Arthritis: Preferred Learning Methods Among Arizona Therapists

(continuing education, self-study guide, attitudes)

Elizabeth A. Wickersham  M. Laurita Fike  Elaine Rousseau  John T. Boyer
Keith E. Meredith  Catherine A. Clay

Arizona occupational and physical therapists were surveyed about their needs for education in arthritis. Responses to statements regarding attitudes, knowledge, willingness to learn, and preferred methods of learning were subjected to chi-square analysis. The results showed that a significant number of both occupational and physical therapists are deficient in knowledge about the disease and maintain negative attitudes about patients with rheumatoid arthritis.

Elizabeth A. Wickersham, RPT, is the physical therapist for the Southern Arizona Chapter of the Arthritis Foundation, and the University of Arizona's Southwest Arthritis Center, Tucson, Arizona.

M. Laurita Fike, OTR, is Director of Occupational Therapy, Institute for Rehabilitation and Research in Houston, Texas. Formerly, she was Director of Occupational Therapy, Tucson Medical Center, Tucson, Arizona.

Elaine Rousseau, M.A., is a doctoral student, University of Arizona, Tucson, Arizona.

John T. Boyer, M.D., is Director of the Southwest Arthritis Center, Professor of Internal Medicine, and Chief of Clinical Immunology, Arizona Health Sciences Center, University of Arizona, Tucson, Arizona.

Keith E. Meredith, Ph.D., is Director of Education, Evaluation, and Project Development, Southwest Arthritis Center, Tucson, Arizona.

Catherine A. Clay, is an information specialist, Southwest Arthritis Center, Tucson, Arizona.

In 1975, a random health screening study done in Tucson, Arizona, reported that 25.6 percent of those persons interviewed complained of arthritis (1), an incidence more than twice the national average. The study also found that rates of hospitalization for arthritis in Tucson exceeded national averages.

Occupational and physical therapy services are theoretically an integral part of the prescribed treatment for people with rheumatoid arthritis and severe osteoarthritis. Yet an informal, local Arthritis Foundation survey in 1977 showed that less than 2.5 percent of the registered physical therapists (PTs) and even fewer occupational therapists (OTs) in the state were involved in arthritis treatment (2).

The reasons for the disparity in Arizona between those needing ser-
vices and those providing them have been unknown. Negative feelings about the disease and/or the patients could account for the lack of services. Another reason may be a deficiency in basic and continuing education in arthritis for therapists. Arizona has no college-level program for occupational therapy, and the state's physical therapy program at Northern Arizona University graduated its first class in 1980. Therefore, therapists practicing in the state have come from a wide range of cultural and educational backgrounds where the demand for training in arthritis was less than the demand for trained personnel in Arizona.

For several years, the University of Arizona's Southwest Arthritis Center and the Southern Arizona Chapter of the Arthritis Foundation have attempted to provide state therapists with arthritis-related continuing education; however, low attendance at the workshops indicated that not all practicing therapists were being reached. Although allied health professionals have

Figure 1

The map shows the distribution of arthritis programs and therapists across the United States. The numbers indicate the following:

- **West Coast**: 14 Programs, 39 Therapists
- **Rocky Mountains**: 3 Programs, 18 Therapists
- **North Central**: 20 Programs, 51 Therapists
- **East Coast**: 17 Programs, 47 Therapists
- **South East**: 4 Programs, 7 Therapists
- **Outside U.S. Programs**: 4 Programs, 4 Therapists

(England, New Zealand, Germany)
expressed interest in continuing education, many often fail to participate in workshops or conferences because of the cost of registration fees, lost time from work, and distance involved in traveling to the location of the workshop (3-5).

In an attempt to find the cause for the needs disparity and correct the educational deficiency, the Southwest Arthritis Center conducted a survey in Arizona to determine the knowledge and attitudes of PTs and OTs about arthritis and which method of learning about the disease was preferred.

**Methods**

Using mailing lists from The American Occupational Therapy Association and the Arizona Board of Physical Therapy Examiners, 550 questionnaires were mailed to all licensed PTs and all The American Occupational Therapy Association members in the state (300 PTs and 250 OTs). Therapists were asked to provide some demographic data and respond to 26 Likert-type statements. Each statement allowed for indication of level of agreement in one of four response categories ("strongly disagree," "disagree," "agree," and "strongly agree"). The 26 items were clustered into 4 major categories: knowledge, attitudes, willingness to learn, and preferred methods of learning. Two hundred and nineteen (40%) of the questionnaires were returned; 62 (28%) of the respondents were OTs, 155 (71%) were PTs, and 2 (1%) were both. No follow-up was conducted with non-respondents. Summary statistics and chi-square statistical tests were run on the data after collapsing the response categories from four to two because of the low number of responses in the extreme response categories. Not all respondents answered all questions.

**Results**

**Demographic Data.** Of the 211 therapists who responded to location of practice, 20 therapists (9%) indicated they were not practicing at the time of the survey. Of the 191 practicing therapists, 87 percent stated that they worked in an urban setting. The majority worked in either Maricopa (Phoenix area) or Pima (Tucson area) counties. Sixty-one percent of the respondents had worked for less than 10 years and 36 percent for less than 5. Twenty-five
percent of the practicing therapists indicated that they worked with no arthritis patients at that time; 46 percent worked with less than 10 patients with arthritis a month; 12 percent worked with 11 to 20 patients a month; and 17 percent worked with more than 20 patients a month. Physical therapists as a group worked with more arthritis patients per month than did occupational therapists.

Respondents represented graduates from 73 different academic programs in the United States and 3 foreign countries (see Figure 1). More than 60 percent of the OTs and 50 percent of the PTs felt their academic preparation in the management of the arthritis patient was poor or fair (see Table 1). Only 12 of 76 schools were rated as excellent, and 1 was in England. No particular school stood out as being better than any other, and no area of the country seemed to provide better training in general. Opportunities to work with arthritis patients during a clinical internship period also received low ratings (see Table 2).

In the same year this study was done, Jette and Becker (5) conducted a similar survey using a different viewpoint. They asked the directors of undergraduate programs in nursing, physical therapy, and occupational therapy about the perceived adequacy of classroom and clinical exposure to rheumatic disease. Their results showed that 75 percent of the respondents viewed the current level of classroom exposure in all three disciplines as "just right." Fifty-nine percent also rated the clinical exposure as "just right."

Knowledge. In this category only 15 percent of the total respondents were correct in all their responses. Thirty-six percent of the OTs and 29 percent of the PTs gave incorrect responses to at least half the statements (see Figure 2). There was no significant difference between the two groups on the knowledge section total score.

Attitude. Data from the attitude
category showed a prevalent negative attitude toward arthritis patients by both OTs and PTs. Of the total respondents, 38 percent thought that arthritis patients are more demanding than other types of patients, and 36 percent believed that these patients complained more than other patients. Forty-six percent of the therapists stated they did not want to work with more arthritis patients. PTs demonstrated a negative attitude significantly more often (p < .05) than did OTs (see Figure 3). Occasionally, statements on attitude did provoke empathetic, voluntary responses from therapists; however, 19 percent said that treating arthritis patients was discouraging.

**Willingness to Learn.** Both occupational and physical therapists responded enthusiastically in this category. Of the 219 respondents, 97 percent of the PTs and 84 percent of the OTs thought it was important to keep up with new concepts in arthritis. However, 27 percent of the PTs and 38 percent of the OTs were "too busy" to participate in any day or evening programs (see Figure 4).

**Preferred Methods of Learning.** From seven possibilities for continuing education, 84 percent of the total respondents preferred the written self-study guide (see Table 3). This preference was consistent without regard to length of time in practice, rural or urban settings of practice, or number of arthritis patients being treated.

At the end of the survey, respondents were asked to indicate their interest in applying for a hypothetical job offering benefits and working conditions that compared favorably with their present job. The case load would be primarily patients with arthritis. Thirty-nine percent of the respondents indicated they would not be interested, 49 percent would consider applying for the job, and 12 percent would be enthusiastic about the opportunity.

**Discussion**

The results of this study show that both occupational and physical therapists in Arizona have deficiencies in their knowledge of arthritis. In addition, approximately half of the therapists consider their academic background in arthritis poor.
to fair. This finding contradicts the Jette and Becker (6) study in which program directors believed their programs were adequate in this area.

There were differences between OTs and PTs in some of the answers given in the knowledge and attitude sections. The size of the arthritis patient case load carried by the therapist might affect both knowledge and attitude about the disease. Physical therapists appear to treat more arthritis patients than occupational therapists treat, so that familiarity with this type of patient might enhance concrete or practical knowledge, while at the same time lead to a more negative attitude. If this relationship were true, however, then one might expect a relationship between years of experience and attitude toward arthritis—that is, more experience leads to negative attitude. This relationship was not found for either PTs or OTs. Occupational therapists serve a 3-month internship in psychiatry and of the respondents indicated they were working in mental health settings. This could account for their more positive attitudes and at the same time be responsible for their lack of knowledge about arthritis. Physical therapists appear to have slightly more academic and internship opportunities in arthritis, and this, along with their higher case load of arthritis patients, may account for their slightly higher scores in willingness to learn about arthritis.

Conclusion
Arthritis is the nation's leading crippling disease. Although Arizona has twice the national average in numbers of people with arthritis, there are few therapists in the state working with these patients. At least 25 percent of the therapists did not work with any arthritis patients and 77 percent worked with less than 20 patients per month. These data indicate that many arthritis patients do not receive occupational and physical therapy.

In addition, this study indicates that 61 percent of the therapists would consider working with more arthritis patients; 12 percent of these therapists would be enthusiastic about working with these patients, although more than one-third of the therapists lack relevant knowledge. Most respondents were willing to learn more, indicating that more therapists would work with arthritis patients if they had additional knowledge about the disease.

In light of this evidence, OT and PT educators may want to reconsider the content of existing educational programs. Jette and Becker (6) believe that changing the classroom curriculum would probably fail because the directors think their undergraduate programs are adequate. Also, OTs and PTs appear unaware of the need for additional arthritis-related training until after they are in practice, indicating a need for continuing education rather than classroom curriculum revision.

The primary goal of the survey was to determine whether or not therapists were interested in learning more about arthritis and which method of continuing education they would prefer. Although responses varied, both OTs and PTs were interested in continuing their education and preferred the self-study guide method. This preference may reflect the Stinson and Mueller (5) findings that allied health professionals often feel they cannot afford the loss of time and money required to attend workshops and seminars.

Continuing education for allied health professionals has long been a concern of medical educators (5). As science and technology in health care advance in response to academic research, methods must be found to equip health care practitioners with new information.

As a result of the survey findings and a desire to provide the most appropriate method of continuing education for therapists, the Southwest Arthritis Center is writing and evaluating an arthritis self-study guide for practicing therapists.

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REFERENCES

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