
Family Practice Grand Rounds

A Young Parent Dies: The Family Physician and the Survivors

Patricia Boiko-Weyrauch, MD, Erna Furman, BA, HON (London), Kenneth G. Reeb, MD, and Jack H. Medalie, MD, MPH
Charleston, South Carolina, and Cleveland, Ohio

JACK H. MEDALIE, MD (*Professor and Chairman, Department of Family Medicine*): This week's Family Practice Grand Rounds at Case Western Reserve University will be a working conference in which Ms. Patricia Boiko-Weyrauch will present a family with whom she is currently working. This Rounds deals with the impact on the family of a sudden, violent death of a parent, and the role of the family physician in working with such families. We will focus on the following three areas:

1. "Normal" grief reactions and how family physicians can help families in their grief.
2. The importance of empathy.
3. The significance of feelings in grief; recognizing professional and lay attitudes toward these feelings and the need to express them.

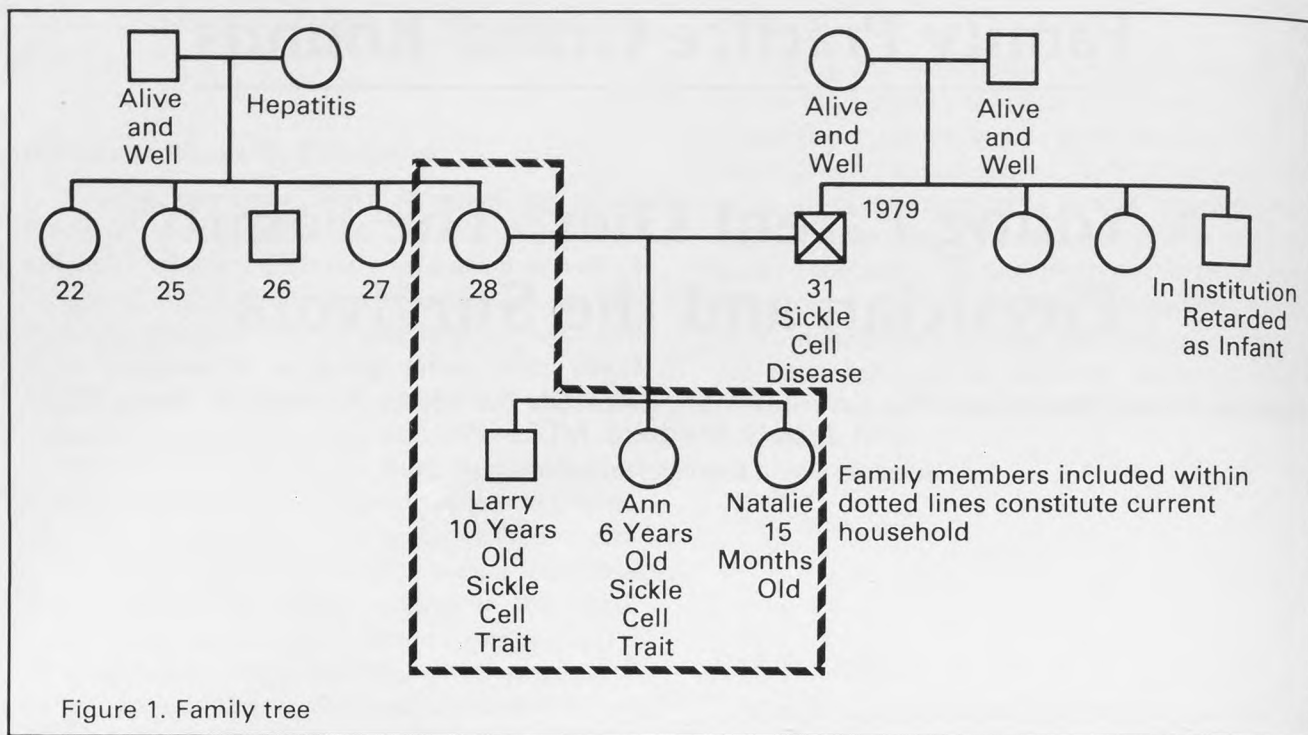
This is an important problem for family physicians. An estimated 30.8 married men and women

per 100,000 population die suddenly from suicide, homicide, or accident each year.¹ Although we do not know exactly what proportion of these people have surviving young children, we know the problem is common and is important in family practice. Ms. Boiko-Weyrauch, a fourth-year medical student at Cornell, is working with us this month on an elective clerkship at the Family Practice Center of University Hospitals of Cleveland. She has generously agreed to share her experiences in working with this family in the hope that we can all develop more effective skills in working with family tragedies. Ms. Boiko-Weyrauch will present the family, whom she met on their initial visit to the University Hospitals Family Practice Center. She will also share excerpts of the videotape recording of her initial interview with the family.

We are very fortunate to have Mrs. Erna Furman, a child analyst at the Cleveland Center for Research in Child Development and author of *A Child's Parent Dies*.² Mrs. Furman will consult with us about this particular family and will discuss the management of grief in families where a parent has died.

We are also honored to have with us this morning Dr. Gabriel Smilkstein, Associate Professor of Family Medicine at the University of Washington School of Medicine in Seattle, who is a visiting professor in our department this week.

From the Department of Family Medicine and the Department of Psychiatry, Case Western Reserve University, and the Cleveland Center for Child Development, Cleveland, Ohio. At the time this Grand Rounds took place, Dr. Boiko-Weyrauch was a fourth-year medical student at Cornell University in New York. She is presently a resident in Charleston, South Carolina. Requests for reprints should be addressed to Dr. Kenneth G. Reeb, Department of Family Medicine, University Hospitals of Cleveland, 2065 Adelbert Road, Cleveland, OH 44106.



Case Presentation

MS. PATRICIA BOIKO-WEYRAUCH (*Fourth-year medical student, Cornell University, New York*): The R. family consists of Mrs. R., 28 years old, and her three children: Larry, a 10-year-old boy, Ann, a six-year-old girl, and Natalie, a 15-month-old girl (Figure 1). Mr. R., aged 31 years, died four months prior to the family's first visit to the University Hospitals Family Practice Center. He was shot "as an innocent bystander after attempting to help someone," according to Mrs. R. Since her husband's death, Mrs. R. complained of loss of appetite, a five-pound weight loss, and trouble sleeping. She had sought help at a psychiatric health clinic one month after her husband's death. There, she was given a two-month supply of Valium, Dalmane, and Tofranil, and instructed to return for follow-up.

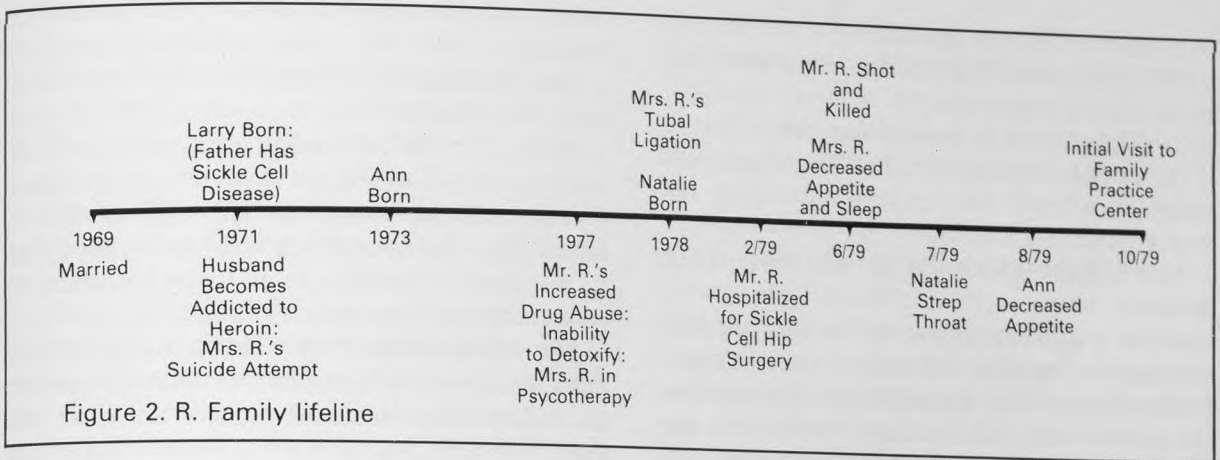
Mrs. R. reported a history of a suicide attempt in 1971 related to her husband's becoming addicted to heroin, which he used to treat pain related to his sickle cell disease. She was hospitalized for one day following that attempt. She denies any subse-

quent suicidal ideation, although Mr. R.'s drug problem continued throughout their marriage. In 1977, after an unsuccessful attempt at detoxification and methadone maintenance by Mr. R., Mrs. R. again became depressed and sought psychiatric help. She was treated with psychotherapy and Sinequan for one month.

At the initial visit, Natalie, the 15-month-old daughter, had an upper respiratory tract infection. Mrs. R. also complained that Ann, the 6-year-old girl, was not eating well, and Larry, the 10-year-old boy, refused to discuss or openly grieve his father's death.

There were no other medical complaints. Mrs. R. was unaware of any school difficulties for the two older children.

During the second visit a biomedical/psychosocial "lifeline" was constructed (Figure 2). This helps us gain some perspective about the temporal relationships among various biomedical and psychosocial events which have occurred to this family. Also during this second visit, the family was interviewed to further determine the impact of this tragic death on the surviving family members.



Video Transcript

MS. BOIKO-WEYRAUCH (to Larry): "I hear that your father died recently."

LARRY: "Um huh."

MS. BOIKO-WEYRAUCH: "What happened? Can you tell me?"

LARRY: "He got shot."

MS. BOIKO-WEYRAUCH: "He got shot. How did you feel about that?"

LARRY: "Sad."

MS. BOIKO-WEYRAUCH: "What did you do?"

LARRY: "Cried."

MS. BOIKO-WEYRAUCH: "Do you still feel sad?"

LARRY: "Yes."

MS. BOIKO-WEYRAUCH: "Do you miss him?"

LARRY: (Nods his head yes.)

MS. BOIKO-WEYRAUCH: "What happened when your father died? What kinds of things did you think about?"

LARRY: "Nothing."

MRS. R.: "Tell her how you felt when I first told you. Tell her what you did when I told you. You don't remember?" (Larry shakes head no.)

MS. BOIKO-WEYRAUCH: "How did you tell them?"

MRS. R.: "It was real hard. Everybody tried to

get me to let them tell the kids, but I felt it was my job to tell them. There has been a lot of people at my house so they knew something was wrong. They have been used to their father being in and out of the hospital. He had sickle cell disease. He had just been in the hospital for hip surgery for three weeks in February. So, like I said, there were a lot of people around that day and the kids were catching bits and pieces of conversation so when I finally did decide to tell them, I asked them did they know that their daddy was in the hospital. They said, 'Yeah,' and asked when he was coming home. I told them he wasn't coming home this time, that he had been shot, and that he wasn't ever coming home again. I don't know if I did it right—like that, but at the time that was the only way I could—put it to them straightforward. I don't know if they understood—her (Ann) being so young; but I think he (Larry) understood it more than she did."

MS. BOIKO-WEYRAUCH: "Did you understand that?"

LARRY: (Nods yes.)

MS. BOIKO-WEYRAUCH: "What did that mean to you?"

LARRY: (Shrugs his shoulders.)

MRS. R.: "Come on now, talk. What did that mean when I told you he'd been shot and killed and wasn't ever coming home again?"

LARRY: "That he died."

MS. BOIKO-WEYRAUCH: "What does that mean when a person dies?"

LARRY: "That he doesn't come back."

MS. BOIKO-WEYRAUCH: "What happens to him?"

LARRY: "He's buried."

MS. BOIKO-WEYRAUCH: "Did you go to the funeral?"

MRS. R.: "They both went. I had a hard time with her because she didn't want to view the body. I tried to talk her into it, and told her that would be the last time she'd see her daddy. She said no, she didn't want to see him. I didn't make her go."

MS. BOIKO-WEYRAUCH: "It sounds like everything is out in the open and you told them straight—right from the beginning. (Ann) How did you feel when your mother told you that he died? Were you sad?"

ANN: (Nods yes.)

MS. BOIKO-WEYRAUCH: "What were you angry about?"

ANN: "I don't know."

MRS. R.: "Are we going to have an 'I don't know' session? Come on, let's talk. This is one thing that you really do need to do because you haven't . . . he hasn't talked about it since it happened. I haven't talked to him about it, about how he feels about it."

LARRY: (Begins to cry silently.)

MRS. R.: "If you want to cry, go ahead and cry. You haven't cried since it happened and I think this would be a good time for you to talk about it and let the doctor know how you really feel about it. (She moves Larry closer to her and puts her arm around him.) I understand how they do miss him, but they just don't talk about it; it's hard for them."

MS. BOIKO-WEYRAUCH: "It's a hard thing to talk about. Sometimes if they know you're feeling sad they may not want to come and talk to you about it. Is that how you feel, Larry: that you don't want to make your mother feel sad by talking to her about it?"

LARRY: "Yes."

MS. BOIKO-WEYRAUCH: "How about you, Mrs. R. What was your husband like? Do you have some happy memories?"

MRS. R.: "Some good, some bad. I guess it's like that in every marriage. Some good times, some bad times. I try to focus on the good times

mainly. He was a good husband, a good father. It's been hard. I feel like crying sometimes."

MS. BOIKO-WEYRAUCH: "Do you have someone to talk to?"

MRS. R.: "A counselor. It's good to have someone to talk to and get it all out, cry and all. I try not to do that around the kids. My mother-in-law told me that even if I do feel like crying not to do it in front of the kids, to go to the bathroom or something like that. But, it's hard."

MS. BOIKO-WEYRAUCH: "It's important to have someone to talk to, just like it's important for the kids to have someone to talk to. Since the three of you feel the same way, sad and like crying sometimes, maybe you can talk about it at home if it makes you feel better. It may make you feel better to know that you can come and talk to your mother because she feels the same way as you do."

Discussion

MS. BOIKO-WEYRAUCH: At the visit following the videotaping, Mrs. R. complained that her 10-year-old son, Larry, still had not verbalized his feelings or approached his mother with sadness or remembrances. The week prior had been Mrs. R.'s "wedding anniversary" and the children had accompanied their mother and paternal aunts to the cemetery. Larry had refused to visit the gravesite, to show any emotion, or to explain his behavior. Mrs. R. continues to take Valium, 2 mg as needed, approximately twice a week, but no longer takes the sedative or antidepressant.

MRS. ERNA FURMAN (*Child Analyst, Cleveland Center for Research in Child Development, and Assistant Clinical Professor, Department of Psychiatry, Case Western Reserve University School of Medicine*): I must begin this discussion by applauding Ms. Boiko-Weyrauch for taking on such an emotionally difficult case and dealing with the family with sensitivity. I agree that the father's tragic death had potentially adverse effects on the family's health. I believe this is an important area of work for family physicians. We can learn a great deal from this presentation. I hope my comments will be taken in the constructive spirit in which they are meant.

There are three things necessary to facilitate the mourning process:

1. All fundamental needs of the patient or family must be met; ie, food, shelter, support.
2. The family must understand the events of the death.
3. The family needs assistance in tolerating and mastering the feelings associated with these events.

In this case, the presenter was concerned about facilitating the second and third of the above conditions. The first condition was already satisfied. Mrs. R. was having difficulty sleeping and eating and had just lost her main support, Mr. R. This is not pathological. On the contrary, it is only normal that a woman used to sleeping with her husband should have difficulty sleeping without him. Using the same reasoning, the family might have a decreased appetite if they have been accustomed to the father being at meals and he is no longer there.

Another concern was the mother's history of depression and attempted suicide. Mrs. R.'s suicide attempt was eight years ago when she was a very young adult. The fact that she was able to seek and obtain help for her depression showed both her personal strength and her ability to recognize when she needs assistance. (Mrs. R. was informed of the 24-hour telephone service at the family practice center which would allow her the availability of a physician at any time.)

I believe Mrs. R. is showing an appropriate grief reaction. However, she is likely to be receiving the message from health care professionals that her reaction and feelings were inappropriate.

Since the patient had come to ask for a therapist to talk to because this form of therapy had helped her before, the prescribing of Valium, Dalmane, and Tofranil, by the initial physician, may have given the patient the feeling that her grief reactions were to be suppressed. Such medications may interfere with the normal mourning process.

I would also like to comment on interviewing technique in working with bereaved family members. As we saw on the videotape, the interview began with, "I hear your father died recently . . . what happened? Can you tell me?" A more empathetic approach should be taken with a bereaved family. Phrases such as "I'm so sorry to hear that your father has died, perhaps you'd like to share some of your feelings about this," might be more helpful. Most of the conversation should be with

the mother, especially at the initial interview. Children do not tolerate a probing approach from a "stranger" such as the physician.

One of the major issues of the discussion was the idea that at this initial interview the family did *not* necessarily need to spell out their feelings. Feelings are to be 'endured' and 'had'; they are not to be gotten out and gotten rid of like some poison. Ms. Boiko-Weyrauch's comments implied that she felt that these feelings needed to be expressed to assure that there was no pathology. In encouraging the children to express their feelings, she is in effect telling them that their feelings are bad. The magnitude and profound nature of the feelings regarding this tragic event should be assumed by the physician. In this way, the physician can empathize and share these feelings, and can help the family use verbalization of feelings as a tool for tolerating and mastering them, instead of regarding words as a way to "ventilate" or "extrude" feelings like a noxious substance.

The role of the physician is to help confirm, for the individual and family members, the normal nature of the grief process and to be available to the patient, yet allow him freedom to deal with these feelings in the way most personally appropriate.

It is the surviving parent who is most important in determining the outcome of the mourning process for children. This parent must be able to communicate his/her own feelings to the children as well as to listen to the child's unhappiness. In this family, Mrs. R. was having difficulty expressing her sadness to them and required intervention to help her do so.

The child most at risk to suffer if the mother has difficulty with the mourning process in this family is the 15-month-old daughter, because her progressive development depends most closely on the mother's emotional availability and capability to enjoy the child. (As noted in the lifeline, the child developed strep throat less than one month after the death of her father and was presently being treated for an upper respiratory tract infection.) It is important that the family physician find out if the child is progressing in motility, speech, and happy affect. The physician should determine if the child has completed the developmental tasks that she began to accomplish before the death and if there has been continued development afterwards.

DAVID D. SCHMIDT, MD (*Director, Depart-*

ment of Family Medicine, University Hospitals of Cleveland and Associate Professor, Department of Family Medicine): There is a considerable amount of evidence to suggest that bereaved individuals should be encouraged to express their feelings openly. Often there is a feeling of anger or hostility directed toward the lost loved one. It is difficult to reconcile these emotions with logical thinking, and the bereaved may feel weird or evil for having such feelings. When a family physician discovers this situation, simple reassurance that these are common emotions felt by nearly everyone who loves another person can have marked therapeutic benefit.

MRS. FURMAN: I agree, but it is better to have them express their feelings freely themselves, in a therapeutic environment, rather than have them probed and prodded.

KENNETH G. REEB, MD (Associate Professor, Department of Family Medicine): I feel a need for more definitive, concrete advice from experts such as Mrs. Furman about how to respond to specific clinical situations which may arise in families in which a parent has died. What should I tell a family if the parents ask me whether the kids should be allowed to look at the body of the deceased?

MRS. FURMAN: I am always asked that question. Rather than tell them anything, listen to them, so that, with your help as listener and sharer in their thinking, they can work out what is best for all concerned.

DR. GABRIEL SMILKSTEIN (Associate Professor, Department of Family Medicine, University of Washington, Seattle; Visiting Professor, Case Western Reserve University): The cultural elements involving the patients and their grief should be considered so that the physician doesn't "lay his trip" on the patient. For example, when I was in the Congo, there were two women from different tribes giving birth. One was shouting and the other silent. There was no way I could tell either of them how to express their pain.

MRS. FURMAN: But we must distinguish between the *expression* of feelings, which is a culturally determined factor, and whether or not one *has* feelings to begin with, which is a universal human experience. Just like pain is a universal experience with functions to tell us to avoid further injury to the painful part, which has adaptive value, so too are feelings of adaptive value. It is

better to have a painful leg, than to have no leg at all. The same holds true for painful feelings.

ROBERT L. DICKMAN, MD (Assistant Professor, Department of Family Medicine): If we model or *pretend* to feel empathy, isn't that non-productive?

MRS. FURMAN: I don't think we should "pretend" empathy, we should feel it.

ROBIN MOIR, MD (Assistant Professor, Departments of Psychiatry and Family Medicine): Very often the physician finds himself being requested to provide a sedative following a death. This is almost an automatic response by relatives and very often by the physician. In some instances, this may be helpful and humane and perhaps even a prerequisite to demonstrate care and concern for the patient. However, the provision of a prescription should not be a substitute for offering oneself and empathizing with the patient's circumstances and feelings. There certainly should not be a prescription in the place of talking with the patient and one should not simply accept the demands of relatives for a prescription to be given to a bereaved family member without some discussion more directly with that person.

In many instances, the person himself would prefer not to have medication; would prefer not to have this imposed by concerned relatives who feel helpless to offer anything else. If one does provide medication, it is appropriate to provide only enough for several days and in most instances to restrict this to nighttime sedatives and perhaps to an anti-anxiety agent such as Valium to be used only as needed.

One should not move toward the prescription of medication such as antidepressants in the acute grieving state, as though this represents a clinical depression, for several reasons. Most importantly, the reason given by Mrs. Furman is that this conveys an attitude that feelings are abnormal and to be gotten rid of. Furthermore, antidepressants have no place because they are not effective with normal grief, take a long time to act, and need to be taken in a regular sustained manner when indicated.

The amount of medication prescribed should be small for two reasons: the first, that symptomatic treatment should be transient at most; and secondly, in order to ensure that the physician is not substituting pills for his own personal caring.

There should be a plan for the patient to come to the office early following bereavement.

DR. REEB: There was a marked change in demeanor and affect displayed by the patient, Mrs. R., when she shifted from the role of a grieving wife to that of a responsible mother. In the former role, her affect was flat, quiet, passive. She even actively avoided eye contact with the physician. When the interview switched to focus on the children's adjustment, she abruptly assumed the role of competent historian, taking charge of the children, relating actively to the physician, and providing detailed information about both the phenomena and the feelings associated with the entire family's adjustment to her husband's death.

Physicians should be aware of this phenomenon of roles that patients assume and how these assumed roles influence the physician's view of a situation. It seems a particularly important phenomenon for specialists such as pediatricians because parents are likely to assume that the physician's concerns are limited primarily to the well-being of the children.

ANTONNETTE GRAHAM, MSW (*Instructor, Department of Family Medicine and Faculty Social Worker, Family Practice Center*): Parents are often unable to deal with their child's grief because of being so overwhelmed by their own grief. Neighbors, family, and friends often need to intervene to do some early grief work with the child.

MRS. FURMAN: With younger children, especially, this is usually only helpful when the surviving parent gives explicit permission to prevent the child from feeling disloyal; for example the parent may say to the child, "I'm sorry, it's too hard yet for me to talk this over with you. I'll feel better in time. Right now, I've asked so-and-so to help us out and to explain things to you." And on this subject of children's grief, I would recommend to you three excellent articles by Bowlby,³ Greenberg,⁴ and Miller.⁵

DR. MEDALIE: In summary, I want to emphasize that the death of a parent is one more example of a life cycle event in which the family physician should be alert to his role in prevention and patient education, as well as to his therapeutic role. Since this is a crisis period for a family, it is an opportune moment to monitor family functioning and to promote changes which will hopefully lead to long-term improvement in that functioning. The physician must remember that grief reactions are "normal," but can be problematic. It is the professional's responsibility to monitor the prog-

ress of all family members through this process to ensure that they are accomplishing their goals individually and collectively. As Mrs. Furman has pointed out so eloquently today, this must be done with sensitivity and genuine empathy, along with the knowledge that feelings are important, and they must be acknowledged, but there is no need to become alarmed if they are not immediately expressed.

I would like to thank Mrs. Furman and Dr. Smilkstein for their help in addressing this problem today and to especially thank Ms. Boiko-Weyrauch for her excellent presentation this morning.

For your interest, two additional useful and excellent articles on grief in general were written by Siggens⁶ and Lindemann.⁷

References

1. Mortality for selected causes by marital status, United States, Part A. In National Center for Health Statistics, Health Service and Mental Health Administration (Rockville, Md): Department of Health, Education, and Welfare, PHS series 20, No. 8A. Government Printing Office, 1970
2. Furman E: A Child's Parent Dies: Studies in Bereavement. New Haven, Conn, Yale University Press, 1974
3. Bowlby J: Grief and mourning in infancy and early childhood. *Psychoanal Stud Child* 15:9, 1960
4. Greenberg L: Therapeutic grief work with children. *Soc Casework* 56:396, 1975
5. Miller JM: Children's reactions to the death of a parent: A review of the psychoanalytic literature. *J Am Psychoanal Assoc* 19:697, 1971
6. Siggens L: Mourning: A critical study of the literature. *Int J Psychoanal* 47:14, 1966
7. Lindemann E: Symptomatology and management of acute grief. *Am J Psychol* 101:141, 1944

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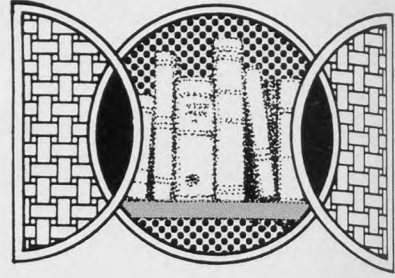
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Book Reviews



Stress and the Major Cardiovascular Disorders. Robert S. Eliot. *Futura Publishing Company, Mount Kisco, New York, 1979, 176 pp., \$14.95.*

One of the major points that Dr. Eliot makes in this book is that the major measurable cardiovascular risk factors, such as smoking, cholesterol, hypertension, obesity, family history, and inactivity, account for only about one half of the major cardiovascular disorders. Stress is identified as a major factor in the major cardiovascular disorders. The author refers to the Kennedy Space Center and the high rate of coronary artery disease among the ground support personnel despite normal serum cholesterol levels, blood pressures, and other risk factors except stress. He also makes the point that cigarette smoking is the clearest marker for coronary artery disease although the mechanism is not understood.

One of the chapters in the book discusses the pathology and pathophysiology of myocardial necrosis, and points out that the condition known as coagulative myocytolysis is the category of cell death that results from hyperfunctional overdrive. This pathologic change is rapid in onset and disappearance. It leaves little detectable histologic evidence 24 hours after its onset, whereas the classic polymorphonuclear infiltration in an infarcted

area requires at least 8 hours to develop.

There is discussion in the book of behavioral therapies designed to break the link between environmental stress and physiologic reaction, a discussion of pharmacologic therapy (with a boost for a little wine or a little beer), a discussion of exercise, and then of rehabilitation and prevention—particularly involving the family.

All in all this is a good book, easy to read, and of interest to the family physician.

Paul L. Bower, MD
Rolling Hills, California

Psychosomatic Obstetrics and Gynecology. David D. Youngs, Anke A. Ehrhardt (eds). *Appleton-Century-Crofts, New York, 1980, 306 pp., \$18.50.*

This edited collection of works by 23 authors is a unique contribution to reference literature. The title belies the quality of scientific investigation and scholarly reporting which is presented. The editors' stated purpose, "to expose the interested reader to behavioral science research and clinical experi-

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