CHRONIC PAIN:
DEVELOPMENT OF AN ASSESSMENT TOOL FOR PRIMARY CARE

Scholarly Project for the Degree of M. S. N.
MICHIGAN STATE UNIVERSITY
MIRIAM A. HOCK
1997

DATE DUE	DATE DUE	DATE DUE

CHRONIC PAIN:

Development of an Assessment Tool for Primary Care

By

Miriam A. Hock

Submitted to
Michigan State University
College of Nursing
in partial fulfillment of the requirements
for the degree of
Master of Science in Nursing

1997

ABSTRACT

Chronic Pain: Development of an Assessment Tool for Primary Care

by

Miriam A. Hock

Chronic pain is a major cause of physical and psychological disability, with multidimensional implications: injured self-esteem, unemployment, inability to perform simple daily activities, sexual dysfunction, and social isolation from family and friends.

A variety of tools have been used in the assessment of chronic pain. Many of these tools were developed in pain treatment programs to furnish a basis for treatment and to measure treatment outcomes. Many are impractical for use in a primary care setting.

It is the objective of this project to develop a clinically useful assessment tool that can be used by primary health care providers in the assessment of patients who suffer from chronic pain, whether the cause of the pain is known or not.

ACKNOWLEDGEMENTS

The writing of a scholarly project is labor intensive; also I have found it to be a communal endeavor. Sustaining me during this time was a large circle of friends. The members of the Olivet Congregational Church where my husband is minister graciously accepted a reduction of my usual parish activities. My co-workers at the Veterans Affairs Medical Center in Battle Creek encouraged me when my motivation declined and were cooperative with the flexible scheduling required to permit me to finish my work; in particular I wish to thank Julie Hoffman, Library Assistant at the VAMC, whose assistance in literature search was invaluable. My classmates in the graduate nursing program at Michigan State University affirmed my early work on chronic pain; that affirmation encouraged me to stay with the subject.

My scholarly project committee comprising Linda Beth Tiedje, Louise Selanders, Brigid Warren and Celia Wills, gave excellent direction to the project and were both intellectually challenging and warmly affirming as it took shape. Linda Beth Tiedje, committee chair, deserves particular thanks; she spent hours critiquing multiple incarnations of this work as it progressed.

This project could not have been completed without the love and support of my family. My husband, Clark, provided a haven where my studies could be uninterrupted and gently prodded me when my confidence flagged. Our four children and three grandchildren endured too much separation; for their understanding and patience, I am forever grateful.

TABLE OF CONTENTS

INTRODUCTION

Chronic pain is a major cause of psychological and physical disability, with multidimensional implications: injured self-esteem, unemployment, inability to perform simple daily activities, sexual dysfunction, and social isolation from family and friends (Mayer et al., 1987; Potter & Perry, 1989; Bowman, 1994). In many patients, chronic pain is inadequately relieved (Bonica, 1991). Some estimate that chronic back problems disable 1% of the total population (Mayer et al., 1987).

Given the complex causes and effects of chronic pain, it is understandable that a variety of tools have been used in its assessment (Basler, 1993; Geisser, Robinson, Keefe, & Weiner, 1994; Goldberg & Maciewicz, 1994; Jensen, Turner, & Romano, 1994; Mayer et al., 1987; Pilowsky, Spence, Rounsefell, Forsten, & Soda, 1995; Subramanian, 1994). The tools used address the many faces of the chronic pain syndrome: pain intensity, depression, body symptoms associated with pain, coping strategies, attitudes about pain, and physical functioning.

Primary health care providers are the gatekeepers for medical care (Mezey & McGiven, 1993) and chronic pain patients will likely seek pain management from these providers (Hitchcock, Ferrell, & McCaffery, 1994). It is therefore necessary that primary health care providers be able to assess and treat chronic pain sufferers.

The objective of this project is to develop a clinically useful tool that can be used by primary health care providers in the assessment of patients who suffer from chronic pain. The tool is intended for assessing the impact of chronic pain more than its etiology.

Background Issues Related to Chronic Pain

Attitudes/Behaviors of Patients and Health Care Providers

People with chronic pain come repeatedly for care and are often frustrated that the cause and scope of their pain are not fully understood. In one survey, the average person with pain had sought treatment from ten different health care providers and had visited a health care provider on the average of ten times during the previous year. In this study, internists and general practitioners were frequently sought to provide pain management (Hitchcock et al., 1994).

Health care providers are often frustrated by chronic pain patients, feeling puzzled and helpless that their efforts do little to make the patient better. In the survey conducted by Hitchcock et al. (1994), 41% of respondents reported that their physicians refused to prescribe enough medication to relieve their pain. Among the reasons given for this refusal were the physician's belief that patients should not take medications on a long-term basis, the belief that the patient's report of pain was not severe enough to prescribe medication, or that the patient should be able to "handle" even severe pain without using any medication.

The average health care provider in primary care may have neither the time nor the resources to use multiple assessment tools. However, primary health care providers are the ones who have an ongoing relationship with chronic pain patients. It is, therefore, all the more necessary that primary health care providers be able to assess and treat chronic pain sufferers. One of the unfortunate results of chronic pain is that the patient may have been referred to one specialist after another in the hope that a “cure” will be found. When this expectation is not realized the chronic pain patient has another reason to be discouraged. This lack of “curing” may lead to further psychological and psychosocial disability. An important part of a health professional’s commitment is the obligation to manage pain and relieve a patient’s suffering (AHCPR Publication No. 92-0032, 1992). As gatekeepers to medical care, primary health care providers are in a unique position to insure that barriers to care are minimized and/or eliminated. The primary health care provider needs a simple and usable assessment tool so that he/she may have some confidence that the patient with chronic pain has been adequately assessed. Comprehensive and appropriate ongoing treatment that alleviates lifestyle pain-induced problems as well as treatment of pain causes and symptoms can then be initiated.

Communication Issues

The issue of communication difficulties between patient and health care provider in the area of chronic pain is well-supported by the literature. In long-term care facilities, one-fourth of patients who complain of pain are thought by nurses to be exaggerating the severity of that pain (Ryan, Vortherms & Ward, 1994). Patients report satisfaction with pain management even when their pain is not relieved; their satisfaction is highly related to psychosocial aspects of care such as communication (Ward & Gordon, 1994). Health care providers sometimes see chronic pain patients as malingerers, seeking care when it is not really needed. This compounds the patients' problems, making them feel that they must be "bad" patients. "Whatever pain achieves, it achieves in part through its unsharability, and it ensures this unsharability through its resistance to language" (Scarry, 1985, p. 4). This "loss of language" is two sided. The patient perceives her/himself as inhabiting an autistic realm, bereft of words with sufficient currency to articulate her/his presenting symptoms. On the other hand, the health care provider functions in the "realistic" world structured by medical/scientific definitions, social expectations, and cultural norms. For the person in pain, "having pain" is a vibrant example of certainty; while for the person "hearing about pain," the reality of pain is elusive and can easily be doubted (Scarry, 1985).

Pain is a subjective experience and is entirely real to the person in pain. "Pain is whatever the experiencing person says it is and exists whenever he says it does" (McCaffrey, 1972, p. 8). If the patient's perceptions are not included in the assessment of pain, the health care provider must depend on physiological responses (heart rate, blood pressure and respiratory rate) and behavioral responses (grimacing, groaning, guarding, etc.) (AHCPR Publication No. 92-0032, 1992). When physiological responses are within normal limits and/or behavioral responses are absent, the health care provider may doubt the presence of pain. As a result, patients' pain is often poorly predicted by healthcare professionals (Voigt, Paice, & Pouliot, 1995).

In treating the chronic pain patient, the success of the health care provider's work will frequently depend on the acuity with which he/she can hear the description of pain, coax it into clarity, and interpret it. Alternatively, the doubt of the health care provider may amplify the suffering of the person with chronic pain (Scarry, 1985).

Models/Standards for Providing Care

It is important for health care providers to be aware of the manner in which they relate to their clients from initial assessment through treatment. Health care providers usually provide care in one of two major roles, either as caretaker or consultant (Texidor, 1991). In the caretaker role, health care providers are willing to take ownership of the patient's problem and are in control of the outcome of treatment. This approach does not support the patient's participation in treatment. Alternately, when the health care provider acts as consultant, the client is encouraged to share ownership of the health care issue at hand. This approach to treatment is especially appropriate for chronic pain patients where personal involvement, self-care, self-responsibility, and decision making have the potential to produce lifestyle changes that may have a positive effect on the chronic pain patient's quality of life (Texidor, 1991).

While the Agency for Health Care Policy and Research has not published a clinical practice guideline specifically focused on the management of chronic pain, the published guidelines on the management of cancer pain can serve as a helpful guide for health care providers working with chronic pain patients. The cancer pain guidelines recommend that (1) formal means should be developed for evaluating pain management and for obtaining patient feedback on the adequacy of pain control, (2) the quality of pain management should be evaluated at points of transition in provision of services, (3) each practice setting should designate who will be responsible for pain management, and (4) standard procedures should be developed defining acceptable levels of patient monitoring and the responsibilities of care providers in the administration of specialized forms of analgesia (AHCPR Publication No. 94-0592, 1994).

CONCEPTUAL FRAMEWORK

Conceptual Definitions

Pain is defined as an unpleasant sensory and emotional experience that is associated with tissue damage, either actual or potential (AHCPR Publication No. 94-0592, 1994). Acute pain is defined as pain that has a rapid onset, varies in intensity, lasts for a brief time (or up to six months), and is self-limiting (Potter & Perry, 1989). With acute pain, both the patient and the provider know that relief of pain is in sight. The time-limited nature of acute pain has implications for its management. The prevention and control of acute pain is aggressive and primarily pharmacological (AHCPR Publication No. 92-0032, 1992).

Chronic pain is defined as pain which persists for more than six months and results in the need for long-term treatment (Potter & Perry, 1989). The management of chronic pain uses a variety of modalities, including, but not limited to, cognitive-behavioral strategies (Mobily, Herr, & Kelley, 1993), group treatment (Basler, 1993), multidisciplinary treatment (Jensen et al., 1994) and psychotherapeutic approaches (Miller, 1993).

Chronic pain is often treated pharmacologically (Bowman, 1994; Ryan et al., 1994). Some patients have had surgery or other treatments to relieve their chronic pain (Mayer et al., 1987; Miller & Kraus, 1990). Chronic pain impacts individuals' ability to conduct regular daily activities such as working at a job, keeping house, taking care of children, attending school, doing volunteer work, or taking part in community activities (Basler, 1993; Follick, Smith, & Ahern, 1985). Depression frequently accompanies chronic pain (Hitchcock et al., 1994; Geisser et al., 1994). Chronic pain requires coping skills on the part of both the patient and the provider that go beyond measures used with acute pain (Basler, 1993; Bowman, 1994; Mayer et al., 1987; Miller & Kraus, 1990; Smoller & Schulman, 1982). Patients report that they must accept the pain, learn to live with it, and center their life around it (Bowman, 1994). The continuous presence of chronic pain affects psychological well-being, leading to depression, anxiety, and impaired memory (Hitchcock et al., 1994). Constant pain also affects the nervous system's perception of pain. It is believed that the tissues themselves retain a memory of the pain, increasing its perception (Bonica, 1991). These factors must be understood by the health care provider when treating the chronic pain patient.

Persons suffering from chronic pain are likely to seek care from primary care providers (Hitchcock et al., 1994). Primary care providers are those health professionals who bear the responsibility for providing primary health care (Starfield, 1992). Primary care is defined as the point of entry into the health care system and has the locus of responsibility for organizing the care of patients and populations over time (Starfield, 1992).

In summary, while pain is defined as an unpleasant sensory and emotional experience that is associated with tissue damage, either actual or potential (AHCPR Publication No. 94-0592, 1994), chronic pain must be differentiated from acute pain. Acute pain is time- and self-limited and is frequently managed by aggressive pharmacological therapy (AHCPR Publication No. 92-0032, 1992). Chronic pain is an entirely different concept and is defined as pain that continues over a long period of time, affecting quality of life. Treatment approaches range from non-pharmacological means such as physical therapy, exercise, stress management and biofeedback to the combined use of these methods with medications (Hitchcock et al., 1994)

Conceptual Framework

The complex issues surrounding the assessment and treatment of chronic pain point toward the need to see the patient suffering from chronic pain in a holistic way, with his/her own unique personality, coping strategies, and psycho-social history and environment. The mind is not separable from the body; hence quality health care requires a humanistic respect for the functional unity of the human being (Watson, 1985). Watson's (1985) conceptual framework identifies the strain between considering the person as a <u>whole</u> and the traditional divisions of the natural, basic, and biomedical sciences with a sum-of-parts focus. While careful to acknowledge the legitimate role of the traditional sciences in the study of human beings, Watson asserts that to use <u>only</u> this approach requires making certain assumptions about human life and human caring that are nonhuman in character. For example, to see the human being as separable, with divisions of mind, body, and spirit, denies the unity in which every person lives. Yet, traditionally, health care providers treat people as divisible. The proliferation of specialties (psychiatry, internal medicine, podiatry, urology, dermatology, cardiology, obstetrics and gynecology, etc.) illustrate the way the human being is viewed as divisible. Watson sees nursing as a human science, combining and integrating traditional science with beauty, art, ethics and the aesthetics of the human-to-human care process. As a human science, nursing views human life as a gift to be cherished—a process of wonder, awe, and mystery (Watson, 1985).

The issue can be focused sharply in the following way. The philosophical basis of nursing is to heal and care. The philosophical basis of medicine is to cure. For patients suffering with chronic pain, cure is remote, elusive, and perhaps impossible. Healing and care can provide hope, understanding and the potential for improved quality of life.

Theoretical Framework

Chronic pain impacts every aspect of the chronic pain sufferer's life—work, relationships, leisure time, self-esteem, and ability to perform daily activities. Therefore, Watson's holistic approach is particularly well-suited to the care of patients who suffer with chronic pain. The interaction of the primary health care provider with the chronic pain patient is appropriately illustrated in Watson's schematic model (See Figure 1).

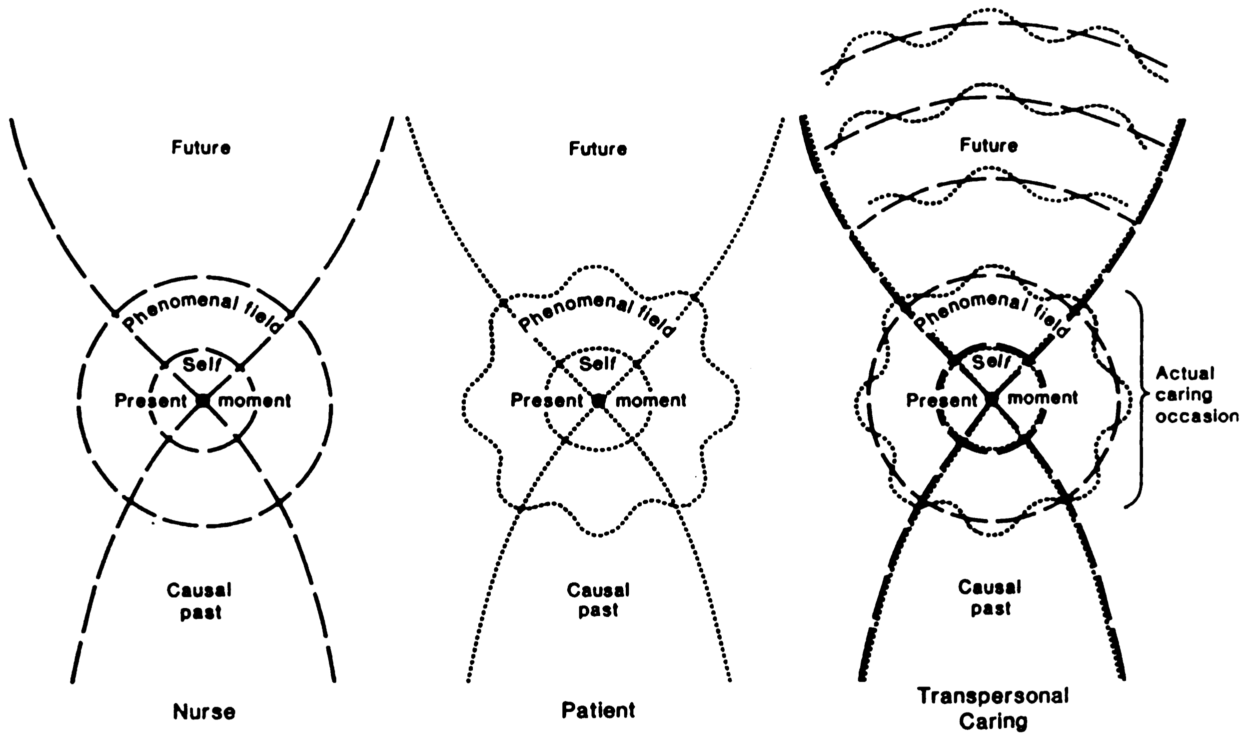

Figure 1. Dynamics of human caring process, including transpersonal dimension of health care provider and patient (Watson, 1985, p. 59).

For Watson, the main focus of nursing is care. A liberal arts education provides the nurse/health care provider with a humanistic perspective and a scientific knowledge base. These are required for successful application of her seven assumptions about the science of caring:

1. Caring can be effectively demonstrated and practiced only interpersonally.
2. Caring consists of carative factors that result in the satisfaction of certain human needs.
3. Effective caring promotes health and individual or family growth.
4. Caring responses accept a person not only as he or she is now but as what he or she may become.
5. A caring environment is one that offers the development of potential while allowing the person to choose the best action for himself or herself at a given point in time.
6. Caring is more "healthogenic" than is curing. The practice of caring integrates biophysical knowledge with knowledge of human behavior to generate or promote health and to provide ministrations to those who are ill. A science of caring is therefore complementary to the science of curing.
7. The practice of caring is central to nursing (Talento, 1989, p. 294).

Watson's seven carative factors are particularly well-suited to the care of patients with chronic pain because of the emphasis on human interaction between patient and health care provider. Working effectively with a person who endures chronic pain requires the health care provider to interact with the person, going beyond a curing emphasis (#1, #2, and #3). A health care provider can assist the patient by helping him/her to accept life with chronic pain and the limitations that pain imposes (Bowman, 1994), and by understanding the experience of chronic pain (Bonica, 1991). This is acutely important for persons with chronic pain because they frequently become isolated from family and friends. For chronic pain sufferers to become motivated to look at pain in a different way requires the health care provider to accept these persons not only as they are now but as what they may become (#4). Chronic pain sufferers may need assistance in seeing that they need not be victims of their pain. Chronic pain sufferers must also believe that they have choices about what treatments may be most effective for them (#5). In order for chronic pain sufferers to interrupt the chronic pain phenomenon, they need to believe that they can reestablish control over their lives by the choices they make regarding treatment. When persons hear that there is probably no cure for their pain, they may accept this fact more readily if care is not withdrawn (#6). Patients with chronic pain need to know that they are not "bad" patients when their pain is not cured; they need ongoing care and empathy from their health care providers (#7).

The interaction of the health care provider with the chronic pain patient is shown in Figure 2. Chronic pain is a factor in the phenomenal field

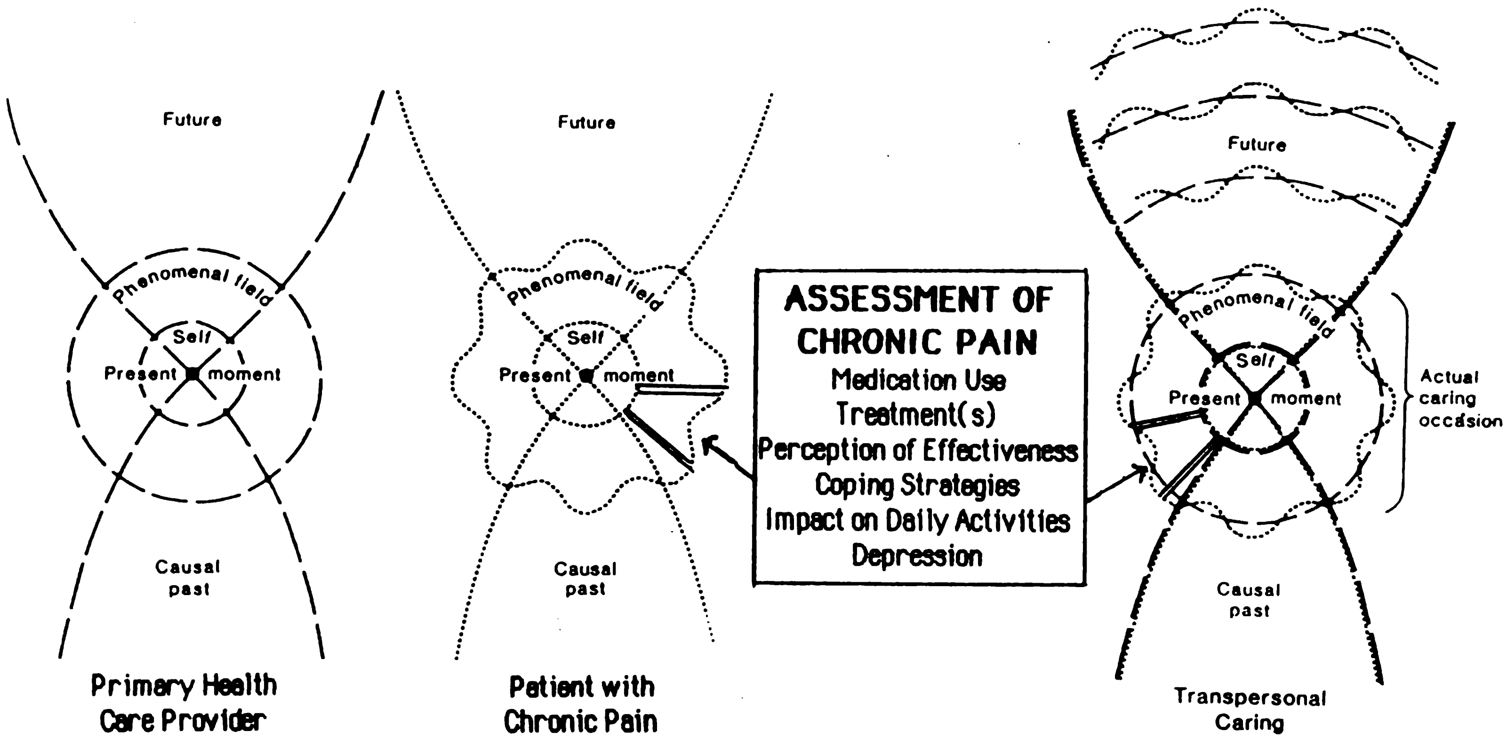

Figure 2. Assesment of chronic pain, including the interaction of health care provider and the chronic pain patient (Adapted from Watson, 1985, p. 59).

of the patient. The health care provider's ability to care, and conduct assessment in a supportive manner are part of the health care provider's phenomenal field. The two interact in the actual caring occasion. The assessment of chronic pain will be emphasized in this project.

LITERATURE REVIEW

The literature on chronic pain is highly varied. It includes global reviews (Miller & Kraus, 1990; Texidor, 1991; Turk, Rudy, & Sorkin, 1993), phenomenological studies on the experience of chronic pain (Bowman, 1994; Hitchcock et al., 1994), the challenges surrounding diagnosis (Hockberger, 1990), and pain concepts and theory (Bonica, 1991; Ferrell, Rhiner, Cohen, & Grant, 1991). Also included are the impact of pain management on quality improvement in health care settings (Ferrell, Whedon, & Rollins, 1995; Ward & Gordon, 1994), the assessment of pain and disability (Follick et al., 1985; Voigt et al., 1995), and attitudes toward pharmacologic management of pain (McCaffery & Ferrell, 1996; Ryan et al.,1994; Ward & Gatwood, 1994). The literature further includes approaches for the treatment of chronic pain. The literature review that follows will include treatment literature (from the perspective of chronic pain assessment); depression; attitudes; ability to function; assessment of pain; and coping strategies.

Treatment Literature

Assessment of the patient is a common feature in all treatment studies. Since the focus of this project is the assessment of chronic pain, it is appropriate to review the literature that includes the use of assessment tools, even where the tools have been used in treatment studies. Assessment in the treatment literature is often used as a means to measure treatment outcomes. The assessment of patients to determine outcomes of treatment has a different focus and may be done at different times than assessment to determine patient needs. Patients who are participants in pain treatment programs have been evaluated and determined to be appropriate candidates for pain treatment. This is very different from initial pain assessment to determine the needs of a patient, such as would be done in a primary care setting.

The focus of this project is the assessment of a patient with chronic pain who presents for care in a primary care setting. This assessment should enable the health care provider to determine the needs of the chronic pain patient. Even though assessment in a primary care setting has a different purpose (to determine needs) than assessment of treatment outcomes, the tools that have been used to measure treatment outcomes can guide the development of an initial assessment tool for use in primary care. Therefore the literature reviewed will highlight material in which assessment measures are used, for both the initial assessment of pain and for the outcomes of treatment.

The complexity of the response to chronic pain is reflected in the use of a number of assessment tools. These tools have addressed various aspects of the response to chronic pain: 1) depression (Basler, 1993; Geisser et al., 1994; Goldberg & Maciewicz, 1994; Jensen et al., 1994; Mayer et al., 1987; Pilowsky et al., 1995; and Subramanian, 1994); 2) the impact of attitudes on the perception of pain (Geisser et al., 1994; Jensen et al., 1994; Pilowsky et al., 1995); 3) the ability to function when experiencing pain (Basler, 1993; Goldberg & Maciewicz, 1994; Jensen et al., 1994; Mayer et al., 1987; and Subramanian, 1994); 4) coping strategies used with chronic pain (Basler, 1993; Geisser et al., 1994; and Jensen et al., 1994); and 5) assessment of the pain itself (Basler, 1993; Geisser et al., 1994; Goldberg & Maciewicz, 1994; Jensen et al., 1994; Mayer et al., 1987; Pilowsky et al., 1995; and Subramanian, 1994).

The Sickness Impact Profile is a global assessment tool that has been widely used in the assessment of chronic pain patients (for example, by Follick et al., 1985; Jensen et al., 1994; Pilowsky et al., 1995; Subramanian, 1994). It is a 136-item behaviorally based measure of health status, and covers categories of activity involved in normal living: ambulation, mobility, body care and movement, communication, alertness, emotional behavior, sleep and rest, work, recreation and pastimes, home management, and eating. It is a self-report measure of illness-related dysfunction (Follick et al., 1985). This tool gives a wealth of information but has a heavy respondent burden, requiring an average of 40 to 60 minutes for completion (Gerety et al., 1994).

Depression

The Beck Depression Inventory is frequently used to assess depression in patients who suffer from chronic pain (Geisser et al., 1994; Goldberg & Maciewicz, 1994; Jensen et al., 1994; and Mayer et al., 1987) . It is a 21-item multiple-choice self-report inventory. It measures both the cognitive affective components and the neuro-vegetative signs of depression (Beck, 1972).

In long-term follow-up of a treatment program for the management of chronic pain, Subramanian (1994) used the Profile of Mood States to assess depression. This profile is a 65-item, 5-point rating scale that assesses six transient aspects of affect and mood: tension-anxiety, depression-dejection, anger-hostility, vigor-activity, fatigue-inertia and confusion-bewilderment.

The Von Zerssen Depression Scale is a 16-item scale that assesses the frequency with which depressive symptoms occur, including the report of general dysphoric mood, behavior, and suicidal ideation on a four-point scale ranging from 'not at all true' to 'absolutely true.' It was used in the assessment of patients who suffer from low back pain, tension headache, rheumatoid arthritis, and ankylosing spondylitis (Basler, 1993).

Other questionnaires used to measure the affective state of chronic pain patients include the Zung Depression Questionnaire, the Levine-Pilowsky Depression Questionnaire, and the Spielberger State-Trait Anxiety Inventory (Pilowsky et al., 1995).

Attitudes

Catastrophizing is one of the many attitudes seen in chronic pain patients. Geisser et al. (1994) conducted a study to determine whether catastrophizing is related to McGill Pain Questionnaire scores when controlling for depression using the Beck Depression Inventory. Catastrophizing is a measure of a person's judgment about his/her inability to persist in coping efforts, excessive worry about the future, and a tendency to view pain and the individual's life situation as overwhelming. Results suggest that catastrophizing may increase pain perception and decrease the efficacy of treatment.

The Survey of Pain Attitudes (Jensen, Karoly, & Huger, 1987; Jensen & Karoly, 1989) was developed to assess seven beliefs hypothesized to be important in adjustment to chronic pain: pain control (belief in one's control over pain), disability (belief in oneself as disabled by pain), harm (belief that pain is a signal of damage and that activity should be avoided), emotion (belief that emotions influence pain), medical cure (belief in a medical cure for pain), solicitude (belief that others should be solicitous in response to pain behaviors), and medication (belief in the appropriateness of medications for the treatment of chronic pain). Changes in pain-related attitudes were found to be associated with improvement in depressive symptoms and in physical functioning, as well as with decreased number of pain-related physician visits (Jensen et al., 1994).

Pilowsky et al., (1995) measured illness-related attitudes and beliefs of chronic pain patients through the use of the Illness Behaviour Assessment

Schedule and the Illness Behaviour Questionnaire. The patients were treated using cognitive-behavioural therapy with amitriptyline (Elavil). This study suggests that non-specific factors (being accepted, respected, and receiving psychological support) are helpful in pain management.

Ability to Function

The Goldberg Scale of Vocational Development was designed to measure specific problems of motivation and work disability encountered by people with disabilities; it is not limited to persons with chronic pain (Goldberg, 1992). It measures specific problems of motivation and work disability and is a two-hour clinical interview synthesizing educational and vocational history, work values, interests, motivation to work, realistic assessment of pain disability, and optimistic/pessimistic outlook towards the future. Its first use with a chronic pain population was in a study of 21 patients in an inpatient pain program (Goldberg & Maciewicz, 1994). Motivation as measured by the Goldberg Scale was found to be a significant factor in the reduction of pain complaints and in decreased depression.

A checklist of bodily symptoms containing 57 items (nausea, tiredness, trembling, exhaustion, etc.) was developed by Brähler and Scheer (1983). It was used by Basler (1993) to assess patients' ability to function. Chronic pain patients rated the extent to which they suffer from these debilitating symptoms using a scale between 1 (not at all) and 5 (extremely). The use of cognitive-behavioural treatment in this study resulted in an improvement of physical complaints.

The Physical Dysfunction scale of the Sickness Impact Profile was used to assess physical ability to function in a multidisciplinary treatment program for chronic pain patients (Jensen et al., 1994). The study suggests that coping strategies taught in this treatment program did not have a significant impact on physical functioning at three and six month follow-up.

Mayer et al. (1987) assessed patients with chronic low back pain using a variety of physical function tests. Included were spinal range of motion, dynamic trunk strength, static lifting, lifting under workload, cardiovascular fitness/muscular endurance measures, and a global effort rating. Following the functional restoration program examined in the study, 87% of the treatment group were working as compared with 41% of the comparison group (who were denied treatment by the insurance carrier).

The Pain Disability Index measures household responsibilities, social activities, occupational activities, sexual behaviour, recreational activities, self-care and life support activities. It is a good indicator of the disabling effects of chronic pain on normal life activities as an index of the ability to function (Goldberg & Maciewicz, 1994). Younger people were found to have higher pain disability scores before treatment; correlation between age and Pain Disability Index was not significant at follow-up. The study which included 21 patients did not define the age of "younger people."

Assessment of Pain

The McGill Pain Questionnaire is a descriptive measure of pain using twenty groups of single-word pain descriptors. The patient chooses a word most consistent with his/her subjective pain experience; the words in each group increase in rank order intensity (Melzack, 1975). The questionnaire has repeatedly been used in assessing both acute and chronic pain intensity (for example, Geisser et al., 1994; Paice et al., 1995; and Pilowsky et al.,1995). It is useful in assessing patient's pain over time for comparison purposes; for example, when changing treatment strategies.

Patients sometimes are instructed to keep a pain diary in the assessment of their pain (Basler, 1993; Smoller & Schulman, 1982). A pain diary may also take the shape of a visual analogue scale (Pilowsky et al.,1995). Mayer et al. (1987) used pain drawing and the Million Analog Scale to assess pain. Severity of pain is often measured by a numerical scale that rates pain intensity on a scale from 0=*no pain* to 10=*pain as bad as it can be* (AHCPR Publication No. 92-0032, 1992; Subramanian, 1994). It must be remembered that these scales should not be used for comparing pain among individuals. Because pain is a subjective experience, each person's pain intensity rating is uniquely his/her own. However, these tools are useful in assessing individual patient's pain over time. If a health care provider relies only on the patient's report of pain "today," significant information may not be available as the patient may not accurately remember what the pain was like a week or a month ago. Keeping a pain diary or recording pain on a scale provides objective, within-subject information about a subjective experience.

Coping Strategies

The Coping Strategy Questionnaire (Rosenstiel & Keefe, 1983) measures six cognitive coping responses to pain (diverting attention, coping self-statements, praying and hoping, reinterpreting pain sensations, catastrophizing, and ignoring pain) and a behavioral response (increased behavioral activities). In one study, changes in pain-related beliefs (measured by the Survey of Pain Attitudes referred to above) and cognitive coping strategies were associated with improvement in depressive symptoms and physical functioning (Jensen et al., 1994).

Assessment as Treatment

Interpersonal support leads to patients developing a sense of being accepted and respected. Many patients arriving at pain clinics report that previous experiences with health care providers have not generated such feelings (Pilowsky et al., 1995). Support of this kind must begin with assessment.

Patients report satisfaction with care when they are evaluated nonjudgmentally and receive support and empathy for their problems (Hockberger, 1990), even though their pain is not relieved (Ward & Gordon, 1994; Ferrell et al., 1995). How we treat the pain is less important than how we make patients feel about their care. Patients leave health care sites with a positive view of the encounter if providers take time to examine, listen to, and talk with patients. Primary care providers must provide support and empathy from initial assessment through treatment if they expect their patients to be satisfied with care.

Critique of Literature

Of the treatment studies here reviewed, five had fewer than 100 subjects (Goldberg & Maciewicz, 1994; Jensen et al., 1994; Geisser et al., 1994; Pilowsky et al., 1995; Subramanian, 1994). The other two studies had 176 subjects (Basler, 1993) and 188 subjects (Mayer et al., 1987).

Only three of the studies mentioned the race of subjects (Geisser et al., 1994; Jensen et al., 1994; Subramanian, 1994). These were characterized as 89% white, 91% Caucasian, or "almost all" Caucasian.

One study (Pilowsky et al.,1995) made no mention of gender. Other studies included both men and women in varying percentages (Basler, 1993; Geisser et al., 1994; Goldberg & Maciewicz, 1994; Jensen et al., 1994; Mayer et al., 1987; Subramanian, 1994). It can be concluded that chronic pain affects both men and women.

Some studies refer to the age of subjects (Goldberg & Maciewicz, 1994; Geisser et al., 1994; Jensen et al., 1994; Subramanian, 1994). Others include age as one aspect of the demographic profile of participants (Pilowsky et al., 1995; Subramanian, 1994). One study had a range of 21 to 76 years (Geisser et al., 1994); another had a range of 21 to 64 years (Jensen et al., 1994); and a third included clients ranging in age from 38 to 82 years (Subramanian, 1994).

Only three of the studies reviewed included the duration of chronic pain as a characteristic of participants. In Basler's (1993) study, the duration of pain was more than 10 years. Average duration of pain was 3.9 years in the study done by Geisser et al. (1994). In another study the duration of pain was 2 to 34 years (Subramanian, 1994).

In summary, it may be concluded that these studies may not be generalizable to the total population of chronic pain patients because samples are small in size, and do not include multiple ethnic groups. Chronic pain appears to afflict adult patients regardless of age. The literature suggests that chronic pain afflicts men and women about equally.

Most studies used multiple assessment measures; the areas most frequently assessed are depression, the pain itself, and the impact of chronic pain on daily living. Given the multidimensional response to chronic pain, the assessment measures used are appropriately distributed to evaluate the variety of responses to chronic pain.

Review and Synthesis

The focus of this project is the assessment of chronic pain. If Watson is correct that every interaction between the patient and health care provider has the potential to be therapeutic, then assessment is part of therapy. Assessment and treatment can not be divorced. This idea is validated by several writers in current literature (Bowman, 1994; Hockberger, 1990; Pilowsky et al., 1995; Texidor, 1991). It has been shown in our literature review that assessment measures are commonly used by researchers pre- and post-treatment, both to furnish a baseline for treatment and to measure outcomes of therapy. Assessment when used by primary health care providers may also be part of the therapy process itself.

The assessment tool envisioned in this project has a different purpose than merely measuring outcomes of treatment. Assessment is a repetitive problem-solving process. The guidelines for the management of cancer pain (AHCPR Publication No. 94-0592, 1994) suggest that pain be assessed at regular intervals and with each new report of pain. The approach used with cancer patients may also be appropriate for chronic pain patients. A clinical guideline for the management of pain is outlined as follows: A) Ask about pain regularly and assess it systematically; B) Believe the patient's (or family's) report of pain and what relieves it; C) Choose appropriate pain control options; D) Deliver interventions in a timely, coordinated and logical manner; E) Empower patients and their families and enable them to control their options as much as possible (AHCPR Publication No. 94-0592, 1994).

The primary care provider must regularly assess the pain of persons who suffer from chronic pain, and provide treatment options and coping strategies that are appropriate to the patient. An ongoing and empathetic relationship with the patient that involves him/her in the treatment plan is essential. Primary care providers are familiar with the necessity of continuous monitoring of their diabetic and hypertensive patients' response to treatment. Medications or dosages are frequently changed. The patient's participation in treatment is essential for success because changes in behavior are usually required. Health care providers must be equally flexible and creative when assessing and treating the patient with chronic pain (Meinhart & McCaffery, 1983).

The foregoing literature review illustrates the multitude and variety of measures that may be used to assess the patient with chronic pain. In summary, it is instructive to note that all use a depression inventory or some measure of mood states. Three used the McGill Pain Questionnaire and the Sickness Impact Profile. Most use a pain rating index. There is frequent use of some measure of coping strategies.

Given the complexity of factors that contribute to the chronic pain syndrome and the frustration that many chronic pain patients experience when their pain is not relieved, it is not surprising that the assessment of chronic pain patients may be overwhelming to the primary health care provider. Clearly both the patient and the health care provider need to have confidence that chronic pain can be assessed and treated.

Based on the literature review, the three most important categories to be included in a chronic pain assessment are: 1) coping strategies; 2) the degree to which chronic pain has impacted daily living activities, work and relationships; and 3) the presence/absence of depression. Assessment of coping strategies can give the health care provider important insight regarding the patient (Bowman, 1994; Geisser et al., 1994; Jensen et al., 1994; Miller, 1993; Subramanian, 1994; Texidor, 1991). The patient's use of coping strategies that he/she has developed independently may indicate the individual's ability to be involved in his/her care. For example, a previous study has shown that when patients catastrophize, their perception of pain increases and treatment has lower efficacy (Geisser et al., 1994). Chronic pain impacts daily living, work and relationships (Bowman, 1994; Geisser et al., 1994; Goldberg & Maciewicz, 1994; Mayer et al., 1987; Smoller & Schulman, 1982; Jensen et al., 1994). Therefore, these issues must be assessed. Depression must be assessed, since it is almost axiomatic that depression is associated with chronic pain (Geisser et al., 1994; Miller, 1993; Pilowsky et al., 1995; Texidor, 1991).

It is important for the health care provider to acquire knowledge about three additional factors when assessing a patient presenting with chronic pain: 1) use of medication; 2) history of previous treatment(s); 3) the patient's perception of the effectiveness of these treatments. The patient's use of medication must be assessed because pain relievers are the first line of treatment in patients suffering from pain. The health care provider needs to know what medications have been tried and the level of relief that the patient has experienced (Bowman, 1994; Miller & Kraus, 1990; Smoller & Schulman, 1982). Previous treatment and the patient's perception of effectiveness must be addressed because most chronic pain patients have been seen by a variety of health care providers. Frequently their experiences have not been positive (Texidor, 1991; Pilowsky et al., 1995; Miller, 1993).

The assessment itself <u>should</u> be accomplished in a face-to-face encounter with the patient, in keeping with Watson's model of the human-to-human care process outlined in the conceptual framework above. If this method is found to be impossible in the clinical setting, the purpose may be accomplished by the use of a carefully crafted questionnaire that the patient can fill out and mail in or bring back on a follow-up visit. It must, however, be short enough that the health care provider can assist the patient in answering the questions if responding to a written questionnaire is difficult. Difficulties could include, but are not limited to, vision or literacy problems and the pain itself.

PROJECT DEVELOPMENT

Approach and Procedures

It was the goal of the writer to develop a clinically useful assessment tool that could be used by primary health care providers in assessing patients with chronic pain in a primary care site. It must be short enough to be practical for use in a primary care setting where the provider must see a new patient every 20 to 30 minutes. It included: (Table 1) the patient's use of medication (Hock, 1996); (Table 2) a history of previous treatment(s) (Hock, 1996); (Table 3) the patient's perception of the effectiveness of these treatments (Hock, 1996); (Table 4) current coping strategies (Hock, 1996); (Table 5) the degree to which chronic pain has impacted daily living activities, work and relationships (Sherbourne, Stewart, & Wells, 1992); and (Table 6) the presence/absence of depression, using the CESD-10 scale, (Andresen, Carter, Malmgren, & Patrick, 1994). (See Appendix A for actual tool.)

It seemed desirable to pilot the tool with a cohort of patients to determine usefulness. Therefore, permission was sought and granted from the University Committee on Research Involving Human Subjects at Michigan State University (See Appendix B).

Table 1.

Patient's use of medication

Do you take medication for your pain? (please circle) Yes No

If yes, Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

Which medication works best for you?

Note. Questions developed for this study. (Hock,1996).

Table 2.

History of previous treatments

Have you had surgery related to your pain? (please circle) Yes No

If yes, describe the surgery.

Have you had other treatments for your pain? (please circle) Yes No

If yes, describe the treatments.

Note. Questions developed for this study. (Hock,1996).

Table 3.

Patient's perception of treatment effectiveness

Explain how the surgery has helped/changed your pain.

Explain how the treatments have helped/changed your pain.

Note. Questions developed for this study. (Hock,1996).

Table 4.

Current coping strategies

In addition to medications and treatment, what else do you do to help you cope with your pain?

Note. Question developed for this study. (Hock,1996).

Table 5.

Impact of chronic pain on daily living, work, and relationships

The following questions are about your regular daily activities such as working at a job, keeping house, taking care of children, attending school, doing volunteer work, or taking part in community activities.

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of chronic pain?

Circle Yes or No for each question.

Yes No a. Took frequent rests when doing work or other activities

Yes No b. Cut down the amount of time you spend on work or other activities

Yes No c. Accomplished less than you would like

Yes No d. Didn't do work or other activities as carefully as usual

Yes No e. Were limited in the kind of work or other activities

Yes No f. Had difficulty performing the work or other activities (for example, it took extra effort)

Yes No g. Required special assistance (the assistance of others or special devices) to perform these activities

Yes No h. Acted irritable toward people (for example, snapped at them, gave sharp answers, criticized easily)?

Note. (Sherbourne et al., 1992)

Table 6.

Presence/absence of depression

Please rate how often you have felt this way during the past week, by circling the appropriate number on the left-hand side of each statement:

0 = Rarely or None of the Time (less than 1 day)

1 = Some or a Little of the Time (1-2 days)

2 = Occasionally or a Moderate Amount of Time (3-4 days)

3 = Most or All of the Time (5-7 days)

During the past week:

0 1 2 3 1. I was bothered by things that usually don't bother me.

0 1 2 3 2. I had trouble keeping my mind on what I was doing.

0 1 2 3 3. I felt depressed.

0 1 2 3 4. I felt that everything I did was an effort.

0 1 2 3 5. I felt hopeful about the future.

0 1 2 3 6. I felt fearful.

0 1 2 3 7. My sleep was restless.

0 1 2 3 8. I was happy.

0 1 2 3 9. I felt lonely.

0 1 2 3 10. I could not get "going."

Note. CESD-10 scale, (Andresen et al., 1994).

Pilot of Assessment Tool

The purpose of the assessment tool was explained in a face-to-face interview. The consent of the patient to participate was secured (Appendix C).

The tool was piloted with five individuals known to suffer from chronic pain. Included were the following persons: (1) an 87 year-old woman with an 18-year history of osteoporosis, (2) a 56 year-old woman with bone spurs on the walking surface of the right heel complicated by nerve damage secondary to a severe laceration of the heel of the right foot more than two years ago, (3) a woman in her early fifties with chronic low back pain for 4 to 5 years, (4) a woman in her early sixties with chronic low back pain for many years and back surgery 29 months ago, and (5) a 40 year-old woman with severe low back pain secondary to an on-the-job injury, requiring a variety of treatments, none of which has been effective to date in controlling the pain.

Target Group

The convenience sample of five individuals who suffer from chronic pain was chosen from co-workers and acquaintances of the writer. The initial plan to include patients from the family practice clinics where the writer is currently engaged in clinical practice was impossible to implement because of scheduling difficulties and the limited time that the writer was at those clinics.

The target group included only females. Three are health care workers. One is retired living with her spouse on an above-average income. One is a single parent supporting a middle school age child on the salary of a staff nurse. One is a single health care professional who owns her own home. Two are married and working full-time at middle-income jobs.

Evaluation

Prior to administration, three primary health care physicians were asked to review the tool and evaluate its potential usefulness. One indicated that he thought it had usability but gave no feedback about possible improvements. A second did not respond. The third filled it out as a questionnaire and indicated that it was clear but gave no feedback about its clinical usefulness.

The five interviews were conducted in face-to-face encounters. Privacy was assured by conducting the interview either in the individual's or the interviewer's home or in a room to which the door was closed. Each interview required from fifteen to twenty minutes to complete, considerably less than the forty-five minutes originally targeted.

All participants stated that the assessment content was clear and readable. Participants gave helpful feedback about possible improvements. One suggested that the patient's perspective about what should be done to relieve the pain should be included (she volunteered the opinion that losing weight would undoubtedly relieve some of her pain); this individual also thought that factors precipitating pain should be addressed. Another thought that the frequency, duration and intensity of the pain should have been an element in the assessment; this was clearly an omission that should have been included. Two individuals believed that the degree to which chronic pain had changed the person's life should have been assessed; this would seem to be a difficult item to quantify. While conducting the interviews, the writer became aware that the time-frames stated in the daily activities and depression sections of the questionnaire were somewhat constricting, particularly with individuals who had been coping with chronic pain over many years. The time frames could be adapted according to the experiences of individual patients. The date of surgery (if applicable) could also be included.

While the group with whom the tool was piloted was very small and lacked diversity, it is believed that the tool has usefulness. It could be improved by incorporating an assessment of the pain itself without sacrificing the advantage of its short administration time, an essential characteristic for usefulness in a primary care site.

The studies in the literature review did not include multiple ethnic groups. The assessment tool developed in this project could overcome this shortcoming by including a question that would capture the awareness that cultural groups differ in their response to pain. This inclusion would make the assessment tool more useful in primary care settings where a variety of cultural groups seek healthcare. (See Appendix D for a revision of the assessment tool.)

Implications for Advanced Nursing Practice and Primary Care

Chronic pain is a troublesome problem both for patients and for health care providers. As noted earlier in this paper, chronic pain sufferers frequently feel that their pain is not understood, and often find that their pain impacts negatively on their work, life, and relationships. Health care providers are hard-pressed to remain empathetic and caring in the face of a problem that is resistant to "cure."

Healthcare providers must be educated about the complex nature of chronic pain and the need to remain empathetic toward those who suffer with it. Advanced practice nurses are uniquely qualified to provide empathetic and flexible care to these individuals because the philosophical basis of their training focuses on healing and care. The patient suffering from chronic pain needs assurance that the pain is "not in my head" (Bowman, 1994). Chronic pain sufferers may need assistance in finding ways to regain control of their lives. Advanced practice nurses, trained to see individuals in a holistic manner and with information about adjunctive therapies, are well-qualified to suggest alternative treatments (such as massage, heat, rest, and flexible activity scheduling). Both health care providers and patients need education about the impact of attitudes on the ability to cope with chronic pain.

The primary health care provider, whether an advanced practice nurse or other professional, is in a unique position to make a significant and positive impact on the chronic pain sufferer. Beginning with initial assessment and continuing through ongoing contacts with these patients, the attitude of the provider is critical (Hockberger, 1990; Pilowsky et al., 1995). Therapeutic effects can be achieved by remaining respectful toward the patient (Bowman, 1994), acting as a consultant to the patient (Texidor, 1991), assisting the patient in taking control of their pain management (Subramanian, 1994), maintaining an empathetic and caring attitude (Ferrell et al., 1995), and not abandoning the patient (Watson, 1985).

A health care provider desiring to relieve suffering could use the assessment tool developed for this project as a worthwhile first step in working with a chronic pain patient. The writer found the interview process productive; those interviewed seemed comfortable and were forthcoming with information. The assessment tool should become part of the patient's medical record.

The need to document ongoing problem-solving and reassessment could be accomplished by the use of a pain flowsheet placed in the patient's record. (See Appendix E for a possible format for such a pain flowsheet; not all aspects of the flowsheet would need to be documented at every pain-related visit.) Outcomes of treatment could be documented by periodic chart reviews to ascertain whether the number of pain-related visits to the health care provider becomes less over time.

LIST OF REFERENCES

Andresen, E. M., Carter, W. B., Malmgren, J. A., & Patrick, D. L. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. American Journal of Preventive Medicine, 10(2), 77-84.

Basler, H. (1993). Group treatment for pain and discomfort. Patient Education and Counseling, 20, 167-175.

Beck, A. T. (1972). Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press.

Bonica, J. J. (1991). History of pain concepts and pain theory. The Mount Sinai Journal of Medicine, 58(3), 191-202.

Bowman, J. M. (1994). Experiencing the chronic pain phenomenon: A study. Rehabilitation Nursing, 19(2), 91-95.

Brähler, E. & Scheer, J. (1983). Der Giessener Beschwerdebogen (GBB). Bern: Huber.

Ferrell, B. R., Rhiner, M., Cohen, M. Z., & Grant, M. (1991). Pain as a metaphor for Illness, Part I: Impact of cancer pain on family caregivers. Oncology Nursing Forum, 18(8), 1303-1309.

Ferrell, B., Whedon, M., & Rollins, B. (1995). Pain and quality assessment/improvement. Journal of Nursing Care Quality, 9(3). 69-85.

Follick, M. J., Smith, T. W., & Ahern, D. K. (1985). The sickness impact profile: A global measure of disability in chronic low back pain. Pain, 21, 67-76.

Geisser, M. E., Robinson, M. E., Keefe, F. J., & Weiner, M. L. (1994). Catastrophizing, depression and the sensory, affective and evaluative aspects of chronic pain. Pain, 59, 79-83.

Gerety, M. B., Cornell, J. E., Mulrow, C. D., Tuley, M., Hazuda, H. P., Lichtenstein, M., Aguilar, C., Kadri, A. A., & Rosenberg, J. (1994). The sickness impact profile for nursing homes (SIP-NH). Journal of Gerontology: MEDICAL SCIENCES, 49(1), M2-M8.

Goldberg, R. T. (1992). Toward a model of vocational development of people with disabilities. Rehabilitation Counseling Bulletin, 35: 161-173.

Goldberg, R. T., & Maciewicz, R. J. (1994). Prediction of pain rehabilitation outcomes by motivation measures. Disability and Rehabilitation, 16(1), 21-25.

Hitchcock, L. S., Ferrell, B. R., & McCaffery, M. (1994). The experience of chronic nonmalignant pain. Journal of Pain and Symptom Management, 9(5), 312-319.

Hock, M.A. (1996). Questions developed for this study. Partial fulfillment of Master of Science Degree in Nursing at Michigan State University.

Hockberger, R. S. (1990). Meeting the challenge of low back pain. Emergency Medicine, (August 15), 99-127.

Jensen, M. P., & Karoly, P. (1989, March). Revision and cross-validation of the Survey of Pain Attitudes. Paper presented at the 10th annual scientific sessions of the Society of Behavioral Medicine, San Francisco.

Jensen, M. P., Karoly, P., & Huger, R. (1987). The development and preliminary validation of an instrument to assess patients' attitudes toward pain. Journal of Psychosomatic Research, 31, 393-400.

Jensen, M. P., Turner, J. A., & Romano, J. M. (1994). Correlates of improvement in multidisciplinary treatment of chronic pain. Journal of Consulting and Clinical Psychology, 62(1), 172-179.

Mayer, T. G., Gatchel, R. J., Mayer, H., Kishino, N. D., Keeley, J., & Mooney, V. (1987). A prospective two-year study of functional restoration in industrial low back injury: An objective assessment procedure. Journal of the American Medical Association, 258(13), 1763-7.

Meinhart, N.T., & McCaffery, M. (1983). Pain: A nursing approach to assessment and analysis. Norwalk, Connecticut: Appleton-Century-Crofts.

McCaffery, M. (1972). Nursing Management of the Patient with Pain. Philadelphia: J. B. Lippincott Company.

McCaffrey M., & Ferrell, B. R. (1996). Correcting misconceptions about pain assessment and use of opioid analgesics: Educational strategies aimed at public concerns. Nursing Outlook, 44(4), 184-190.

Melzack, R. (1975). The McGill pain questionnaire: Major properties and scoring methods. Pain,1, 277-299.

Mezey, M. D. & McGivern, D. O. (Eds.). (1993). Nurses, Nurse Practitioners. New York: Springer Publishing Company.

Miller, L. (1993). Psychotherapeutic approaches to chronic pain. Psychotherapy, 30(1), 115-124.

Miller, T. W., & Kraus, R. F. (1990). An overview of chronic pain. Hospital and Community Psychiatry, 41(4), 433-440.

Mobily, P. R., Herr, K. A., & Kelley, L. S. (1993). Cognitive-behavioral techniques to reduce pain: A validation study. International Journal of Nursing Studies, 30(6), 537-548.

Paice, J., Mahon, S. M., & Faut-Callahan, M. (1995). Pain Control in Hospitalized Postsurgical patients. MEDSURG Nursing, 4(5), 367-372.

Pilowsky, I., Spence, N., Rounsefell, B., Forsten, C., & Soda, J. (1995). Out-patient cognitive-behavioural therapy with amitriptyline for chronic non-malignant pain: A comparative study with 6-month follow-up. Pain, 60, 49-54.

Potter, P. A., & Perry, A. G. (1989). Fundamentals of nursing: Concepts, process, and practice. St. Louis: The C. V. Mosby Company.

Rosenstiel, A. K., & Keefe, F. J. (1983). The use of coping strategies in chronic low back pain patients: Relationship to patient characteristics and current adjustment. Pain, 17, 33-44.

Ryan, P., Vortherms, R, & Ward, S. (1994). Cancer pain: Knowledge, attitudes of pharmacologic management. Journal of Gerontological Nursing, 20(1), 7-15.

Scarry, E. (1985). The body in pain: The making and unmaking of the world. New York: Oxford University Press.

Sherbourne, C. D., Stewart, A. L., & Wells, K. B. (1992). Role functioning measures. In Stewart, A. L. & Ware, J. E. (Eds.), Measuring functioning and well-being: The medical outcomes study approach (pp. 205-219. Durham and London: Duke University Press.

Skidmore-Roth, L. (1997). Mosby's nursing drug reference. Mosby: St. Louis.

Smoller, B., & Schulman, B. (1982). Pain control: The Bethesda program. Garden City, New York: Doubleday & Company, Inc.

Starfield, B. (1992). Primary care: Concept, evaluation, and policy. New York: Oxford University Press.

Subramanian, K. (1994). Long-term follow-up of a structured group treatment for the management of chronic pain. Research on Social Work Practice, 4(2), 208-222.

Talento, B. (1989). Jean Watson. In J. B. George (Ed.), Nursing Theories: The base for professional nursing practice (pp. 293-309). Norwalk, Connecticut: Appleton & Lange.

Texidor, M. S. (1991). Models of delivery of health care services and chronic pain. Medical Psychotherapy, 4, 39-46.

Turk, D. C., Rudy, T. E., & Sorkin, B. A. (1993). Neglected topics in chronic pain treatment outcome studies: Determination of success. Pain, 53, 3-16.

U. S. Department of Health and Human Services. (1992). Acute Pain Management: Operative or Medical Procedures and Trauma (AHCPR Publication No. 92-0032). Rockville, MD: Author.

U. S. Department of Health and Human Services. (1994). Management of Cancer Pain (AHCPR Publication No. 94-0592). Rockville, MD: Author.

Voigt, L., Paice, J. A., & Pouliot, J. (1995). Standardized pain flowsheet: Impact on patient-reported pain experiences after cardiovascular surgery. American Journal of Critical Care, 4(4), 308-313.

Ward, S., & Gatwood, J. (1994). Concerns about reporting pain and using analgesics: A comparison of persons with and without cancer. Cancer Nursing, 17(3), 200-206.

Ward, S. E., & Gordon, D. (1994). Application of the American Pain Society quality assurance standards. Pain, 56, 299-306.

Watson, J. (1985). Nursing: Human science and human care: A theory of nursing. Norwalk, Connecticut: Appleton-Century-Crofts.

Widner, S., & Zeichner, A. (1993). Psychologic interventions for the elderly chronic pain patient. Clinical Gerontologist, 13(4), 3-18.

APPENDIX A

Chronic Pain: An Assessment Tool for Primary Care

1. Do you take medication for your pain? (please circle) Yes No

2. If yes, Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

Name ____________________ Dosage _______________

3. Which medication works best for you?

4. Have you had surgery related to your pain? (please circle) Yes No

5. If yes, describe the surgery.

6. Explain how the surgery has helped/changed your pain.

7. Have you had other treatments for your pain? (please circle) Yes No

8. If yes, describe the treatments.

9. Explain how the treatments have helped/changed your pain.

10. In addition to medications and treatment, what else do you do to help you cope with your pain?

The following questions are about your regular daily activities such as working at a job, keeping house, taking care of children, attending school, doing volunteer work, or taking part in community activities.

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of chronic pain? Circle Yes or No for each question.

Yes No a. Took frequent rests when doing work or other activities

Yes No b. Cut down the amount of time you spend on work or other activities

Yes No c. Accomplished less than you would like

Yes No d. Didn't do work or other activities as carefully as usual

Yes No e. Were limited in the kind of work or other activities

Yes No f. Had difficulty performing the work or other activities (for example, it took extra effort)

Yes No g. Required special assistance (the assistance of others or special devices) to perform these activities

Yes No h. Acted irritable toward people (for example, snapped at them, gave sharp answers, criticized easily)?

Please rate how often you have felt this way during the past week, by circling the appropriate number on the left-hand side of each statement:

0 = Rarely or None of the Time (less than 1 day)

1 = Some or a Little of the Time (1-2 days)

2 = Occasionally or a Moderate Amount of Time (3-4 days)

3 = Most or All of the Time (5-7 days)

During the past week:

0 1 2 3 1. I was bothered by things that usually don't bother me.

0 1 2 3 2. I had trouble keeping my mind on what I was doing.

0 1 2 3 3. I felt depressed.

0 1 2 3 4. I felt that everything I did was an effort.

0 1 2 3 5. I felt hopeful about the future.

0 1 2 3 6. I felt fearful.

0 1 2 3 7. My sleep was restless.

0 1 2 3 8. I was happy.

0 1 2 3 9. I felt lonely.

0 1 2 3 10. I could not get "going."

Are the items in this questionnaire clear? Yes No

Have you any suggestions that might improve this assessment tool? Please state your suggestions. Thank you very much for your participation.

APPENDIX B

UCRIHS Approval

MICHIGAN STATE
UNIVERSITY

February 13, 1997

TO: Linda Beth Tiedje
A-230 Life Sciences Building

RE:
IRB#: **97-046**
TITLE: CHRONIC PAIN: DEVELOPMENT OF AN ASSESSMENT TOOL
REVISION REQUESTED: N/A
CATEGORY: 1-C
APPROVAL DATE: 02/12/97

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project and any revisions listed above.

RENEWAL: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/ CHANGES: Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517)355-2180 or FAX (517)432-1171.

Sincerely,

David E. Wright, Ph.D.
UCRIHS Chair

DEW:bed

cc: Miriam Hock

OFFICE OF
RESEARCH AND GRADUATE STUDIES

University Committee on Research Involving Human Subjects (UCRIHS)

Michigan State University
246 Administration Building
East Lansing, Michigan
48824-1046

517/355-2180
FAX: 517/432-1171

APPENDIX C

PARTICIPANT INFORMED CONSENT

CHRONIC PAIN: Development of an Assessment Tool for Primary Care

College of Nursing

Michigan State University

I understand that I am being asked to participate in the development of a chronic pain assessment. I also understand that this assessment uses an interview format and will take approximately forty-five minutes to complete. I further understand that my participation is completely voluntary and that I may refuse to participate. If there are particular questions that I do not wish to answer, I may refuse to do so. Should I choose not to participate, it will have no negative impact on the care that I receive from my primary physician.

I understand that my responses will be kept completely confidential and that my identity will not be disclosed in any report of this project. By request, and within these restrictions, a report will be made available to participants.

If I have any concerns or questions regarding my participation in this project, I understand that I may contact Miriam Hock at (616) 749-9396, and she will try to answer my concerns or questions to my satisfaction.

Participant's Name (please print) ______________________

Participant's Signature ______________________________

Signature of interviewer _____________________________

Date ____

APPENDIX D
Chronic Pain: An Assessment Tool for Primary Care

1. In your family of origin, how did you react to pain? What was done when people were in pain?

1. Do you take medication for your pain? (please circle) Yes No
2. If yes, Name____________________ Dosage__________________
   Name____________________ Dosage__________________
   Name____________________ Dosage__________________
   Name____________________ Dosage__________________

3. Which medication works best for you?
4. Have you had surgery related to your pain? (please circle) Yes No
5. If yes, give the date and describe the surgery.

6. Explain how the surgery has helped/changed your pain.

7. Have you had other treatments for your pain? (please circle) Yes No
8. If yes, describe the treatments.

9. Explain how the treatments have helped/changed your pain.

10. In addition to medications and treatment, what else do you do to help you cope with your pain?

11. On a scale of 0 to 10, with 0 = *no pain* and 10 = *the worst pain you can imagine*, how would you rate your pain today?

12. How frequently do you have pain?

13. How long does the pain usually last?

The following questions are about your regular daily activities such as working at a job, keeping house, taking care of children, attending school, doing volunteer work, or taking part in community activities.

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of chronic pain? Circle Yes or No for each question.

Yes No a. Took frequent rests when doing work or other activities

Yes No b. Cut down the amount of time you spend on work or other activities

Yes No c. Accomplished less than you would like

Yes No d. Didn't do work or other activities as carefully as usual

Yes No e. Were limited in the kind of work or other activities

Yes No f. Had difficulty performing the work or other activities (for example, it took extra effort)

Yes No g. Required special assistance (the assistance of others or special devices) to perform these activities

Yes No h. Acted irritable toward people (for example, snapped at them, gave sharp answers, criticized easily)?

Please rate how often you have felt this way during the past week, by circling the appropriate number on the left-hand side of each statement:

0 = Rarely or None of the Time (less than 1 day)

1 = Some or a Little of the Time (1-2 days)

2 = Occasionally or a Moderate Amount of Time (3-4 days)

3 = Most or All of the Time (5-7 days)

During the past week:

0 1 2 3 1. I was bothered by things that usually don't bother me.

0 1 2 3 2. I had trouble keeping my mind on what I was doing.

0 1 2 3 3. I felt depressed.

0 1 2 3 4. I felt that everything I did was an effort.

0 1 2 3 5. I felt hopeful about the future.

0 1 2 3 6. I felt fearful.

0 1 2 3 7. My sleep was restless.

0 1 2 3 8. I was happy.

0 1 2 3 9. I felt lonely.

0 1 2 3 10. I could not get "going."

Appendix E

Pain Flowsheet

Use of medications:

Medication	Dosage	Frequency	Efficacy (1-5*)

Coping Strategies:

Strategy	Frequency	Efficacy (1-5*)

Pain Diary?

Date	Yes	No	Date	Yes	No	Date	Yes	No

* (1=no relief; 5=highly effective)