Public Health Briefs

Prescribing CPR: A Survey of Physicians

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Abstract: We interviewed 55 cardiologists, internists, and family practitioners to determine attitudes and practices regarding cardiopulmonary resuscitation (CPR) counseling. There was unanimous support for citizen-CPR. However, only 40 per cent of the physicians interviewed recommended CPR training to spouses of patients with coronary heart disease and 42 per cent did not provide counseling about cardiac arrest. This suggests that the doctor's office can be better utilized in the promotion of CPR education. (*Am J Public Health* 1982; 72:1158–1160.)

Introduction

The value of citizen-CPR (cardiopulmonary resuscitation) in increasing survival from out-of-hospital cardiac arrest has been well documented.[1–3] Because the majority of cardiac arrests occur in the home, families of patients with coronary heart disease have long been targeted as high-priority for CPR instruction.[4] Despite widespread efforts (American Heart Association, American Red Cross, and local hospitals and fire districts), only a small proportion of this priority group appear to have been trained. A King County, Washington survey of spouses of high-risk cardiac patients found that 53 per cent of spouses of cardiac arrest survivors and 77 per cent of spouses of myocardial infarction survivors did not know how to perform CPR six months following the cardiac event. Further, only 16 per cent of untrained spouses obtained CPR instruction during this six-month period.[5]

This study surveys the attitudes and practices of physicians in King County, Washington—an area advanced in its approach to CPR education—regarding recommendations of CPR training to spouses of patients with coronary heart disease.

Method

In July 1981, a random sample of cardiologists, internists, and family practitioners in King County, Washington, was selected from the King County Medical Society directory. We intended to interview 10 per cent of eligible internists and family physicians; cardiologists were overrepresented (20 per cent of sample) due to the small population size and due to their involvement with patients at risk for cardiac arrest. Of the 96 physicians contacted, 55 (57 per cent) consented to an in-person interview (see Table 1), 9 per cent of the estimated eligible population of physicians in King County.

A 15-minute structured and open-ended interview assessed physicians' routine counseling practices for patients with coronary heart disease. Particular attention was paid to recommendation of CPR training for spouses and general feelings toward citizen-CPR.

Results

Physicians had an average of 14 years practice experience. All the physicians managed patients at high risk for cardiac arrest, 9 family practitioners and 7 internists occasionally obtained a consult from a cardiologist, and 8 family practitioners and 5 internists frequently referred complex cardiac patients to specialists for care. No discernible differences in CPR training, attitudes towards citizen-CPR, or recommendation of CPR training to spouses of cardiac

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TABLE 1—Summary of Physician Responses by Specialty

	Number Responding			
	Cardiologist	Internist	Family Practitioner	TOTALS
Estimated # eligible in King County, Washington	47	277	303	627
Response rate	8/11	23/35	24/50	55/96
Reasons for refusal				
Vacation	1	4	9	14
Too busy	2	8	17	27
Per cent of estimated eligible interviewed	17%	9%	9%	9%
Estimated patients in physicians practice with coronary heart disease				
<10%	—	3	6	9
10–39%	—	16	18	34
40–70%	1	4	—	5
>70%	7	—	—	7
Office staff trained in CPR				
Yes	5	8	12	25
No	3	15	12	30
Spouse included in heart disease counseling (N = 53)				
Always or frequently	8	14	12	34
Infrequently or never	—	7	12	19
Emergency instructions provided to spouse for cardiac arrest (N = 53)				
Yes	6	13	12	31
No	2	8	12	22
CPR training recommended for spouses of high risk patients				
Yes	5	8	9	22
No	3	15	15	33

patients existed among this subgroup compared to other physicians in our sample. See Table 1 for further details.

Fifty-three physicians (96 per cent) counseled their coronary heart disease patients as a routine part of management. Discussion of life-style alterations and risk factor elimination was most frequently reported (83 per cent), followed by information about medications (45 per cent), and anatomical or physiological explanation of the disease (26 per cent). Prognosis, preparations for the possibility of death, and CPR training for spouses were ranked as the lowest counseling priorities by 60 per cent of the physicians. Spouses were included in counseling by two-thirds of the physicians.

In counseling, 49 physicians (89 per cent) talked explicitly about the risk of heart attack associated with coronary heart disease. Thirty-two (59 per cent) provided specific instruction for what to do in case of a cardiac arrest, including the emergency telephone number in their community. However, 35 doctors (63 per cent) felt that spouses would be unprepared to respond correctly in the event of a cardiac arrest.

Almost all physicians interviewed expressed support for citizen-CPR training and 84 per cent reported having received formal training themselves. Furthermore, 89 per cent of our subjects felt that the doctor's office is an appropriate place to advocate CPR training.

Twenty-two physicians (40 per cent) reported recommending CPR training to spouses (eight in all cases, and 14 for selected high risk patients). This practice was twice as high among cardiologists compared to other physicians. Most spouses were referred to the Seattle Fire Department CPR Training program. Thirty-three doctors did not recommend CPR for spouses. Their reasons included psychological or physical concern for the spouse, or a negative assessment of the patient's condition. Thirteen physicians listed no particular reason.

Discussion

We found that most physicians who treat patients with coronary heart disease (the underlying cause of an estimated 80 per cent of cardiac arrests) agree that public CPR training is an appropriate undertaking. Nevertheless, fewer than half of the physicians we interviewed recommend CPR training to spouses of their high risk patients. Cardiologists, as indicated by our small sample, recommend CPR as part of routine counseling practice; however, such does not appear to be the case with internists and family practitioners. Certainly there may be valid reasons for this observation such as case mix. Yet we find these results surprising because of the positive physician attitudes toward their role

in advocating CPR. The percentage of internists and family practitioners (36 per cent) who recommend CPR to spouses of high risk patients is only slightly higher than the estimated percentage of CPR trained individuals in the general community (30 per cent).

Medical textbooks do not acknowledge the role of physicians in recommending CPR training even to families of their cardiac patients. They should be encouraged to communicate to their patients that CPR is a basic lifesaving technique that every adult can and should learn. One opportune moment to do so is after the initial diagnosis of a coronary heart disorder, when, during coventional counseling sessions, the attention of the patient and family can be focused on medical treatment and life-style alternations.

REFERENCES

1. Thompson RG, Hallstrom AP, Cobb LA: Bystander initiated cardiopulmonary resuscitation in the management of ventricular fibrillation. Ann Internal Medicine 1979; 90:737–740.
2. Lund I, Skulberg A: Cardiopulmonary resuscitation by lay people. Lancet 1976; 2:702–705.
3. Eisenberg M, Bergner L, Hallstrom A: Paramedic programs and out-of-hospital cardiac arrest: I. factors associated with successful resuscitation. Am J Public Health 1979; 69:30–38.
4. Standard for cardiopulmonary resuscitation (CPR) and emergency cardiac care (ECC). JAMA (supplement) 1974; 227:833–868.
5. Bergner L, Eisenberg M: CPR—who should be trained? Emergency Health Services Quarterly (In Press).

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Comprehensive Course on Colorectal Cancer Offered without Charge to Primary Care Physicians

Experts in gastrointestinal cancer and in family medicine have developed a comprehensive two-year, multi-element continuing medical education (CME) course for primary care physicians, as part of a nationwide effort to inform doctors about one of the most common and lethal forms of cancer.

The course, being offered without cost to more than 50,000 primary care physicians and related specialists throughout the United States, is primarily a home-study course, to be augmented by visiting faculty symposia around the country.

Entitled "Colorectal Cancer: Essentials for Primary Care Physicians," the course is sponsored by the Sloan-Kettering Cancer Center and offers physicians up to 27 hours of CME credit through the American Medical Association, the American Academy of Family Physicians, the American Osteopathic Association, and the American College of Obstetricians and Gynecologists. The course consists of an audio-cassette announcement package, a pre-course self-assessment, a clinical roundtable series, the visiting faculty component, and a post-test self-assessment.

The need for such an educational effort was recently identified by the International Workgroup on Colorectal Cancer, and was implemented in order to increase the knowledge and skills of primary physicians in identifying and treating these disorders.

The course is being produced by Health Learning Systems Inc., 200 Broad Acres Drive, Bloomfield, NJ, 07003, under an educational grant from SmithKline Diagnostics. Physicians who wish to participate in the program should send their name, address, and medical specialty along with their request for information to Health Learning Systems at the above address.