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Daily Use of Complementary and Other Therapies for Symptoms among Older Adults: Study Design and Illustrative Results

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Abstract

Objectives—This paper describes research designed to specify complementary therapies used among older adults by obtaining daily use data and the specific purposes for use.

Design—Two-hundred African American and white participants completed a baseline interview and up to six sets of three daily-diary interviews at monthly intervals.

Results—Participants provided retrospective information on complementary therapy use, and information on the use of therapies for specific symptoms experienced across 3,070 person days. Retrospective information indicated that most participants used complementary therapies (e.g., 85.0% used home remedies in the past year). The use of complementary or other therapies and the number of days the therapies were used varied for specific symptoms. For example, home remedies were used on 86 (9.1%) of the 944 person days for which joint pain was reported.

Discussion—The daily-diary design provides detailed information for delineating how elders include complementary and other therapies in their health self-management.

Keywords

Health self-management; complementary therapies; rural aging

Introduction

Most adults in the United States use complementary therapies for their health and the complementary therapies they use vary widely (Arcury, Suerken, Grzywacz, Bell, Lang, & Quandt, 2006a; Barnes, Powell-Griner, McFann, & Nahin, 2004; Barnes, Bloom, & Nahin, 2008; Brown, Barner, Bohman, & Richards, 2009; Eisenberg, Kessler, Foster, Norlock, Calkins, & Delbanco, 1993). Use of complementary therapies is also high among older adults, with therapies including home remedies, herbs, and supplements; personal practices; care by practitioners; and prayer and spirituality (Arcury et al., 2006a; Arcury, Bell, Snively, Smith, Skelly, Wetmore, & Quandt, 2006b; Astin, Pelletier, Marie, & Haskell, 2000;

Cavendar & Beck, 1995; Foster, Phillips, Hamel, & Eisenberg, 2000; Grzywacz, Arcury, Bell, Lang, Suerken, Smith, & Quandt, 2006; Loera, Black, Markides, Espino, & Goodwin, 2001; Najm, Reinsch, Hoehler, & Tobis, 2001). Investigators argue that complementary therapy use is a component of health self-management among older adults (Arcury et al., 2006a, Arcury et al., 2006b; Grzywacz, Lang, Suerken, Quandt, Bell, & Arcury, 2005; Kelner & Wellman, 1997; Thorne, Paterson, Russell, & Schultz, 2002; Votova & Wister, 2007). Within the health self-management framework, older adults are actively involved in making observations and treatment decisions about acute symptoms or chronic conditions (World Health Organization, 1983; Ory, DeFries, & Duncker, 1998; Woomert, 1998; Quandt, Arcury, & Bell, 1998; Clark, Frankel, Morgan, Ricketts, Bair, Nyland, & Callahan, 2008).

Documenting the degree to which older adults include complementary therapies in their health self-management and the circumstances surrounding the use of these therapies is a complex challenge. The variety of therapies is great. Investigations too often are based on general survey questions with broad categories, such as “herbs or supplements,” “special diets” or “prayers and healing rituals.” These general questions are often combined to create measures reflecting “any use of a complementary therapy.” The typical survey approach involves asking about participants' use of complementary therapies over an extended look-back period, frequently the past 12 months. Finally, the purpose for which a complementary therapy is used is often not asked, or broad categories (e.g., to promote well-being) are used. Lack of specificity in what is being measured, protracted recall periods, and ambiguous reasons for use of complementary therapy raise substantial question about the accuracy of actual use.

This paper provides an overview of a study designed to specify the use of complementary therapies for health self-management among older adults by obtaining data on the daily use of complementary therapies and the specific purposes for which the complementary therapies are used. First, the study design is described. Second, examples of study results are presented. These results include participants' personal characteristics, retrospective reports for the general use of complementary and other therapies by the participants (reflecting the typical approach to describing complementary therapy use), and prospective reports of the types of complementary and other therapies participants report using for four specific symptoms.

Methods

The goal of this study was to document the daily use of complementary therapies of older adults for specific symptoms on the days the symptoms occurred, for chronic conditions, and for health promotion. Data were also collected on the daily use of self-care behaviors, such as the use of over-the-counter medicine and rest, and on the daily use of conventional health care, such as the use of prescribed medicine. Data collection focused on older adults who lived in three rural counties in south-central North Carolina. A repeated measures design was used in which participants completed a baseline interview, and then completed daily interviews that elicited complementary therapy use on three consecutive days at one month intervals for six months. All procedures were approved by the Wake Forest University School of Medicine IRB and all participants gave signed informed consent.

The sample included community-dwelling adults aged 65 and older who self-identified as African American or white and spoke English. The sample was stratified by ethnicity (African American and white) and sex so that approximately 50 participants were recruited into each ethnic-sex group. A site-based procedure was used to recruit representative participants. Participants were recruited from 34 sites, including county recreation

departments (3 different sites), county social service departments (3), county government meetings (2), senior center and congregate meal sites (3), senior housing complexes (3), social and support clubs (7), churches (6), businesses (5), and polling sites (2). In addition, recruitment included individuals who had participated in previous research studies, who were referred by other participants, and who were referred by community interviewers.

Two hundred African American and white elders completed baseline interviews. Participants included 52 African American women, 48 African American men, 50 white women, and 50 white men. Twelve individuals refused, for a participation rate of 94.4%. However, individuals at specific sites could avoid being asked to participate. Therefore, the actual participation rate may be lower. Nearly 70% (139) of the participants completed the six sets of the follow-up interviews. Of the remaining 61 participants, 23 (11.5% of total sample) completed five sets, five (2.5%) completed four sets, five (2.5%) completed three sets, twelve (6.0%) completed two sets, eleven (5.5%) completed one set, and five (2.5%) completed only the baseline interview. Reasons for not completing all six sets of follow-up interviews varied. Three participants died, and nine became too ill to continue. Twenty-two participants could not be re-located. Fifteen participants decided that they did not want to continue.

Data collection was completed by trained interviewers. Participants first completed baseline, in-person interviews, usually in their homes. Baseline interviews were completed from April 2008 through May 2009. Participants then completed a series of daily-diary follow-up interviews on three consecutive days at intervals of one month. Participants generally completed follow-up interviews on the telephone. However, follow-up interviews were completed in-person with 33 participants; ten participants did not have a telephone, 14 participants had poor hearing or other physical limitations, and nine disliked speaking on the telephone. Follow-up data collection was completed in January 2010. Baseline interviews took 45 minutes to two hours to complete. Follow-up interviews generally took 20 minutes to complete. Participants were given incentives incrementally, with the total incentive received by participants who completed all follow-up interviews being \$100.

Baseline interviews included questions to measure general use of complementary therapies. Items were based on the general literature (Barnes et al., 2004; Barnes et al., 2008) and our long-term research in rural communities (Arcury et al., 2006b; Arcury, Grzywacz, Stoller, Bell, Altizer, Chapman, & Quandt, 2009). These questions asked if participants had used 11 specific home remedies, seven specific over-the-counter medicines, nine specific vitamins or minerals, nine specific herbs, four specific supplements, three specific practitioners, and four specific practices in the past year. Participants were asked if they used additional specific therapies within each of these seven groups. If participants indicated they had used a therapy in the past year, they were further asked if they had used it in the past three months. Participants using a therapy in the past three months were asked the frequency of its use. The baseline survey also included other individual attributes believed to remain relatively constant over the course of the study period, such as beliefs about complementary therapies, physician trust, and medical skepticism.

Participants were presented with a list of 40 symptoms on each of the three days of the follow-up interviews. For each symptom experienced in the previous 24 hours, participants were asked how the symptom was treated. Participants were asked if they had (1) taken an over-the-counter medicine; (2) eaten or drunk something to help; (3) taken a home remedy; (4) stayed in bed or rested; (5) prayed; (6) cut back on usual activities; (7) taken a medicine prescribed by a doctor for this symptom; (8) taken another type of prescription medicine; (9) visited a doctor; (10) taken an herb or supplement; (11) visited another health professional; (12) ignored the symptom or decided to wait and see; and (13) taken any other action. The

participants were asked to specify the over-the-counter medicine, what they had eaten or drunk, home remedy, herb or supplement, and type of other health professional. The participants were also asked to evaluate how much each therapy helped with the symptom with the response categories not at all, a little, some, and a lot.

Each of the follow-up interviews asked participants how they treated four chronic conditions (arthritis, heart disease, diabetes, and respiratory disease), if they had them, and what they had done for general illness prevention. The therapies included (1) pray; (2) over-the-counter medicine; (3) eaten or drunk something special; (4) home remedy; (5) herb or supplement; (6) medicine prescribed by a doctor for this condition; (7) medicine not prescribed by a doctor; (8) visit a medical doctor; and (9) visit another health professional. The participants were asked to specify the over-the-counter medicine, what they had eaten or drunk, home remedy, herb or supplement, and type of other health professional. The participants were also asked to evaluate the effectiveness of each therapy they used. The first of the three follow-up interviews included items on major changes in health status, use of conventional medical care in the preceding month, and new prescription medicines in the preceding month.

Personal characteristics included sex, ethnicity (African American, white), age, marital status (currently married, not currently married), educational attainment (less than high school, high school, more than high school), and migration status (always lived in the South, lived outside the South). Measures of health care characteristics included the presence of any of 17 physician-diagnosed chronic conditions. Conventional health care characteristics included usual source of medical care and satisfaction with quality of medical services.

Measures of general therapy use include any use of a remedy in the categories home remedy, herb, supplement, vitamins or minerals, practitioner, self-care practice, or over-the-counter medicine, and use of specific therapies within each category in the past 12 months, and in the past three months. Use of specific therapies in the past three months has the values of zero days, 1 to 3 days, 4 to 11 days, 12 to 36 days, 37 to 89 days, and 90 days. Reporting frequency of therapy use in the past three months is limited to therapies used by at least 15% of participants in the past three months.

Four example symptoms were selected for presentation here: joint pain, indigestion, low energy, and sore throat. First, the number of person days individuals used a remedy as a proportion of the days a symptom was experienced is reported. Second, the number of persons who experienced a symptom and used a specific therapy is reported, and the average number of days these persons used each remedy for that symptom is reported.

All analyses were performed using SAS v9.2 (SAS Institute, Cary, NC). Results were aggregated from all interviews. The mean and standard deviation of percent of days interviewed where a particular symptom was expressed and a particular therapy was used for that symptom were calculated.

Results

Participant personal, health, and health care characteristics are reported in Table 1. The 200 participants provided data for a total of 3,070 person days.

Complementary Therapy Use Reported in the Baseline Interview

Most participants reported using complementary therapies in the previous 12 months and previous three months (Table 2). Home remedies were used by 85.0% in the previous 12 months, with any herb being used by 28.0%, a supplement used by 28%, a vitamin or

mineral used by 68.0%, a practitioner used by 25.5%, and a self-care practice used by 73.0% in the past year. All but one elder used an over-the-counter remedy in the past year. Smaller percentages used these therapies in the previous three months; with any home remedy being used by 75.0%, any herb used by 12.0%, any supplement used by 24.0%, any vitamin or mineral used by 62.0%, a practitioner used by 14.5%, and a self-care practice used by 63.0%.

Therapy use varied substantially during the three months prior to the baseline interview (Table 3). Home remedies were the most widely reported therapies used. However, they were used sporadically, seldom on 12 or more days in the previous three months. For example, although 40.0% of the participants reported using Vaseline in the previous three months, 11.5% used it daily. Similarly, although vinegar is reported used by 34.5% of participants in the previous three months, four individual used it daily and 11.5% used it several times per week. At least one supplement (flaxseed, fish, or omega-3 oil) had about daily use among those who used it, as did vitamins and minerals, and the two self-care practices relaxation and formal exercise. Similarly, the over-the-counter remedy aspirin was used daily by almost all of those who reported its use.

Therapies Used Daily for Specific Symptoms

The percent of the 3,070 person days on which complementary and other therapies were used to treat four specific example symptoms varied by therapy and symptom (Table 4). The most widely used therapy was prayer. Among the other complementary therapies, home remedies were frequently used for joint pain (9.1% of person days) and sore throat (20.5% of person days). Frequently used home remedies for joint pain included rubbing alcohol, used on 52 (5.5%) of the person days, WD-40, used on 10 (1.1%) of the person days, and raisins soaked in gin, used on 6 (0.6%) of the person days; frequently used home remedies used for sore throat included a salt water rinse, used on 18 (14.1%) of the person days, and mouth wash, used on 7 (5.5%) of the person days.

Ignoring a symptom or waiting to see if it resolved was a common practice for each of the four example symptoms. Over-the-counter medicines were frequently used for joint pain (42.5%) and sore throat (34.7%), and less so for indigestion (13.7%) and low energy (2.6%). Foods and beverages were frequently used to treat indigestion (17.2%), low energy (27.7%), and sore throat (30.7%). Rest and reducing activities were frequently used for joint pain and low energy.

Visiting a medical doctor in the previous 24 hours was not a common behavior for any of the symptoms, although at least one participant reported a doctor visit for each of the symptoms. Prescription medicine was commonly used for joint pain (45.0%) and indigestion (22.5%), but use was limited for low energy (4.5%) and sore throat (4.7%).

The number of individuals experiencing a symptom who actually used a complementary or other therapy to treat that symptom and the number of days that they used a complementary or other therapy for a symptom also varied by therapy or symptom (Table 5). Focusing on the specific symptom joint pain, for example, of 147 persons experiencing joint pain, 26 persons used a home remedy for treatment, and these persons used a home remedy an average 46.3% of the days they had joint pain. Prayer was used by 109 of 147 persons to treat joint pain, and these persons used prayer an average 71.9% of the days they had joint pain. Over-the-counter medicines were used by 92 of the 147 persons, and they used them an average 63.9% days they had joint pain. Of 61 persons experiencing a sore throat, 15 used a home remedy and used it 65.7% of days on average; 31 used prayer 82.5% of days on average; 28 used an over-the-counter medicine 72.7% of days on average.

In focusing on the specific prescribed medicine, for example, of the 147 persons with joint pain, 95 used a prescribed medicine 63.3% of days on average; of 78 persons with indigestion, 24 used a prescribed medicine 68.5% of days on average; of 106 persons reporting low energy, 14 used a prescribed medicine 34.6% of days on average; and of 61 persons reporting a sore throat, 5 used a prescribed medicine 57.5% of days on average. Of the 147 persons with joint pain, 19 used an herb or supplement 30.4% of days on average; of 78 persons with indigestion, 1 person used an herb or supplement for 14.3% days; of 106 persons reporting low energy, 19 used an herb or supplement 58.7% days on average; and of 61 persons reporting a sore throat, none used an herb or supplement.

Discussion

This study collected data from 200 adults aged 65 and older up to six times at one month intervals. At each follow-up, participants completed daily-diary interviews for three consecutive days. The participants provided data for 3,070 days.

The retrospectively reported use of complementary therapies by the participants is greater than that reported in studies based on national data (Barnes et al., 2004; Barnes et al., 2008). Analysis of complementary therapy use, excluding prayer, among persons aged 65 and older using the nationally representative 2002 National Health Interview Survey showed that 27.7% had used any of 64 complementary therapies in the past 12 months (Arcury et al., 2006a). We found that 85% of the rural older adults who participated in our study had used a home remedy in the past year, 28.0% had used an herb, 28.0% had used a supplement, and 25.5% had used a complementary practitioner.

This study provides insight into complementary and other therapy use among older adults for health self-management from several different perspectives. First, it provides retrospective data comparable to most epidemiological surveys of complementary therapy use. Second, it provides retrospective data on the frequency with which older adults used complementary and other therapies in the past three months. Third, for specific symptoms, chronic conditions (not reported), and health promotion (not reported), it provides data on the use of specific therapies (e.g., herbs and specific herbs) used in the past day. Because participants provided these data up to six times at intervals of one month, with data being collected over 20 months, seasonal variation can be considered in analyses. Participants included African American and white men and women. In addition to basic demographic and health characteristics, measures include behaviors, health related quality of life measured with the SF-36 (Ware, Kosinski, & Dewey, 2000), the Complementary and Alternative Medicine Beliefs Inventory (CAMBI) (Bishop, Yardely, & Lewith, 2005), the Trust in Medical Profession scale (Hall, Camacho, Dugan, & Balkrishnan, 2002), and Medical Skepticism (Fiscella, Franks, & Clancy, 1998).

Retrospective data on use of complementary therapies in the past 12 and three months indicate extremely high levels of use among the study participants. However, examination of the retrospectively reported frequency of use of these remedies in the past three months and prospectively reported use of complementary therapies for four specific example symptoms show lower patterns of use. These results raise questions about the actual levels at which complementary therapies are being used in the adult and older adult US populations.

Although this study has many strengths, it also has some limitations. First, the number of possible specific complementary therapies is extremely large. The baseline interview items examining use of complementary therapies in the past year and past three months were limited. For example, participants were asked about only nine specific herbs, four specific supplements, three specific practitioners, and four specific practices. However, participants

were asked to specify any other therapies within each type that they might use. Follow-up interview items asked participants if they used classes of therapies to treat each symptom as well as to treat four specific chronic conditions and for health promotion. These classes of therapies included herbs or supplements, food or beverage, or over-the-counter medicine. Participants were then asked to name the specific herb, supplement, food, beverage, or over-the-counter medicine they used. Therefore, the data set contains a great deal of information on the use of specific remedies. Second, participants recruited to this study were told that it focused on the use of complementary therapies as well as other therapies. Some older adults may have agreed to participate because of an interest in the use of complementary therapies. This may result in greater average use of complementary therapies among these older adults than in the general population. Finally, selection of participants for this study was not random. Therefore, care must be taken in generalizing the study results. However, comparing the results from this study to larger studies with randomly selected participants, such as the 2002 and 2007 National Health Interview Survey, will allow analysts to understand whether this kind of detail has validity in other older populations across the social and economic spectrum in the United States.

The use of complementary therapies for specific symptoms varies widely, although complementary therapy use is not especially common for the four example symptoms. These results also show the number of older adults who used other self-care practices, such as over-the-counter medicines and rest, and medical care for the treatment of specific symptoms and chronic conditions. Together, these data allow for the detailed analysis of the therapies older adults include in their health self-management regimens and the ways in which they draw on specific therapies in response to onset and changes in symptoms and chronic conditions. Potential analyses will also provide insights into how older adults adapt health self-management regimens in response to the assessed efficacy of complementary therapies, self-care practices, and application of conventional medical advice. Finally, analysis of the therapies included in the self-management regimens of these older adults will allow consideration of data on diverse personal and health characteristics, as well as beliefs and values.

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Table 1

Personal, Health, and Conventional Health Care Characteristics, Older Adults in Three Rural North Carolina Counties, 2008–2009.

Characteristics	n	%
Personal Characteristics		
Sex		
Female	102	51.0
Male	98	49.0
Ethnicity		
African American	97	48.5
White	103	51.5
Age		
65 to 69 years	64	32.0
70 to 74 years	55	27.5
75 to 79 years	35	17.5
80 years and older	46	23.0
Marital Status		
Currently married	81	40.5
Not currently married	119	59.5
Educational Attainment		
Less than High School	68	34.0
High school	26	13.0
More than High School	106	53.0
Migration Status		
Always lived in the South	119	59.5
Lived outside the South	81	40.5
Health Characteristics		
Any Chronic Condition	198	99.0
Specific Chronic Conditions		
Arthritis	131	65.5
Heart disease	73	36.5
High blood pressure	160	80.0
Diabetes	71	35.5
Depression or other mental condition	35	17.5
Conventional Health Care Characteristics		
Usual Source of Medical Care		
Doctor's office	176	88.0
Hospital emergency department	5	2.5
Hospital outpatient department	2	1.0
Community health center	2	1.0
Public clinic	3	1.5
Other	12	6.0

Characteristics	n	%
Satisfaction with Quality of Medical Services		
Satisfied	195	98.0
Dissatisfied	4	2.0

Table 2

Retrospective General Therapy Use in the Past Year and in the Past Three Months Among Older Adults in Three Rural North Carolina Counties, 2008–2009.

Therapy	Used in the Past Year		Used in Past 3 Months	
	n	%	n	%
Any Home Remedy	170	85.0	150	75.0
Honey	75	37.5	48	24.0
Lemon	64	32.0	42	21.0
Vinegar	81	40.5	69	34.5
Baking soda	45	22.5	32	16.0
Olive oil	34	17.0	28	14.0
Table salt	43	21.5	33	16.5
Whiskey	13	6.5	8	4.0
Epsom salts	57	28.5	41	20.5
Vaseline	89	44.5	80	40.0
Kerosene or Turpentine	7	3.5	6	3.0
WD-40	5	2.5	3	1.5
Other	27	13.5		
Any Herb	56	28.0	24	12.0
Aloe	15	7.5	6	3.0
Garlic	16	8.0	10	5.0
Ginseng	4	2.0	3	1.5
Ginkgo biloba	3	1.5	3	1.5
Chamomile	4	2.0	3	1.5
Mint	2	1.0	2	1.0
Other	27	13.5		
Any Supplement	56	28.0	48	24.0
Flaxseed, Fish, or Omega-3 Oil	48	24.0	42	21.0
Coenzyme Q10	7	3.5	4	2.0
Glucosamine sulfate	15	7.5	13	6.5
Chondroitin	7	3.5	6	3.0
Other	13	6.5		
Any Vitamin or Mineral	136	68.0	124	62.0
Multi-vitamin	96	48.0	94	47.0
Vitamin A	4	2.0	4	2.0
Vitamin B6	7	3.5	5	2.5
Vitamin C	33	16.5	30	15.0
Vitamin E	23	11.5	22	11.0
Calcium	50	25.0	50	25.0
Iron	19	9.5	18	9.0
Magnesium	7	3.5	7	3.5
Zinc	2	1.0	2	1.0

Therapy	Used in the Past Year		Used in Past 3 Months	
	n	%	n	%
Other	40	20.0		
Any Practitioner	51	25.5	29	14.5
Chiropractor	15	7.5	10	5.0
Physical therapist	29	14.5	15	7.5
Massage therapist	8	4.0	7	3.5
Other	9	4.5		
Any Self-Care Practices	146	73.0	126	63.0
Relaxation	35	17.5	32	16.0
Meditation	26	13.0	26	13.0
Massage	12	6.0	11	5.5
Formal exercise	118	59.0	112	56.0
Other	41	20.5		
Any Over-the-Counter Remedy	199	99.5	192	96.0
Antiseptic cream	89	44.5	69	34.5
Cough Syrup or Drops	125	62.5	94	47.0
Cod liver oil	19	9.5	16	8.0
Ben Gay or Icy Hot	62	31.0	53	26.5
Vic's VapoRub	55	27.5	39	19.5
Aspirin	146	73.0	140	70.0
Pain relievers	136	68.0	123	61.5
Other	67	33.5		

Table 3

Number of Days a Therapy was Used in Past 3 Months for Frequently Used Therapies (Used by at Least 15% of Participants), Older Adults in Three Rural North Carolina Counties, 2008–2009.

Therapies	0 Days		1–3 Days		4–11 Days		12–36 Days		37–89 Days		90 Days	
	n	%	n	%	n	%	n	%	n	%	n	%
Home Remedies												
Honey	152	76.0	16	8.0	14	7.0	9	4.5	5	2.5	4	2.0
Lemon	158	79.0	11	5.5	12	6.0	5	2.5	7	3.5	7	3.5
Vinegar	131	65.5	25	12.5	17	8.5	21	10.5	2	1.0	4	2.0
Baking soda	168	84.0	12	6.0	7	3.5	8	4.0	1	0.5	4	2.0
Epsom salts	159	79.5	24	12.0	9	4.5	6	3.0	1	0.5	1	0.5
Vaseline	120	60.0	18	9.0	9	4.5	19	9.5	11	5.5	23	11.5
Herbs - None												
Supplements												
Flaxseed, fish, or omega-3 oil	158	79.0	2	1.0	1	0.5	1	0.5	4	2.0	34	17.0
Vitamins or Minerals												
Multi-vitamin	106	53.0	1	0.5	.	.	2	1.0	8	4.0	83	41.5
Vitamin C	170	85.0	1	0.5	2	1.0	2	1.0	3	1.5	22	11.0
Vitamin E	178	89.0	.	.	3	1.5	3	1.5	3	1.5	13	6.5
Calcium	150	75.0	.	.	.	.	3	1.5	2	1.0	45	22.5
Practitioners												
Chiropractor	190	95.0	2	1.0	3	1.5	5	2.5	.	.	.	.
Physical therapist	185	92.5	2	1.0	3	1.5	6	3.0	3	1.5	1	0.5
Massage therapist	193	96.5	5	2.5	2	1.0	.	.	.	.	.	.
Self-Care Practices												
Relaxation	168	84.0	1	0.5	4	2.0	5	2.5	2	1.0	20	10.0
Formal exercise	88	44.0	6	3.0	2	1.0	19	9.5	51	25.5	34	17.0
Over-the-Counter Remedies												
Antiseptic cream	131	65.5	24	12.0	15	7.5	14	7.0	7	3.5	9	4.5
Cough syrup or drops	106	53.0	25	12.5	22	11.0	22	11.0	15	7.5	10	5.0

Therapies	0 Days		1-3 Days		4-11 Days		12-36 Days		37-89 Days		90 Days	
	n	%	n	%	n	%	n	%	n	%	n	%
Ben Gay or Icy Hot	147	73.5	13	6.5	15	7.5	10	5.0	7	3.5	8	4.0
Vic's VapoRub	161	80.5	16	8.0	11	5.5	5	2.5	2	1.0	5	2.5
Aspirin	60	30.0	8	4.0	3	1.5	8	4.0	5	2.5	116	58.0
Pain relievers	77	38.5	19	9.5	24	12.0	34	17.0	18	9.0	28	14.0

Table 4

Number of Person Days Therapies Were Used for Four Example Daily Symptoms based on 3,070 Person Days of Reported Symptoms.

Therapies and Number of Person Days Used	Daily Symptoms and Total Person Days Reported							
	Joint Pain 944		Indigestion 262		Low Energy 464		Sore throat 128	
	n	%	n	%	n	%	n	%
Complementary Therapies								
Home remedy	86	9.1	12	4.6	1	0.2	26	20.5
Herb or supplement	33	3.5	1	.4	58	12.5	0	0
Other health professional	10	1.1	0	0	2	0.4	0	0
Prayer	551	58.5	100	38.3	268	58.1	53	41.7
Self-Care Practices								
Ignore symptom or wait	195	20.7	107	40.8	228	49.2	46	36.2
Over-the-counter medicines	401	42.5	36	13.7	12	2.6	44	34.7
Food or Beverage	20	2.1	45	17.2	128	27.7	39	30.7
Rest	358	38.0	25	9.5	288	62.3	16	12.6
Reduce activities	285	30.2	21	8.0	210	45.4	14	11.0
Non-prescribed medicine	60	6.4	10	1.8	5	1.1	6	4.7
Medical Care								
Visit medical doctor	17	1.8	3	1.2	11	2.4	1	0.8
Prescribed medicine	425	45.0	59	22.5	21	4.5	6	4.7

Table 5
Average Percent of Days Therapies Were Used Among Those Who Used Each Therapy to Treat the Daily Symptom.

Therapies	Daily Symptoms											
	Joint Pain N=147 ¹			Indigestion N=78 ¹			Low Energy N=106 ¹			Sore Throat N=61 ¹		
	n ²	Mean	SD	n ²	Mean	SD	n ²	Mean	SD	n ²	Mean	SD
Complementary Therapies												
Home remedy	26	46.3	30.5	6	49.0	33.1	1	9.1	.	15	65.7	28.8
Herb or supplement	19	30.4	29.3	1	14.3	.	19	58.7	26.7	0		
Other health professional	8	15.3	10.1	0			2	26.7	9.4	0		
Prayer	109	71.9	27.3	43	66.9	30.9	74	76.5	26.2	31	82.5	27.2
Self-Care Practices												
Ignore symptom or wait	92	40.0	30.1	45	67.0	31.1	75	69.9	30.4	33	77.5	30.2
Over-the-counter medicines	92	63.9	28.3	25	73.1	35.3	10	27.9	27.5	28	72.7	31.5
Food or Beverage	12	19.1	17.0	25	48.8	31.2	50	59.2	34.0	24	71.6	28.5
Rest	101	52.3	30.3	18	51.9	31.0	86	74.9	25.9	11	71.1	29.8
Reduce activities	90	49.4	30.8	15	55.4	32.0	73	64.4	30.5	11	65.8	28.6
Non-prescribed medicine	22	29.7	26.0	8	32.3	29.3	4	34.2	12.3	5	70.0	29.8
Medical Care												
Visit medical doctor	15	11.6	4.5	3	26.4	12.0	9	17.8	7.2	1	100.0	.
Prescribed medicine	95	63.3	29.7	24	68.5	26.7	14	34.6	23.6	5	57.5	41.1

¹Number of participants reporting this symptom on at least one day.
²Number of participants reporting the use of this therapy for this symptom on at least one day.