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Coping with the Stresses of Arthritis

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Arthritis represents one of the most serious health problems in the United States today, as has been discussed in other chapters in this volume. Rheumatoid arthritis is particularly problematic for the older segments of our society, since it is possible that a variety of developmental life-stage issues interact with the presence of the disease to make the problems of rheumatoid arthritis loom larger. There are many potential sources of stress associated with having arthritis. These include stresses from pain and the discomforts of treatment, mobility problems, difficulties in self-care, threats to self-esteem, threats to social relationships and the fulfillment of social roles, threats to one's emotional equilibrium, and work-related problems. Yet as wide-ranging and important as the effects of arthritis on people's lives may be, we still do not know much about how patients cope with the specific stresses of the disease, or about the relationship between coping and adjustment to arthritis. In this chapter we will discuss the importance of studying coping in patients with arthritis, and describe some preliminary results from our study of elderly patients' efforts in coping with the disease.

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THEORETICAL FRAMEWORK

Coping is defined as efforts to manage demands (both external or internal) that tax or exceed the resources of a person (Cohen & Lazarus, 1979). Coping may serve one of two major functions—problem-solving or emotion-regulating (Lazarus & Launier, 1978). Problem-solving functions involve efforts to deal with the demands or obstacles that create the threat; emotion-regulation involves efforts to regulate the distress that occurs as a result of threat (e.g., by drinking alcohol or denying the nature of the problem). People use both emotion-focused and problem-focused coping simultaneously in dealing with most stressful life circumstances (Folkman & Lazarus, 1980).

Five general modes of coping have been identified (Cohen & Lazarus, 1979): information-seeking, direct action, inhibition of action, intrapsychic (or cognitive) processes, and turning to others for support. Each of these modes may be used to serve problem-solving or emotion-regulating functions. Information-seeking involves trying to learn more about the nature of a problem and what can be done to deal with it. Direct actions include any concrete act, such as drinking alcohol, removing an environmental obstacle, or fighting another person. The inhibition of action involves refraining from action, as when a person holds back from lashing out or decides not to do something in a situation where others might choose to act. Intrapsychic processes involve cognitive ways of dealing with the stressor or one's emotional reactions to it, for example by reappraising the situation or altering one's attention. Included in this category are psychological processes, such as denial, traditionally seen as defenses. Turning to others for support (Mages & Mendelsohn, 1979) involves seeking help or emotional support from other people, and has been studied in its role as a buffer to the potentially deleterious effects of life stressors (Cobb 1976; Dimsdale, Eckenrode, Haggerty, Kaplan, Cohen, & Dornbusch, 1979; Kaplan, Cassel, & Gore, 1977).

COPING AND HEALTH OUTCOMES

In recent years increasing attention has been paid to the role of cognitive factors, such as cognitive appraisal and coping, in moderating the effect of stressful life experiences. The way a person copes with stressful events can influence his or her emotional,

physiological, and behavioral reactions (Lazarus, 1966, 1981; Lazarus & Launier, 1978). Coping has been investigated in its relationship to disease etiology and to recovery from illness and medical treatment. In regard to *disease etiology* (for reviews see Cohen, 1979, 1981; Elliott & Eisdorfer, 1982), coping has been linked to neuroendocrine response, immunological response, and to increased risk for disease. Many studies have shown that the way an individual copes may reduce the hormonal response to stressors (for a review see Rose, 1980). For example, "successful" defenses have been associated with lower levels of 17-hydroxycorticosteroids in patients awaiting breast surgery (Katz, Weiner, Gallagher, & Hellman, 1970) and in soldiers facing combat (Bourne, Rose, & Mason, 1967). People who are physically active in situations of threat show increased cardiovascular and neuroendocrine response (Gal & Lazarus, 1975; Singer, 1974). Animal work suggests that inability to cope with an environmental stressor is related to changes in immunological response (Sklar & Anisman, 1979). Type A behavior is an example of how coping may be linked to disease outcomes (i.e., coronary heart disease). Type A behavior is a behavior pattern or coping style that involves a sense of time urgency, aggressiveness, competitiveness, impatience, and underlying hostility (Friedman & Rosenman, 1974). There is considerable evidence that Type A behavior is associated with increased risk of coronary heart disease (e.g., Rosenman, Brand, Jenkins, Friedman, Strauss, & Wurm, 1975) and some evidence that it may be associated with the process of coronary atherosclerosis (e.g., Blumenthal, Williams, Kong, Schanberg, & Thompson, 1978; cf. Dimsdale, Hackett, Hutter, Block, Catanzano, & White, 1979). For a detailed review of this work see Matthews (1982).

There is a growing body of evidence that suggests that how people cope with illness and medical treatment may affect both the progression of the disease and how they recover from it (for reviews see Cohen & Lazarus, 1979, 1983). For example, patients who are depressed take longer to recover from infectious diseases (Calden, Dupertuis, Hokanson, & Lewis, 1960; Imboden, Canter, & Cluff, 1961; Imboden, Canter, Cluff, & Trever, 1959), have a more complicated hospital course after a myocardial infarction (Pancheri, Bellaterra, Matteoli, Cristofari, Polizzi, & Puletti, 1978), and are less likely to survive a myocardial infarction for at least five years (Bruhn, Chandler, & Wolf, 1969). Those who use avoidant coping strategies show faster and less complicated recovery from surgery and better adjustment when short-term medical

outcomes are examined (Cohen & Lazarus, 1973; George, Scott, Turner, & Gregg, 1980; Kornfeld, Heller, Frank, & Moskowitz, 1974). For example, George et al. (1980) found that vigilant copers had an overall slower healing rate after dental surgery, and that vigilance was the strongest negative predictor of overall healing after controlling for the degree of physical trauma of the surgery itself. Cohen and Lazarus (1983) have recently argued that avoidant coping strategies are associated with better adjustment during hospitalization but more difficulties in long-term rehabilitation after serious illnesses. A recent paper, which reported on a meta-analysis of 26 studies that examined avoidant versus vigilant coping strategies in relationship to measures of physical adaptation, drew similar conclusions (Mullen & Suls, 1982). The meta-analysis revealed that avoidant strategies were related to better adaptation when short-run outcomes were examined, and vigilant strategies were related to better outcomes when long-run outcomes were studied. These studies illustrate the importance of taking situations into account when making judgments about whether coping processes are adaptive.

Cohen and Lazarus (1979) outline several different mechanisms that might link coping and negative disease outcomes. For example, maladaptive coping strategies may lead people to become anxious, angry, or depressed, with effects on hormonal response and on immunological functions. Second, coping may also involve habits that themselves promote or interfere with health or adaptive behavior, as when denial prevents a person from making the special efforts needed in physical rehabilitation tasks. Third, certain interpersonal styles may affect transactions with health care providers, influencing their behavior for better or worse. For example, cancer patients who are demanding and complaining may have their symptoms monitored more closely, resulting in speedier treatment if a recurrence takes place. Fourth, other writers have suggested that the will to live and the maintenance of morale may not only help patients' determination to persevere with unpleasant medical treatments but also have direct physiological effects (Cousins, 1976; Mason, Clark, Reeves, & Wagner, 1969).

There is a need for systematic investigation of the relationship between coping and outcome in rheumatoid arthritis. Although some researchers suggest that the types and effectiveness of the strategies used in dealing with arthritis may be related to disease progression and level of disability (Chamberlain, Buchanan, &

Hanks, 1979; Lowman, 1958; Lunghi, Miller, & McQuillan, 1978; Margolies, 1959; Modolfsky & Chester, 1970; Moos & Solomon, 1964, 1965; Polley, Swenson, & Steinhilber, 1970; Robinson, 1957; Vignos, 1973; Wright & Owen, 1976; Zeitlin, 1977), these relationships have not been thoroughly or systematically investigated.

Moos and Solomon (1964) found personality differences on the Minnesota Multiphasic Personality Inventory (MMPI) between two groups of arthritis patients—those whose disease progressed relatively slowly and those with rapid progression. Those whose disease progressed rapidly scored higher on scales reflecting physical malfunctioning and general maladjustment and lower on scales indicating compliance and compulsivity, among others. Moos and Solomon (1965) also found personality differences between patients who functioned poorly relative to their stage of disease. They suggested that the more poorly functioning group was lower in ego strength and had difficulty coping with the added burdens of arthritis. However, these studies examined only MMPI scale scores. They did not actually investigate the coping strategies used in dealing with their arthritis or the resources patients had available for coping. These variables must be studied directly before we can understand the role that coping plays in influencing the course of the disease.

PRELIMINARY RESULTS

Our study of elderly patients with rheumatoid arthritis is examining the relationship between coping and changes in functional disability and in disease activity. To study this question we could not ask simply how an individual "copes with arthritis," since arthritis has many substresses, with different coping strategies undoubtedly relevant to each. Thus assessment is made of how individuals cope with particular stressors associated with the disease. The stressor areas chosen for evaluation were pain, mobility problems, difficulties in self-care, and threats to self-esteem. This chapter will report on preliminary data from 60 of our patients (\bar{X} age = 62; 10 male, 50 female). These preliminary data focus on comparing modes of coping in two different stressor areas—pain and threats to self-esteem brought on by the disease.

All patients were ages 50 to 75, had a diagnosis of rheumatoid arthritis at least at Stage 2 according to the American Rheumatism

Association criteria (Steinbrocker, Traeger, & Batterman, 1949), had had the disease at least a year, and had been seen by a doctor for an arthritis-related problem at least once during the previous year. Subjects with other major debilitating illnesses were excluded from the sample. In order to obtain a heterogeneous population, subjects were obtained from three different sources: (1) University of California San Francisco Arthritis Clinic, (2) private rheumatologists in the Bay Area, and (3) community organizations (e.g., senior citizens' centers, junior colleges). At the beginning of the study, subjects were interviewed about how they coped with particular stressors associated with rheumatoid arthritis. Transcripts were made of the interviews and the coping responses in each stress area were coded. Subjects were given a 1-4 rating of the degree to which they used each of the five modes of coping: information-seeking, direct action, inhibition of action, intrapsychic processes, and turning to others for support. In addition, the direct action mode was separated into two components—the direct action of taking pain medications and other direct actions. The analyses reported here compare the modes of coping used in two stressor areas—the pain of arthritis and the threats to self-esteem that result from the disease.

Coping with Pain

Figures 4.1 and 4.2 present data from the group averages, and indicate that there were significant differences in the modes of coping used in these two stress areas. The two modes of coping used most often in dealing with pain were intrapsychic processes (\bar{X} rating of 3.25) and the direct action of taking pain medications (\bar{X} rating of 3.18). It is not surprising that most arthritic patients take pain medications to deal with the pain of arthritis; in fact, 98 percent of these subjects reported taking medication as a means of coping with arthritis pain. What was unexpected was the frequent use of intrapsychic coping strategies in pain situations. Eighty-eight percent of the patients used distraction strategies. These seemed to be spontaneously developed strategies that involved no formal training. Other common intrapsychic strategies included prethinking (i.e., planning one's actions) used by 26%, self-speech (literally encouraging oneself) by 10%, prayer (7%), and imagery (5%). Use of direct actions other than taking pain medications was the third most common category ($\bar{X} = 2.5$). The di-

FIGURE 4.1 Modes of coping with pain. (Higher ratings reflect greater usage of strategies.) $N = 60$.

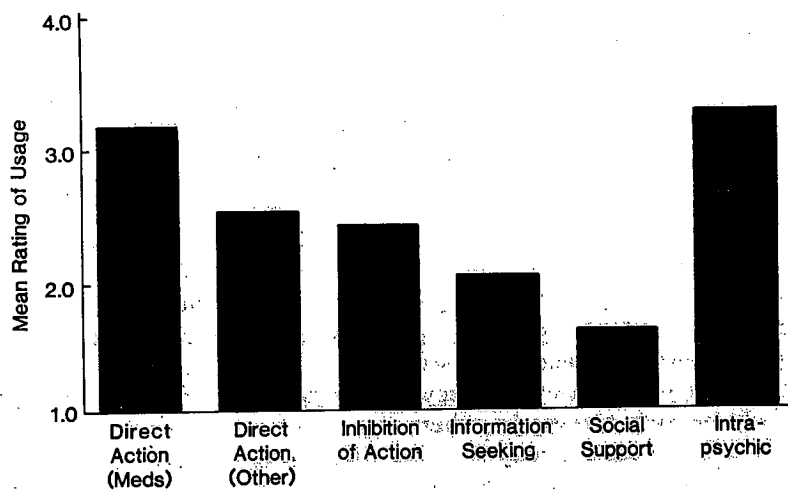
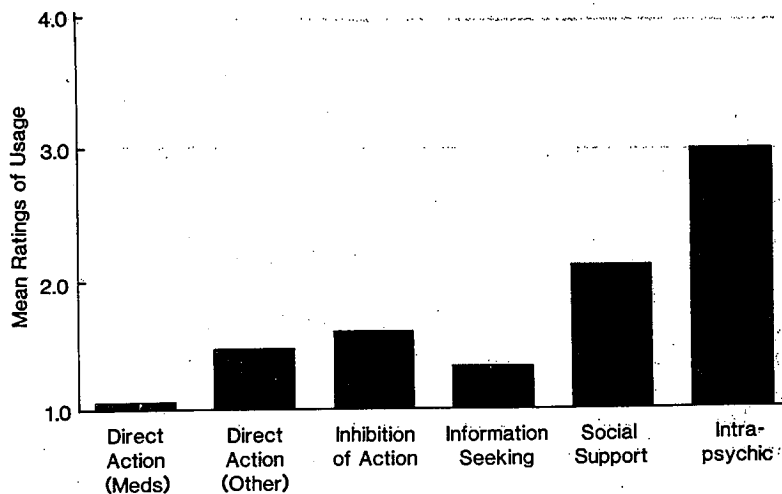


FIGURE 4.2 Modes of coping with threats to self-esteem. (Higher ratings reflect greater usage of strategies.) $N = 60$.



rect actions followed physicians' standard recommendations and included use of heat or cold applications (72%), exercise (53%), staying warm (18%), drinking alcohol (12%), massage (7%), diet/herbs (7%), relaxation/deep breathing (5%), paraffin treatments (4%), and use of splints (4%).

The implications of the findings in the pain area are that, to a large degree, people do not follow the recommendations of physicians in dealing with the pain of arthritis, that they utilize several different techniques in coping with pain, and that they develop their own strategies for combatting this problem. Distraction appears to be a widely used pain control method that intuitively appeals to patients as a means of coping with pain. This finding suggests that rheumatoid arthritis patients may benefit from and be receptive to formal training in the use of distraction methods for dealing with pain. Interestingly, the use of social support was not a frequently used strategy in this particular stress area, most likely because turning to others was not effective in reducing pain response. In fact, it may be more difficult to deal with pain when in the company of other people.

Coping with Threats to Self-esteem

As Figure 4.2 illustrates, fewer strategies were used in dealing with threats to self-esteem as compared to pain. In this stress area intrapsychic strategies were the most frequently used, followed by turning to others for support. Information-seeking was rarely used and direct actions and inhibition of action were also infrequent. About 40 percent of the sample used intrapsychic strategies involving social comparison. These people would think about others worse off than they, or imagine how things could be even worse than they were. The result of this was a feeling of encouragement about their own physical condition. Distraction techniques were used by approximately 20 percent of the sample—getting involved in other activities as a way to cheer oneself up and direct attention away from issues related to arthritis. Other intrapsychic strategies included: avoiding thinking about the problem, hoping for a better future, religious faith/prayer, lowered expectations, and intense analysis of feelings.

These data clearly show fewer strategies used in dealing with threats to self-esteem as compared to pain. Our interviews revealed that this area was a major source of difficulty for patients; they

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felt they did not know how to cope with these problems. This may be because people do not know what are effective strategies when self-esteem is threatened, but also because there may be fewer clearcut solutions to such assaults. This also appears to be an area where physicians are less able to suggest ways to help. Self-help groups may be important in dealing with these problems.

CONCLUSION

A comparison of Figures 4.1 and 4.2 illustrates that different patterns of coping modes were used in different stressor areas. Intrapsychic processes and direct actions were most utilized in pain situations; intrapsychic processes and turning to others for support were used most in dealing with threats to self-esteem. Our detailing of the types of intrapsychic processes used revealed that quite different strategies were employed—distraction being most common in pain situations, and social comparison being most common when self-esteem was at stake. Whereas 88 percent of the sample used distraction strategies in the former case, only 20 percent used them in the latter.

Our data underline a notion that has been discussed elsewhere at length (Cohen & Lazarus, 1973, 1979, 1983) but is ignored by many researchers in the field—that is, the importance of episodic rather than trait assessment of coping. Trait measures of coping tap an individual's habitual way of dealing with stress whereas episodic measures tap how a person copes with a particular stressful situation (Averill & Opton, 1968). In studies of health care situations, little relationship has been found between trait and episodic measures of coping (Cohen & Lazarus, 1973) and episodic measures have been found to be stronger predictors of health outcomes (see the review in Cohen & Lazarus, 1979). Trait measures assume that there is consistency in coping behaviors over time and situation. However, as these data reveal, there is no consistency of coping modes utilized across stress areas associated with arthritis. Strategies are specific to the demands of the situation and to what may be effective in dealing with that situation. When the data for all our stressor areas are analyzed, we will then be able to comment on the patterns of coping found in different-subareas of arthritis, and also on the flexibility individuals show in their use of strategies in different areas.

Although these data are preliminary, they provide a picture of how people deal with the multiple stresses involved in arthritis and suggest intervention strategies that might be useful for patients newly diagnosed with the disease. They also pinpoint the areas where physicians' recommendations are utilized and those areas where we lack knowledge on what to recommend. These results suggest that intervention strategies will be most useful if they provide concrete advice targeted to helping patients deal specifically with different stressful aspects of the disease.