Questions pertained to satisfaction with housekeeping, life satisfaction, worry over health, feeling happy, and feelings about aging. No relation was found between demographic and intervention variables and total Contement Index scores. Neither cohort group showed a significant gain in total contentment scores between pre- and post-tests. Comparison of pre- and post-test data on individual questions showed a significant difference on the question about worry over health for the group having interventions over time. This study suggests that health provider actions over time positively influence client readiness to change health behaviors.

By the year 2030, the number of persons over age 60 in the United States is expected to increase 17%, from 3 million to 46 million (Kovar, 1986). Ninety-five percent of these older adults will be living independently in the community and will have independent functioning as a primary concern (Burnside, 1988; Moneyham, 1988). Multiple chronic conditions and age-related physical, psychologic, and sociologic changes will be “taken in stride” as long as independence is maintained. When serious illness is evidenced, the ability to remain independent will be jeopardized. Disease prevention and health promotion services then are a high priority in the older population (Hazzard, 1983; Moneyham, 1988; Penn, 1988).

Despite functional limitations, independent elders usually voice satisfaction with the quality of their lives (Burnside, 1988; Hazzard, 1983; Stillman, 1986). However, life satisfaction can have a negative impact on self-care. As a result, older adults

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**INTRODUCTION**

Do health visits reduce contentment with health status so that change in health behavior can take place? A study was conducted at two inner-city residences occupied by persons 60 years of age and older who were functioning independently. The sample (N = 61) was divided into two cohort groups based on place of residency. Group 1 (n = 35) had at least six health sessions during the study period, as well as pre- and post-hypertension screening. The second group (n = 26) took part in only the pre- and post-study screening. Both cohort groups filled out questionnaires that included a demographic and Contement Index.

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BY MARYHELEN C. KREIDLER, EdD, RN; JANIS CAMPBELL, PhD, RN; GAYNOR LANIK, PhD, RN; V. RUTH GRAY, EdD, RN; AND MARTHA A. CONRAD, MSN, RN

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JOURNAL OF GERONTOLOGICAL NURSING
may become complacent about personal health practices unless they experience acute distress or are diagnosed as having a disabling disease. Improvement in health behaviors and self-care practices increases the probability that older persons will be able to maintain independent functioning for a longer period (American Nurses Association, 1982). Toward this end, assisting independent elders to desire, plan, implement, and maintain health promotion and disease prevention activities is a challenging role for nurses (Grimes, 1980; Maagdenburg, 1983).

There is a lack of nursing research that compares the effectiveness of interventions used to assist older adults in changing health practices. For this reason, a study was initiated at a university-based, nurse-managed center to investigate the change readiness of older adults who took part in two different types of nursing interventions. The question asked was: “Will older persons who have nursing visits aimed at improving health behaviors and self-care practices demonstrate more readiness to change health behaviors than those who take part in only screening sessions?” The impact of demographic and intervention variables on study findings also was investigated. Change theory was used as the conceptual model for the study.

Change theory can be used to determine client readiness to change health behaviors. Classic change theory has its origin in the work of Lewin (1958), who identified three stages in the change process.

The first stage, unfreezing, involves a desire for change. It is based on discomfort caused by the upsetting of homeostasis and feelings of inadequacy within the individual. Psychologic safety is offered by a change agent through support, reassurance, and assistance. During the second stage, moving, new behaviors are identified that are perceived as problem-solving approaches. This is usually accomplished through identification with a knowledgeable, respected person (the change agent). During the last stage, refreezing, new behaviors are integrated and internalized, while advice, reinforcement, and support are offered by the change agent. Forces that facilitate or inhibit change (driving or restraining forces) also are identified throughout the process.

Planned change is a primary role of the professional nurse and an essential leadership component (Welch, 1979). The use of change theory as a conceptual model has been well documented in the nursing literature by nurse administrators, staff developers, and nursing faculty members (Barber, 1987; Bower, 1988; Brand 1987; Gawinski, 1984; Niland, 1985; Proctor, 1986; Rantz, 1987; Ward, 1984). Change theory and its applicability to practice and research is less documented (Bailey, 1983; Gallagher, 1986; Smith, 1986).

Despite prolific documentation in the areas of nursing education and administration, there is a lack of evidence in the literature that change readiness is currently being used as a practice or research model in gerontological nursing. Only a few studies have investigated older persons’ compliance with recommendations made during health screenings (Rubenstein, 1986; Tullock, 1979), and no studies have looked at change readiness of older clients in relation to specific nursing interventions or their timing.

**METHOD**

**Subjects and Setting**

A study approved through a midwestern university’s institutional review board was conducted at two adjacent inner-city high-rise apartment buildings. Older adults in both buildings were invited to take part in health promotion activities and participate in a study of life contentment. From a sample pool of 150 volunteers, a convenience sample (N = 61) was determined. Subjects had to meet the following criteria:

- Give informed consent;
- Be 60 years of age or older;
- Function independently with minimal assistance;
- Fill out demographic and pre- and post-intervention questionnaires; and
- Take part in hypertension screening at 16-week intervals.

**Procedure**

Residents in two apartment buildings for low-income elders were informed that nurses would be available for blood pressure screenings.
During the screenings, results were explained, questions were answered, and the impact of nutrition, exercise, and stress on health status was clarified. Participants were invited to take part in a study of life contentment; volunteers signed consent forms, and filled out demographic and Contentment Index questionnaires. They were informed that in 16 weeks they would again be screened and fill out the Contentment Index.

Based on subject criteria, all participants met requirements for a cohort. Therefore, residents of one building were randomly selected to receive additional nursing interventions. The only difference in procedure was that residents in the selected building (n = 35) were informed that a nurse would be available for six follow-up sessions during the next 16 weeks. The residents in the other building (n = 26) took part in only two hypertension screenings.

During the follow-up sessions, nurses assisted residents in planning, implementing, and evaluating individualized health promotion activities. Residents could request nursing assessments and/or specific follow-up educational sessions. Client-identified issues included the need for coping strategies, feelings of isolation, difficulties with relationships, specific health concerns, and the need for referrals.

Nurses as change agents offered information and support throughout the intervention process. Based on pre-intervention assessments, and using the change theory model, the following strategies were implemented:

- Explore the impact of life events on health status during assessment and evaluation conferences. The goal of this exploration was to identify discrepancies between health beliefs and practices, identify the need to change behaviors and, promote feelings of discomfort with their present situation (unfreezing stage);
- Plan and implement ways to change negative behaviors (moving stage); and
- Reinforce efforts to change health behaviors and support efforts to promote health (refreezing stage).

**TABLE 1**

<table>
<thead>
<tr>
<th>Contentment Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In general, how satisfied are you with your present arrangements for house cleaning, laundry, and shopping?</td>
</tr>
<tr>
<td>Satisfied</td>
</tr>
<tr>
<td>2. In general, how satisfied are you with your life today?</td>
</tr>
<tr>
<td>Satisfied</td>
</tr>
<tr>
<td>3. Has your health been a worry for you this past month?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>4. Would you say you have been happy or unhappy this past month?</td>
</tr>
<tr>
<td>Happy</td>
</tr>
<tr>
<td>5. Would you agree or disagree with those people who say “things keep getting worse for me as I grow older”?</td>
</tr>
<tr>
<td>Agree</td>
</tr>
</tbody>
</table>


**Instrument**

Bloom and Blenkner’s (1970) Contentment Index (short form) was used to measure overall contentment (Table 1). The original 20-question tool was developed to measure perceived well-being in the elderly. It was found to be sensitive to change and useful for measuring the effects of community programs (Kane, 1981). The short form, consisting of five items, was found to be empirically predictive of total score results (Weissert, 1980). Questions pertained to satisfaction with housekeeping arrangements; life satisfaction; worry regarding health; happiness; and feelings regarding aging. Results of reliability, and content and construct validity were reported by the authors (Mongen, 1984).

**FINDINGS**

Both group’s demographic variables were comparable (Table 2). The total sample (N = 61) included 79% female and 21% male subjects, ranging in age from 60 to 95, with an average age of 74. The majority were white (67%); the remainder were black (33%). Forty-seven percent had completed eighth grade, 12% had completed high school, and 13% had
**TABLE 2**

### Demographic Variables

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>13 (21)</td>
</tr>
<tr>
<td>Female</td>
<td>48 (79)</td>
</tr>
<tr>
<td><strong>Age Range</strong></td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>22 (36)</td>
</tr>
<tr>
<td>70-79</td>
<td>16 (26)</td>
</tr>
<tr>
<td>80-89</td>
<td>20 (33)</td>
</tr>
<tr>
<td>90-95</td>
<td>3 (5)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>20 (33)</td>
</tr>
<tr>
<td>White</td>
<td>41 (67)</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
</tr>
<tr>
<td>Grade school</td>
<td>29 (47)</td>
</tr>
<tr>
<td>Some high school</td>
<td>17 (28)</td>
</tr>
<tr>
<td>High school</td>
<td>7 (12)</td>
</tr>
<tr>
<td>Beyond high school</td>
<td>8 (13)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>27 (44)</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>18 (30)</td>
</tr>
<tr>
<td>Married</td>
<td>10 (16)</td>
</tr>
<tr>
<td>Never married</td>
<td>6 (10)</td>
</tr>
</tbody>
</table>

*N = 61.

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some education beyond high school. The majority were widowed (44%), 30% were divorced or separated, 16% were married, and 10% had never been married. No relation was found between any of the demographic variables and pre- or post-test total or individual question scores on the Contentment Index for either group.

Overall Contentment Index scores were high, supporting the premise that older persons generally report contentment if living independently. A large percentage of those surveyed—31% for both groups—indicated satisfaction with all aspects of their lives both pre- and post-testing. No significance at a level 0.05 was found when comparing the groups' total Contentment Index scores pre- or post-intervention using the 2 sample t-test. Neither group showed a significant gain in total contentment scores between the pre- and post-tests.

Comparison of each groups' individual question responses showed minimal dissatisfaction in both groups pre- and post-intervention, with housekeeping, life-satisfaction, happiness levels, and the aging process (questions 1, 2, 4, and 5). Concern over health (question 3) was high for both groups in initial testing. It was still high in post-testing for the group who had screenings and the six follow-up nursing visits, but it had decreased for the group who had only screening sessions.

χ² analysis of question 3 responses comparing the two groups' pre-test scores was not significant at χ² = .33, p<.05. Analysis of post-test scores for both groups did show significance (χ² = 4.03, p<.05) for the group having the two screening sessions and the six follow-up nursing visits. No relation existed between the focus, type, or outcome of the follow-up sessions and the difference in pre- and post-test scores.

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### NURSING IMPLICATIONS

Charge theory was the conceptual model used by nurses doing community health outreach with well elders. Health promotion activities were deliberately planned so that clients would be uncomfortable enough with their health status to recognize the need for change and act upon it. The study was initiated to determine if older adults who had screening sessions and nursing visits over time demonstrated more change readiness, as measured by a perception of discomfort with health status, than those who took part in only screening sessions.

Prior to implementation of this study, participants indicated interest in their health by voluntarily selecting to take part in a health screening. Post-intervention score findings suggest that the group receiving only blood pressure screening and education was less concerned with health status at the end of 16 weeks than the cohort group. This finding indicates that health screening alone is...
insufficient to create the discomfort necessary for change; unfreezing does not occur and health attitudes and behaviors remain unchanged.

The group interacting with a nurse for six sessions during a 4-month period (as well as participating in the two screenings) had significantly less contentment with health status. The nursing implication is that health screenings alone can reduce health concerns rather than create an atmosphere conducive to change.

Nursing interventions that are planned and continual appear to raise health consciousness and begin the change process of unfreezing, movement, and refreezing when they follow a screening session.

**CONCLUSION**

As valuable as health screening sessions are in raising participants’ awareness, this study suggests that it is the combination of health screening and nursing visits over time that creates the atmosphere in which change can occur. It also indicates that nurses working in the community with independent elders need an evaluative tool for determining client readiness for change. Bloom and Blenkner’s Contentment Index is one such instrument, and it is easily administered.

This study also demonstrated the effectiveness of change theory as a conceptual model for nurses acting as health promoters with community based elders. Change does not occur until clients feel discomfort with their health status and are willing to work at altering health attitudes and practices. By assisting clients as they go through the stages of unfreezing, movement and refreezing, and planning interventions appropriate to each phase, nurses can work collaboratively with their older clients as facilitators of change. The nurse who uses change theory as a health care model and sees the nurse’s role as that of change agent can assist community dwelling elders to maintain their independent functioning.

This pilot study also has generated questions for further research. The next phase of the study will involve a larger population, more than two cohort groups and a control group, and interventions that will take place for a period of 1 year rather than 4 months. Testing can take place every 4 months and client concerns can be used as goals for change. Client use of other health care providers and the rate of illness occurrence during the year also can be addressed. Continued study will assist nurses in recognizing how and when nursing actions can assist older adults in maintaining their independence and in preventing acute episodes of illness.

**REFERENCES**


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CHANGE THEORY

KEYPONITS

1. Despite functional limitations, independent elders usually voice satisfaction with the quality of their lives. However, life satisfaction can have a negative impact on self-care. As a result, older adults may become complacent about personal health practices.

2. Improvement in health behaviors and self-care practices increases the probability that older persons will be able to maintain independent functioning for a longer period.

3. Change theory can be used to determine client readiness to change health behaviors. The first stage, unfreezing, involves a desire for change. During the second stage, moving, new behaviors are identified that are perceived as problem-solving approaches. During the last stage, refreezing, new behaviors are integrated and internalized, while advice, reinforcement, and support are offered by the change agent.

4. Health screening alone is insufficient to create the discomfort necessary for change; unfreezing does not occur and health attitudes and behaviors remain unchanged. As valuable as health screening sessions are in raising participants' awareness, the study reported on suggests that it is the combination of health screening and nursing visits over time that creates the atmosphere in which change can occur.

Minneapolis: University of Minnesota, 1984.


ABOUT THE AUTHORS

Maryhelen C. Kreidler, EdD, RN, is Director, Center for Nursing, and Associate Professor, College of Nursing, the University of Akron, Ohio; also at the College of Nursing, the University of Akron, Ohio are: Janis Campbell, PhD, RN, Associate Professor; Gaynor Lanik, PhD, RN, Assistant Professor Emeritus; V. Ruth Gray, EdD, RN, Dean and Professor; and Martha A. Conrad, MSN, RN, Assistant Director, Center for Nursing, and Family Health Nurse Specialist.

This study was supported in part by University of Akron research grant #RG906.

The authors gratefully acknowledge the assistance of Lou Ann Fulmer, Karen Schwarz, Marcine Szucs, Norma Tomlinson, and Dianne Vishnia in data collection, and Dr. Richard Einsporn in data analysis; and Dr. E. Jane Martin for comments on a draft of this article.

Address correspondence to Maryhelen C. Kreidler, EdD, RN, Center for Nursing, University of Akron, College of Nursing, Akron, OH 44325-3710.