of students but did report a much lower percentage of smokers among both the medical (45 percent) and nonmedical (42 percent) staff than existed in the general population of Ireland (68 percent) in 1971. Although a slightly higher proportion of the medical faculty smoked compared to the nonmedical faculty, the medical faculty also had a higher proportion of former smokers (35 percent as compared with 24 percent). The authors report that these differences between the medical and nonmedical staff were not statistically significant.

At the 1967 World Conference on Smoking and Health, Ravenholt (*56*) reported on a survey he had made of the faculty of the University of Washington Medical School. He found that more than 25 percent of the medical faculty, more than 25 percent of the dental faculty, and 50 percent of the nursing faculty were cigarette smokers. These figures for medical and dental faculties are lower than those of doctors and dentists in general at that time, but the figure for faculty nurses is higher than that of nurses in general.

Health Care Providers as Health Educators

Attitudes Toward the Role of Health Educator

In 1967, the Committee on Youth of the Council on Child Health of the American Academy of Pediatrics issued a statement emphasizing the importance of pediatricians as educators. That statement said that the physician had an obligation to prevent patients from beginning to smoke and recommended that physicians give parents information on the harmful effects of smoking when their first child is born (*14*).

A number of surveys have asked health professionals about their attitudes toward several kinds of health education activities. The national surveys sponsored by the National Clearinghouse for Smoking and Health during the late 1960's and in 1975 (*46, 48-51*) asked the

TABLE 5.—Percentages of health professionals who agreed with statements about their responsibilities in the role of teacher, 1967–1969[1] and 1975[2]

Statements of health professionals' responsibilities	Professional group and year of survey							
	Doctors		Dentists		Pharmacists		Nurses	
	1967	1975	1967	1975	1967	1975	1967	1975
Should be more active than they have been in speaking to lay groups about cigarette smoking.	74	82	57	68	56	68	62	74
Should help patients (patrons) who wish to stop smoking to accomplish this.	92	—	72	—	77	—	85	—
Should convince paients (patrons) to stop smoking.	84	74	59	61	46	51	66	77

[1]SOURCE: Noll, C.E. (*48–51*).
[2]SOURCE: National Clearinghouse for Smoking and Health (*46*).

TABLE 6.—Percentages of the membership of the American Public Health Association and the Canadian Public Health Association agreeing with statements about their role of teacher, 1972 and 1974

Statements on health professionals' responsibilities	[1]Proportion of APHA members in agreement	[2]Proportion of CPHA members in agreement
Should be more active than they have been in speaking to lay groups about cigarette smoking.	80	90
Should convince people to stop smoking.	85	93

[1]SOURCE: Atwater, J.B. (*3*).
[2]SOURCE: Matthews, V.L. (*33*).

respondents if they agreed with three statements that are pertinent to an educational role. Table 5 shows the proportions of doctors, dentists, pharmacists, and nurses who agreed with each statement.

Two of the above statements were used in surveys of the American and the Canadian Public Health Associations (*3*, *33*). Table 6 compares the proportion of their members who agreed with each statement.

Coe and Brehm (*13*) also asked their large sample of general practitioners about their attitudes toward their responsibilities in

getting their patients to stop smoking. They found that 92 percent agreed they should help persons who wanted to stop smoking to do so, and that 83 percent believed they should convince their patients to stop smoking.

Actions as Health Educators

Somewhat fewer health care providers act as health educators than believe they should do so. Surveys in 1967 and 1970 found that about two-thirds of doctors (*13, 37, 49*) but only one-third of dentists (*48*) inquired about their adult patients' smoking habits as a routine procedure. As for teenage patients, in 1967 only about half of doctors who treated teenagers said they routinely asked if they smoked (*49*).

Two 1967 studies that asked about doctors' routine advice to patients concerning smoking reported, in one case, that 29 percent (*49*) and, in the other, 62 percent (*13*) of doctors said they routinely advised all patients against smoking. Differences in the composition of the groups surveyed have affected the surveys' findings on this question. The first survey (*49*) used a simple random sample of the membership (excluding certain classes of members) of the American Medical Association, and the second (*13*) used a nationwide sample of internists and general practioners, stratified for several variables. Also, differences in the context in which the question was asked may have elicited different responses. The first survey (*49*) asked about the advice on smoking in the context of whether the advice was given when the patients had specific health problems, with the alternative "any condition" being given as the final condition in the list. The second survey (*13*) did not report the question exactly as asked but said that it "sought information on how often the physician advised the patient who smoked to give up cigarettes even though the condition being treated was unrelated to smoking."

Proportionately fewer pediatricians than physicians in general advised parents not to smoke in 1967 (*19*). This may reflect the relatively high rates of smokers among pediatricians (*19*). As has been reported in several studies (*8, 13, 49*), physicians who were smokers were less likely than nonsmokers to advise their patients not to smoke.

More than half of the doctors in the 1967 national survey reported by Noll (*49*) said they warned all patients with lung, respiratory, or heart conditions, peripheral vascular disease, peptic ulcers, or mouth or lip lesions against smoking. Less than one-third routinely advised pregnant women not to smoke. This latter finding may reflect the more recent recognition of the hazards of smoking during pregnancy (see the Chapter on Pregnancy and Infant Health).

Stamler, et al. (*64*) studied industrial workers who were referred to their physicians in a coronary heart disease detection project. They interviewed both the workers and their physicians about 6 months after the referral and found that 80 percent of the referred smokers

had seen their doctors. Of those who did so, 70 percent had been advised to stop smoking.

Among dentists in 1967 (*48*), 75 percent said they warned patients with leukoplakia against smoking, but only 36 percent gave that warning to patients with any soft tissue lesion. Some dentists have taken action to help their patients stop smoking. In 1970, for instance, the directorate of dental services at Wilford Hall USAF Medical Center, Lackland Air Force Base, Texas, instituted a cessation program for interested patients (*12*).

When Noll (*51*) asked nurses in 1969 if they had discussed smoking and health with patients and students, only 30 percent said they had discussed it with more than one-third of the patients and students with whom they had contact. As with physicians, nurses who smoked were less likely than those who did not smoke to advise patients and students against smoking. About 65 percent of nonsmokers, but only 50 percent of smokers, had suggested to at least 5 percent of their patients or students that they should stop.

In Noll's 1969 survey of pharmacists (*50*), only 17 percent said they had discussed smoking and health with more than one-third of their patrons (customers), and only 50 percent of nonsmokers and 39 percent of smokers had warned at least 5 percent of their patrons against smoking. Vlassis (*69*) found that, although more than half of Iowa pharmacists surveyed did not believe the state Pharmaceutical Association should take a position on the sale of cigarettes, almost 90 percent were in agreement with the Association's actions in distributing educational material on the harmful effects of tobacco.

Health professionals who train others have an extended opportunity to influence the smoking habits of others; not only may they influence those persons and students they see themselves, but they may also indirectly influence the patients who will be treated by the students they teach. It appears, however, that this opportunity has been frequently neglected by medical schools. In 1969, Anderson (*2*) surveyed the 28 medical schools in the United Kingdom and reported that less than one-third advised entering medical students who smoked that they should stop, and less than one-fourth taught all students during their first year of clinical training about the medical effects of smoking. Knopf (*29*) reported that about one-fourth of medical students at the University of Manchester said in 1972 that they had been advised that smoking was inappropriate for a doctor, and almost two-fifths mentioned antismoking attitudes of the staff. However, about 10 percent mentioned that the staff smoked while teaching and about the same number had heard a teacher justify smoking. At least one medical school has taken steps to provide all its students with information on the hazards of smoking; the Middlesex Hospital Medical School, London, began a policy in 1970 of giving all preclinical

students information and an opportunity to discuss smoking and health on the day they enter the school (*5*).

Effectiveness as Health Educators

Knopf and Wakefield (*30*) interviewed 99 percent of the medical students at the University of Manchester in 1972 and reported that the students were more likely to begin smoking during their training than to give it up and, if they already smoked upon entering school, were more likely to smoke more rather than less during the course of their study. Even so, less than one-third of the medical students smoked, and more than 80 percent considered smoking a major health risk. Knopf (*29*) reported that only 9 percent of a sample of these students said that some aspect of their medical training was relevant to their deciding to stop or to cut down on smoking.

Purvis and Smith (*55*) surveyed the medical and basic science graduate students at the University of Mississippi Medical Center and reported in 1976 that significantly more of the graduate students than medical students smoked (19 percent as compared with 11 percent). They also found that of the former smokers among the medical students, one-third had quit smoking during the preceding year; of these, almost half gave their future profession as a significant reason for stopping.

When the results of physicians' advising patients to stop smoking are measured, generally fewer than one-fourth of the patients do so for any length of time; however, patients who are ill with a disease affected by smoking may respond in proportionately greater numbers. For example, Baric, et al. (*7*) counseled some women at a prenatal clinic about the hazards of smoking and did not counsel others. Eleven weeks later they found that only 14 percent of the group who had been counseled had stopped smoking. Only 4 percent of the women who had not been counseled had stopped.

Williams (*73*) reported that a somewhat higher proportion of patients being treated for chest conditions quit or cut down on smoking after being given routine advice to do so; after 3 to 5 months, 37 percent of patients who had formerly smoked at least 10 cigarettes a day had stopped smoking, and 24 percent had reduced their smoking by at least one half.

Rose and Udechuku (*58*) reported that many patients tended to forget within a few weeks that they had been advised against smoking. In a study of patients under 70 years old who had been discharged from a hospital after being treated for atherosclerotic disease, chronic bronchitis, or hypertension, they found that, when asked less than 4 weeks after discharge, about three-fourths recalled being advised against smoking, but when asked more than 8 weeks after discharge, a little more than half remembered being advised. They also reported

that 34 percent of the patients who recalled the advice had stopped smoking at the time of the survey.

Mausner (*34*) compared respiratory-disease patients' recollection of being advised against smoking with their physicians' notation of advice in medical records. At least 1 year after they had been cautioned not to smoke, almost all remembered the advice and more than half had stopped smoking.

Pincherle and Wright (*53*) studied the effectiveness of advice against smoking given to business executives during routine physical examinations. They reported that at the next routine examination about one-fourth of the executives had stopped smoking cigarettes or had reduced their cigarette smoking by 30 percent. They compared the effectiveness of the physicians' advice with the smoking habits of the physicians and found that, of 10 doctors, the 3 who had never smoked or who had smoked no more than five cigarettes a day tended to have more patients who gave up or cut down on smoking (24 to 37 percent of their patients did so) than did doctors who had previously been heavy cigarette smokers (17 to 23 percent of their patients stopped or cut down on smoking). Apparently, these findings are not a product of individual differences in persuasiveness among the doctors, because those doctors who were most successful in influencing patients against smoking were least successful in dealing with patients' weight problems.

The study by Stamler, et al. (*64*) of industrial workers who were referred to their physicians in a coronary heart disease detection project found that 20 percent of the workers who had been advised to quit smoking by their doctors had stopped 6 months later.

In summary, these studies tend to show that, if doctors advise their patients not to smoke, about 10 to 25 percent may quit or reduce the amount they smoke.

Health Care Providers as Managers in the Control of Smoking in Health Care Settings

Smoking in health care facilities is being increasingly limited by law, and health care providers in administrative positions will be involved in this implementation. This trend toward limiting smoking in public places and medical care facilities is evident in several recent state legislative reports from the National Clearinghouse for Smoking and Health (*4, 43-45*).

Some health care providers in administrative positions have acted to control smoking in health care facilities, regardless of legal requirements, for a variety of reasons other than fire prevention: insuring that employees set a nonsmoking example, protecting nonsmokers from tobacco smoke, reinforcing advice not to smoke, and providing an opportunity for smokers to stop smoking.

Attitudes Toward Controlling Smoking

In 1967, Schnitzer reported on an informal survey he had made of health professionals concerning the question of controlling smoking in hospitals. The consensus of this group of health professionals was that "absolute nonsmoking hospitals would be ideal, but it is not possible at this time" (*60*).

Since 1970, health care providers have begun to move toward greater control of smoking in health care settings, as indicated by resolutions calling for the control of smoking in these facilities by various professional groups. In 1975, for example, the Canadian Hospital Association passed a resolution requesting the prohibition of smoking in patient areas and for the establishment of nonsmoking sections in public and general use areas of hospitals (*11*). The resolution also recommended that hospitals ban the sale of cigarettes on their premises. In 1976, the same group resolved to adopt a policy of actively discouraging the sale and use of tobacco products in Canadian health facilities as an example for the public and to emphasize the hazards of smoking. Even earlier than these resolutions, the American Cancer Society was conducting a nationwide campaign against the sale of cigarettes in hospitals (*18*). And in Britain, in 1977, the Social Services Secretary announced a new antismoking drive which included guidelines to hospitals on restricting smoking (*66*).

Actions to Control Smoking

Willingness on the part of health care providers to act to control smoking in health care settings has developed more slowly than their willingness to assume the roles of exemplars and health educators. In a 1963 letter to *The New England Journal of Medicine*, Gage (*23*) reported that the general staff of the Cooley Dickenson Hospital, Northampton, Massachusetts, had passed a resolution recommending that the sale of cigarettes in the hospital be stopped. The hospital trustees voted to deny their request, however, and agreed only to place signs which indicated the hazards of smoking. Nevertheless, there were hospitals even at that early date that were willing to ban the sale of cigarettes. Another 1963 letter (*28*) to *The New England Journal of Medicine* reported that the Emerson Hospital in Concord, Massachusetts, had banned the sale of cigarettes in December 1962 and had banned smoking by visitors earlier in the same year.

In 1973 the Connecticut Lung Association (*17*) carried out a statewide survey of hospital smoking policies. The findings are shown in Table 7.

A survey in 1972 of 222 nursing homes (*38*) reported that 2 percent had no restrictions on smoking by patients, 4 percent did not permit patients to smoke, and the remainder had some restrictions. Of those permitting smoking by patients, 68 percent did not permit smoking in