

## CHRONICALLY ILL RURAL WOMEN'S VIEWS OF HEALTH CARE

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### ABSTRACT

Successful adaptation to chronic illness requires a collaborative relationship between ill individuals and health care providers. This article reports a secondary analysis of data from a computer-outreach intervention that examined the experiences of 110 chronically ill rural women in communicating with their health care providers and determined factors that influenced their satisfaction with care received. Five themes identified from qualitative data were: self-reliance; treatment/therapies; interactions with health care providers; financial constraints; and accessibility of health care. Quantitatively, three independent variables contributed significantly ( $p < .05$ ) to the prediction of health care satisfaction: quality of life, life change, and health status change. Overall, 25% of the variance in satisfaction with health care was explained by the model. Health care providers can enhance chronically ill rural women's satisfaction with care by: improved interpersonal relationships; collaboration in care management; appointment scheduling that accommodates rural life-styles; and open discussion of financial concerns.

### INTRODUCTION

Access to quality health care in rural areas has historically been limited by scarcity of health care providers, limited dissemination and application of up-to-date health care information, vast distances, primitive road conditions, and in winter, inclement weather. Recent efforts to overcome these barriers to the delivery of quality care in rural areas have included the development of Area Health Education Centers (Moscovice & Rosenblatt, 2000), strategies to increase the number of health care providers in underserved areas (Bowman, 2005; Phillips & Dunlap, 1998), and the proliferation of health-related applications of telecommunications (Bauer, 2003; Boulanger, Kearney, Ochoa, Tsuei, & Sands, 2001; Lin, Chen, Chen, & Hou, 2001; Nesbitt, Hilty, Kuenneth, & Siefkin, 2000; Nesbitt, Marcin, Daschbach, & Cole, 2005; Weinert, Cudney, & Winters, 2005). Whether these innovations are producing a level of health care that is considered by the rural consumer to be satisfactory is a question to be addressed. Some general assessments of rural dweller's satisfaction with the health care they receive have been made, focusing on evaluation of hospitals (Davis et al. 2000),

provider performance (Knudtson, 2000), or service profitability (Davis et al. 2000; Knudtson, 2000; Yasin & Green, 1995). Yet, such surveys do not elucidate the rural consumers' opinions of quality of the health care they receive and may mask the true perceptions of individuals with particular health care needs, such as those with chronic illness.

The unrelenting nature of a chronic illness compounds a rural dweller's difficulties in accessing quality health care. A greater proportion of rural residents (18-19%) find their activities limited by chronic health conditions as compared with urban dwellers (12-14%) (Eberhardt, Ingram, & Makuc, 2001). Regular health care appointments, over years of illness, incur many hours of travel, added expense, and fatigue. For example, in one large western state, it is not unusual for a person to travel 240 or more miles round trip to a health care specialist (Winters, 1999). More than their urban counterparts, rural people equate health with their ability to work, function, and perform daily tasks (Lee, 1989; Ross, 1982). Thus, chronic illness with its long-term impacts may disrupt activities that rural people consider particularly important in their views of self and health. The ability to manage their illnesses in concert with their health care providers may impact their level of success in adapting to their chronic illnesses (Thorne, Con, McGuinness, McPherson, & Harris, 2004).

It is unclear how rural people with chronic illness perceive the quality and efficacy of health care services. While poor health status itself may predispose individuals to a lower satisfaction with care, this influence is relatively small (Wensing et al. 1997). In one study, individuals with chronic illness (without regard for urban versus rural setting) ranked effectiveness of treatment as the most important aspect of care, followed by providers' knowledge level, continuity of care, adequacy of information given by the provider, length of visits, and provider empathy (van der Waal, Casparie, & Lako, 1996). It is unknown whether these indices of quality care are equally pertinent to rural dwellers with chronic illness; therefore, it is of interest to determine rural dwellers' perceptions of and satisfaction with care received.

Information regarding rural consumers' perceptions of the quality of their health care was available from the Women to Women Project (WTW) at Montana State University College of Nursing. WTW was a telecommunications intervention that provided peer support and health information to rural dwelling women with chronic illness via personal computers in order to evaluate its impact on their psychosocial health. This intervention has been described in detail in earlier articles (Cudney & Weinert, 2000; Sullivan, Weinert, & Cudney, 2003; Weinert, 2000). The purposes of this article are to report the results of a secondary analysis of a portion of the WTW data related to the experiences of chronically ill rural women in communicating with their health care providers and to examine the factors related to the women's level of satisfaction with their health care.

## METHODS

Women were recruited for the WTW project via announcements in health care providers' offices, nursing schools, public media, and local offices of the Arthritis Foundation, National Multiple Sclerosis Society, American Cancer Society, and American Diabetes Association. Criteria for participation included: a diagnosis of a chronic illness, e.g., diabetes, cancer, multiple sclerosis, or rheumatoid condition; age 35 through 65; ability to read, write, and speak English; the sight and dexterity to use a computer (regardless of computer literacy); and residence in a small town (less than 12,500) or surrounding area that was at least 25 miles away from an urban area of 12,500 or more.

### *Design*

In this phase of the Women to Women Project, a total of 120 women were randomized into two groups. Half participated in a computer intervention group, a 5-month online peer support and health education experience. In a chat room "Conversation," women in the intervention group shared information, personal experiences, and insights. In a second chat room, "Healthchat," they discussed health information and health care issues. The other half of the women participated in the comparison group with no access to the computer-based intervention. All women were involved in the study for 10 months including participating in telephone interviews and completing repeated measures mail questionnaires at baseline, 2 1/2, 5, and 10 months.

The virtual support group, "Conversation," was available 24/7 for asynchronous discussion on any topic. Many of the messages concerned experiences with chronic illness and the health care system. This support group was of, for, and by the women, and while the research staff monitored the conversations, they rarely actively participated. The "HealthChat" discussions focused on nine health and health care topics, each for two weeks. Each week, the nurse monitor, who was a member of the research staff, posted questions to "HealthChat" to stimulate discussion (Cudney, Sullivan, Winters, Paul, & Oriet, 2005). As part of the topic concerning communicating with health care providers, the women first responded to the question, "What are some of your greatest frustrations in getting the health care you need?" In the week that followed, the second question was, "What have you done/can you do to reduce the frustrations associated with getting health care?" The messages from both "Conversation" and "HealthChat" were downloaded, de-identified, and loaded into NUD\*IST for coding and thematic analysis. These computer exchanges provided a rich qualitative database from which to examine the women's perceptions of their health care.

### *Data Analysis*

For the study being reported in this article, the secondary analysis of data associated with the women's perceptions of the quality of their health care was conducted by a senior medical student at the University of New Mexico as a thesis project. The focus of the investigation was to determine the women's perceptions of and satisfaction

with their health care gleaned from WTW's computer exchanges and from selected measures in the mail questionnaires.

A two-pronged approach was used. First, chat room messages from the 53 women who completed the computer activities (7 did not complete) were thematically analyzed to determine which aspects of health care were of greatest importance to the participants. Second, for the analysis of the questionnaire responses, baseline data were used from all study participants for whom there was complete information (N=110; 10 were incomplete). Demographic and psychosocial variables were examined for association with the level of satisfaction with health care.

**Analysis of Messages.** The women's messages were categorized in a coding tree associated with the NUD\*IST qualitative analysis software system (Qualitative Solutions and Research Pty Ltd, 1997). The approach to analyzing the messages in "Conversation" consisted of two phases: deductive and inductive (Sullivan et al., 2003). The deductive phase occurred during the design of the original WTW project. Data were coded and sorted into categories according to the aims of the study, for example, "social support--given, received, and sought." For the purposes of the secondary analysis, messages relating to health care were grouped into an additional deductive category, "Health Care System." In the inductive phase, the "Health Care System" body of messages was scrutinized by the senior medical student who identified and categorized additional sub-themes embedded in the messages. These included the major categories of positive, negative and neutral experiences associated with health care and sub-categories such as interaction with providers; efficacy of treatment; financial concerns; and accessibility of care. (See Table 1 for complete list.)

An eclectic approach to qualitative analysis (Norwood, 2000) was used to analyze the data generated through the online health education program, "HealthChat." This blended deductive and inductive analytic processes. In the deductive phase, the data were coded according to the health information topics of the interactive educational discussions dealing with health promotion and health maintenance, e.g., communicating with your health care provider. The inductive phase entailed categorizing problems identified by the women and the strategies they suggested for dealing with the health topics discussed.

**Toward a "Satisfaction Index."** Since an in-depth exploration of the client-provider relationship was not a central focus of the larger study, there was no measure that specifically addressed this area. Thus, for this secondary analysis, a measure of client satisfaction, "Satisfaction Index," was constructed using data from one of the instruments that contained relevant items. The Psychological Adjustment to Illness Scale (PAIS) (Derogatis & Fleming, 1996) contained five items targeting the women's satisfaction with/assessment of their treatment, each with a choice of four responses scored on a four-point Likert scale. Areas addressed in these items were:

- a. expectations about treatment;
- b. amount of information received about treatment;
- c. adequacy of content and detail of information given by health care staff;
- d. judgments regarding health care providers and the treatment provided; and
- e. assessment of health care today and the health care professionals who provide it.

Scores from the satisfaction items were summed to form a new five-item “Satisfaction Index” (SI) to address our inquiry into the women’s level of satisfaction with their health care. Test-retest reliability of the SI, estimated by Pearson correlation between the T1 and T2 survey administrations, was high ( $r=0.78$ ,  $p<.001$ ). Internal consistency, at T1, estimated with Cronbach's alpha, was adequate (.80).

Table 1  
*Themes that Emerged from Inductive Analysis of “Health Care System”*

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Positive

Provider

Conveys caring  
Provides Patient Education  
Collaborates  
Available

Therapy (effective, tolerable)

Finances/Insurance (positive perception of expense or ability to obtain aid)

Accessibility of Care

Humor

Diagnostic Process

Negative

Provider

Uncaring  
Inadequate Patient Education  
Non-collaboration  
Unavailable  
Therapy (ineffective)

Finances/Insurance (negative perception of expense, inability to obtain aid)

Inaccessibility of Care

Humor

Diagnostic Process

Neutral

Provider

Expected Collaboration

Therapy

Finances/Insurance

Accessibility

Humor

Diagnosis

Self-reliance

Self-education

Alternative Therapies (sought by participants)

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### ***Psychosocial Measures***

To explore factors associated with health care satisfaction, the scores from several available measures were used. The Sickness Impact Profile (SIP) (Bergner, Bobbitt, Carter, & Gilson, 1981), a 26 item behaviorally-based measure of health status, was used as a measure of the impact of disease on physical and emotional functioning. Reported internal consistency for the SIP was .94, and for this study it was .90. Social support was measured by the 25-item Personal Resource Questionnaire (PRQ85) (Weinert & Brandt, 1987). Reliability for the PRQ was reported as .90; for this study, it was again .90. The Quality of Life Index (QOL) (Ferrans & Farrell, 1990; Ferrans & Powers, 1985), with an established reliability of .95, used 68 items to determine a person's satisfaction with four aspects of life: health and functioning, socioeconomic, family, and psychological/spiritual. The QOL reliability for this study was .92. Scores from the Social Readjustment Rating Scale (Holmes & Rahe, 1967) were used as an indicator of major life events. This 43-item scale attempts to measure the impact of life events and determine their relationship to subsequent illness. Test-retest reliability ranged from .67 to .77 and criterion and construct validity were above .90.

### ***Other Data***

Changes in self-reported health status were examined with single question, "How does your health compare to your health 2 ½ to 3 months ago? Responses could range from 1 ("Much Worse") to 5 ("Much Better"). Standard demographic data were collected in a telephone screening interview.

### ***Ethical Considerations***

The WTW research-based project, including associated secondary analyses of study data, was approved by the Montana State University Human Subjects Committee. Written consent was obtained from the women to participate in WTW and permit project data to be shared with health professionals, and, if appropriate, with the general public. Appropriate assurances were given the women that no one could be identified in any published reports related to the study.

## **FINDINGS**

### ***Sample***

Among participants with complete data (N=110), their diagnoses included cancer (n=13), diabetes (n=27), multiple sclerosis (n=30), rheumatoid conditions (n=38), and other (2). The mean age was 50 years with an average of 14 years of education, 8 years since diagnosis, and a median annual income in the range of \$35,000 to \$39,999.

### ***Content of Messages***

The 53 women who completed the computer portion of the study generated 2,156 messages between the "Conversation" and "HealthChat" chat rooms, and 341 messages

made references to some aspect of health or health care. Five health care themes predominated: treatment/therapies (34%), interactions with health care providers (22%), financial considerations in relation to health care (17%), and accessibility of care (10%). The most prominent theme, however, was the strong sense of self-reliance shown by the women in managing their illnesses (37%). Often more than one theme emerged in a single message thus the percentages sum to more than 100%.

**Self-Reliance.** Throughout their computer exchanges, self-reliance was a strong theme in the women's approaches to illness.

....I think it's really important to take an active role in preserving your own health and not just let the doctors tell you what to think and do. That way you feel you have some control over your own body and its health.

Self-reliance was expressed in a variety of ways. Often the women demonstrated interest and resourcefulness in controlling their own therapy. They shared information on prescription drugs, diets, vitamins, and herbs, and recommended physical therapists, massage therapists, and physicians to one another. They also supported one another's individual efforts in carrying out exercise regimens or quitting smoking. The women were strongly interested in self-education, sharing resources such as book titles, information from articles they had read, and announcements of seminars:

I feel bad that when I was diagnosed with MS, that I was so sick and vulnerable that I didn't have it in me to research. I think if I had, I may have chosen a different course of action than steroid treatment, at least to start with.... I think it is very important to use all the available information and try to balance it all out.

Another stated,

Staying informed about my disease is the most important thing I can do to stop the frustration [with health care]. Also it's taken me 2 yrs to realize and accept the fact that my doctors don't always have answers and they are not going to take the time to research all of the ins and outs of this disease. I'm going to have to do it myself!!!

The theme of self-reliance was also woven throughout other health care themes, discussed below.

**Treatment/Therapies.** Frustration or delight with various modalities of treatment or therapy was a common theme among the women. The women frequently discussed the effectiveness and side effects of their medications, and many of their messages indicated frustration with dependence on multiple medications. "I really dislike being a walking pharmacy, and I think that is what I am anymore." The women expressed relief when the number of medications could be reduced. Finally, the women gave recommendations to one another of other modalities, including massage therapy and counseling.

**Interactions with Health Care Providers.** Rapport with providers was extremely important to the participants. "I absolutely love [Dr. X]! He's been so supportive and has

taken time to answer many of my questions and to just offer reassurance when I needed it." This positive statement contrasts with another woman's experience:

[My doctor] did manage to say 2 things that (as usual [sic]) did not help. 'A lot of people would be happy to be in as good of condition as you are' and, 'You need to start to exercise more. Push it even if it makes you feel sick.' I have been working all day not to be depressed about it.

Throughout their messages, the women expressed the wish to be listened to, to be understood, to be given clear explanations of their conditions and therapies by their health care providers, and to take part in health care decision-making. Subcategories within the provider theme included conveyance of caring and education, accessibility of the provider, and collaboration between providers or between provider and individual. One woman wrote:

...neurologists don't seem to like alternative medicine and vice versa. Nutritionists (generally) don't have much time for medical doctors. Chiropractors and medical doctors--the same! I know that there is always an exception to the rule, but it does seem that there could be a little more cooperation among all these caregivers.

The desire for collaboration with their health care providers related strongly to the sense of self-reliance discussed above. The women were appreciative of those providers who included them in the process of managing illness; one woman commented on collaboration between providers in several disciplines: "It was wonderful to finally find people who worked with the 'whole' me to help me find a direction in my health care." Others, however, felt that their physicians failed to include them in treatment decisions. "I hated being treated like a recalcitrant child who needed to be patted on the head and sent home with a sugar pill." Participants worked to find new providers when collaboration was poor. Participants also commented that they wanted their providers to be knowledgeable and willing to provide education concerning their illnesses.

**Financial Constraints.** Although the group's median income was slightly above the state average (3 year [2000-2002] median Montana income, \$33,900) (U. S. Census, 2005), financial concerns were a prominent theme. "Our doctors are very good generalists.... I don't feel under-served in that at all. But going to [the city] is expensive. It is a six hour drive or a hundred dollars by plane."

In another computer exchange one woman wrote:

Just incurred \$2000 in medical bills, so I'm a little stressed!! Then they tell you they will take \$15 a month, but [they] don't understand that there are many people wanting at least that, and my \$475 a month only goes so far.

The women not only held concerns about the high cost of health care and travel to obtain care, but they also wished for their providers to understand the many obstacles they faced.

**Accessibility of Health Care.** A common theme was the disruption the women faced in their daily lives in order to obtain care:

"Spring and summer is a very busy time. Many have children underfoot, gardens to tender [sic], fields to assist with, vacations, visitors...etc. Personally, I travel every Wednesday to Great Falls, a 90 mile trip one way, to receive my chemo which lasts approx. 4 hrs in addition to the trip. I also try to shop in Great Falls to get fruits and vegetables.... I work full time and this is my busiest time of year."

To compound the problem, this was one woman's experience after she arrived:

The doctor was running behind his schedule and had overbooked, too. My appointment was at 10 a.m. and I saw him at 11:30. I didn't mind this as it happens to everyone all the time. But then the doctor (who was seeing me for the first time) was in a hurry to get through my visit. So 10 minutes later I was going out the door.

Thus, the difficulties of adjusting the responsibilities associated with rural living to accommodate health care provider appointment schedules became increasingly frustrating when providers themselves were not attentive or personally accessible.

### ***Level of Satisfaction***

Overall, the women's satisfaction with their health care was moderate. Mean Satisfaction Index (SI) score was 10.0 (SD +/- 2.8) on a scale that could range from 5 (least satisfied) to 20 (most satisfied). The actual scores ranged from 5-18. To begin to explore the factors associated with satisfaction with health care, the SI was regressed on social support (PRQ85) (Weinert & Brandt, 1987), major life events (Social Readjustment Scale) (Holmes & Rahe, 1967), health change (single item), degree of disability (Sickness Impact Profile) (Bergner et al., 1981), and Quality of Life (Ferrans & Powers, 1985). Analysis was performed using SPSS REGRESSION and SPSS FREQUENCIES for evaluation of assumptions. No transformations were considered because the variables appeared normally distributed and no outliers were found after an examination of Mahalanobis distance.

On Table 2 are displayed the correlations between the variables, the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients ( $\beta$ ),  $R^2$  change and total  $R^2$ , and adjusted  $R^2$ . R for the regression was significantly different from zero,  $F(4, 105) = 8.57, p < .001$ . For the three regression coefficients that differed significantly from zero, 95% confidence limits were calculated. The confidence limits for QOL were -.254 to -.011, for Life Change .000 to .008, and Health Status Change -.809 to -.038. Only three of the independent variables contributed significantly ( $p < .05$ ) to the prediction of health care satisfaction including QOL, Life Change, and Health Status Change. Social support was retained in the model as significance level for the regression coefficient very nearly reached statistical significance ( $p = .058$ ) and the aims of the analysis were not directed at hypothesis testing but toward hypothesis generation. Altogether, about 25% (22% adjusted) of the

variability in health care satisfaction was predicted by knowing the scores on these four independent variables.

Table 2  
*Stepwise Regression of Health Variables on Health Care Satisfaction*

Variables	MD Satisfaction (DV)	QOL	Life Change	Health Status Change	Social Support	B	$\beta$	R2 Change
QOL	-.36**					-.132*	-2.12	.133**
Life Change	.32**	-.32**				.004*	.194	.046**
Health Change	-.22**	.03	-.06			-.424*	-.186	.041*
Social Support	-.35**	.46**	-.26**	.11		-.023	-.185	.026
Means	10.0	17.0	137.1	2.7	Intercept = 130.1	15.87		
Standard deviation	2.8	4.5	130.7	1.2	34.4			
								R <sup>2</sup> =.246 Adjusted R <sup>2</sup> =.217 R=.496**

\*p < .05

\*\*p < .01

## DISCUSSION

The interactive computer-based messages personalized the women's experiences of isolation and focused on the women's self-reliance, responses to treatment/therapies, relationship with their health care providers, financial constraints, and accessibility of care. As advocated by others (Casebeer & Verhoef, 1997; Corner, 1991), the quantitative examination of the interactions of the women's level of satisfaction with other measurable factors as related to the women's more qualitative interactive messages was an attempt to gain a fuller and more insightful understanding of the women's views of their health care.

### *Quantitative Perspectives*

Comparisons of the Satisfaction Index with Quality of Life, Life and Health Status Changes, and Social Support produced a somewhat limited perspective of the women's level of satisfaction with their health care. Interpretation of the correlations and regression coefficients requires an understanding that the lower the score on the Satisfaction Index, the "better" or more satisfied the participant was with their health care. For example, the higher the reported quality of life among the participants, the lower their score on the Satisfaction index (indicating more satisfaction). Likewise, more health changes and greater social support also predicted reports of greater satisfaction with health care. However, a greater degree of life changes resulted in less satisfaction. While these findings are of interest in terms of understanding what factors predict health care satisfaction among this sample, understanding the mechanism by which each independent variable relates to satisfaction with care is difficult.

In all, the quantitatively measured explanatory variables accounted for only 25% of the variability in the women's satisfaction with their health care. Thus, the qualitative data was critically important in elucidating other factors that influenced satisfaction. The women indicated that the quality of their communication and level of collaboration with their providers impacted their adaptation either negatively or positively.

### *Qualitative Perspectives*

An expanded understanding of the women's satisfaction with health care providers in these areas was found in their interactive messages. Women living in less populous counties, farther from care, were likely to be more negatively impacted by the exigencies of travel, which they discussed extensively. Those who indicated they had strong social support described being able to mitigate these difficulties by relying on friends or family to help with travel or with duties at work and home. The comments from the women in different diagnostic groups, who had significantly different levels of satisfaction with their health care, suggested that these differences may have been related to the nature of each illness, the level of its uncertainties, and the impact it had on their day-to-day activities or from the varying abilities of the health care system to address their unique needs.

According to LeMaistre (1999), one of the worst psychological abuses of the chronically ill by health care providers is the "Stop complaining--you simply must adjust!" attitude. The depression experienced by the woman whose doctor said, "A lot of people would be happy to be in as good condition as you are" and the disappointment felt by the woman who was "treated like a recalcitrant child" illustrated the negative impact of these types of responses. The buoyancy felt by the woman who found "people who worked with the 'whole' me to help me find a direction in my health care" highlighted the power of a positive collaboration with a provider.

The women's comments often paralleled the strategies offered by Buchholz (1993) for improving the health care provider-recipient relationship. The woman who advocated not letting the doctors "tell you what to think and do" and having "some control over your own body and its health" echoed Buchholz' philosophy of viewing the relationship between the "owner" of the body and the health care provider as going both ways and

requiring a give-and-take dialogue. The participant's observation, "I think it's really important to take an active role in preserving our own health," reflected Buchholz's notion that chronically ill persons bring to the table their problems to be solved and a mind-set for working with the health care provider. In turn, the health care providers contribute the expertise and professional judgment that forms the basis for their counsel about effective adaptation patterns. If a productive relationship can be forged, chronically ill individuals can better manage their diseases on a daily basis, and, ultimately, adapt to their chronic illnesses more successfully (Thorne et al. 2004).

The women's concerns about financial constraints were akin to reports of studies from other rural areas where higher percentages of women than men did not receive health care because of the high cost or lack of health insurance was a significant barrier to treatment (Beck, Jijon, & Edwards, 1996). Accessibility of care, particularly health care that required referral to a specialist in a distant city, was a unique problem because trying to meet a scheduled appointment involved leaving farm or ranch chores unattended for an extended time, a drain on limited energy pools, and added costs for gas and lodging.

### ***Limitations***

The results of the analysis using the newly derived Satisfaction Index are preliminary and may not be extrapolated to other populations. To be of use in further research, the newly developed satisfaction measure must undergo sound psychometric evaluation. In the case of studies in which the quality of the client-provider relationship is a major focus, a mature, psychometrically sound measure with a good conceptual fit should be employed.

A given limitation of a secondary analysis is that the data which are available may not perfectly address the research question or give information that would enrich the interpretation of findings. For example, it would be informative to know the gender mix of the providers and if the level of satisfaction and the computer comments varied based on provider gender.

### ***Implications for Intervention***

Satisfaction with health care services is a contributing factor that can help rural women to adapt more successfully to living with their chronic illnesses. Among those in this study, satisfaction with health care was influenced by their quality of life, life changes, and health status changes. Important factors that shaped their perspectives of the health care they received included recognition of their self-reliance, effectiveness and side effects of therapy, rapport and collaboration with providers, financial constraints, and the degree of interruption of daily life and travel distances required to access care. Urban-based health care providers serving chronically ill rural dwellers may improve satisfaction through an increased awareness and accommodation of these concerns. Actions to improve care might include relationship-building that incorporates active collaboration in managing care, and better management of appointment scheduling to accommodate rural life styles, e.g., scheduling primary care and specialist referrals on the same or adjacent days and allowing more time during appointments.

### ***Conclusions and Future Directions***

These rural women's observations about their experiences in dealing with chronic illness, in concert with their care providers, give direction for evidence-based practice and future research. Providers need to improve interpersonal relationships; offer opportunity for collaboration in health care decisions; consider the implications of a long journey and time away from home on rural chronically ill women's ability to meet appointments and follow treatment regimens; and recognize the impact of financial constraints on the women's health care decisions.

Areas of future research include: psychometric evaluation of the newly developed satisfaction measure; primary research further exploring the rural-urban patient-provider relationship; investigation of the gender mix of the health care providers and its relationship to satisfaction with care; comparison of satisfaction of care between rural and urban women, women in a variety of rural contexts, and in different diagnostic groups; and examination of self-reliance as a driver of rural women's satisfaction with the health care system. Dissemination of findings related to quality health care for rural women may influence providers and policy makers alike.

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