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ORIGINAL RESEARCH

Patient Satisfaction With Breast Cancer Follow-Up Care Provided By Family Physicians

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Purpose: **There is little evidence to document patient satisfaction with follow-up care provided by family physicians (FPs)/general practitioners (GPs) to breast cancer patients. We aimed to identify determinants of satisfaction with such care in low-income, medically underserved women with breast cancer.**

Methods: **This was a cross-sectional study of 145 women who reported receiving follow-up care from an FP/GP. Women were enrolled in California's Breast and Cervical Cancer Treatment Program and were interviewed by phone 3 years after their breast cancer diagnosis. Cleary and McNeil's model, which states that patient satisfaction is a function of patient characteristics, structure of care, and processes of care, was used to understand the determinants of satisfaction. Stepwise logistic regression was used to identify significant predictors.**

Results: **Of the patients interviewed, 73.4% reported that they were extremely satisfied with their treatment by the FP/GP. Women who were able to ask their family physicians questions about their breast cancer had six times greater odds of being extremely satisfied compared with women who were not able to ask any questions. Women who scored the FP higher on the ability to explain things in a way she could understand had higher odds of being extremely satisfied compared with women who scored their family physicians lower.**

Conclusions: **FPs/GPs providing follow-up care for breast cancer patients should encourage patients to ask questions and must communicate in a way that patients understand. These recommendations are congruent with the characteristics of patient-centered communication for cancer patients enunciated in a recent National Cancer Institute monograph. (J Am Board Fam Med 2011;24:710–716.)**

Keywords: **Breast Cancer, Patient Satisfaction**

Breast cancer is a significant cause of morbidity and mortality among women. The American Cancer Society estimates that it accounts for more than a quarter of all new cancer cases among women and is the leading cause of cancer death in the 20- to 59-year-old age group.[1] After initial breast cancer treatment, focus during the follow-up period shifts to detecting a new primary breast cancer or recurrence and addressing the psychosocial and physical health needs of the patient. This follow-up care can be provided by family physicians (FPs)/general practitioners (GPs) and/or specialists.

Randomized trials in the United Kingdom and Canada suggest that there are no differences in a variety of medical and psychosocial outcomes of early-stage breast cancer survivors followed up by FPs compared with those followed up by specialists.[2,3] There is also evidence to suggest that the addition of a FP/GP to the care team increases the provision of preventive care compared with breast cancer patients followed up solely by oncologists.[4]

These findings lead to two important corollaries: first, that FPs/GPs have an important role to play in the follow-up of a breast cancer patient[5];

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and second, surrogate outcomes (such as patient satisfaction) become important discriminants of quality of care.[2,6,7] Though there is evidence to suggest that FPs/GPs are indeed playing an increasing role in providing follow-up care to breast cancer patients,[8–10] there is little evidence to document patient satisfaction with such care, especially in underserved and vulnerable populations. The objective of the present study was to identify the potential determinants of satisfaction with follow-up care received from a FP/GP among low-income, medically underserved women with breast cancer.

Methods

Sample

The present study was a cross-sectional analysis of data collected as part of a project to assess care received by a population of low-income women with breast cancer in California. Newly diagnosed women with breast cancer who were 18 years of age or older and enrolled in the state's Breast and Cervical Cancer Treatment Program (BCCTP) were eligible for enrollment in the study. The California BCCTP is a joint federal and state funded program that provides treatment for breast and cervical cancer for uninsured and underinsured low-income women (≤200% federal poverty level). The study was approved by the University of California, Los Angeles, Human Subjects Protection Committee.

The study interviewed eligible women by phone 6 months, 18 months, and 3 years after their breast cancer diagnosis. Women who did not speak English or Spanish, had a history of breast cancer, or were receiving treatment for another cancer were excluded from the study. A total of 921 women were recruited for the baseline 6-month interview (a 61% response rate). Further details of the study protocol and recruitment can be found in a previously published article.[11] We used the 3-year survey for this analysis because that was when women were asked about the follow-up care they received from their FPs/GPs.

Model and Variable Specification

The outcome measure was satisfaction with FP/GP care, and it was assessed by the question, Overall, how satisfied were you with your treatment by the family physician/general doctor? This question captured the woman's interaction(s) with her providers during the past 12 months. The four level response categories were "extremely dissatisfied," "somewhat dissatisfied," "somewhat satisfied," and "extremely satisfied." Because of the skewed nature of the responses, we combined the "somewhat dissatisfied," "somewhat satisfied," and "extremely dissatisfied" categories, thus giving a dichotomous outcome variable: "extremely satisfied" versus "not extremely satisfied." Similar questions to assess patient satisfaction and subsequent dichotomization of responses have been used by other studies.[12–16]

We used Cleary and McNeil's[17] model to understand the determinants of satisfaction. Their model posits that patient satisfaction is a function of three domains: (1) patient characteristics, (2) structure of care, and (3) processes of care. Patient characteristics in our study included age (years); self-reported race (white, Latina, and other); marital status (single, married/partnered); education (≤grade 12, >grade 12); insurance status (insured, uninsured); stage of disease (obtained from medical records and coded as stage 0/1, stage 2, or stage 3). Because patients with stage 4 disease have a significantly different prognosis than other stages, we dropped them (n = 7) from our analyses. The survey assessed women's financial status by asking them about their income and a question about financial adequacy (Do you have enough money to cover your needs?). Because of the low response rate on the income question, we used the financial adequacy query (yes, no) to assess financial status. General health status was assessed by the single-item measure from the Short Form 36: "In general, would you say your health is…" (excellent, very good, good, fair, poor). This was scored on a continuous five-point scale, with a higher score indicating better health status.

Structure of care was captured by the FP/GP's sex; ethnicity ("Was the family physician/general doctor from your same ethnic group?"; this was coded as concordant if the response was yes, otherwise it was coded as discordant); language spoken ("Did the family physician/general doctor speak the language you are most comfortable speaking?"; this was coded as concordant if the response was yes, otherwise it was coded as discordant); and the number of FP/GP visits during the past 12 months.

Process of care was captured by asking if the most recent mammogram was ordered and clinical breast examination was done by the FP/GP. To

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better characterize the clinical encounter, women were asked if they were able to ask the FP/GP questions about their breast cancer (yes, no) and to score on a 4-point scale (1 = never, 2 = sometimes, 3 = usually, 4 = always) how often the FP/GP listened carefully to them, explain things in a way they could understand, showed respect for what they had to say, and spent enough time with them.[18]

Data Analysis

Summary statistics, including means and percentages, were calculated to describe the sample characteristics. Group differences among independent variables were characterized using analysis of variance or χ^2 tests. We used a variable selection procedure to fit the most parsimonious multivariate regression model. All independent variables associated with the outcome at $P \leq .2$ were entered into the stepwise logistic regression model. Backward elimination (with a $P < .2$ for retention) was used to obtain the most parsimonious model; the final results were cross-checked using the forward elimination procedure. Stata software version 11.1 (StataCorp, LP, College Station, TX) was used for all statistical analyses; two-sided α levels with $P < .05$ were considered statistically significant.

Results

A total of 921 women were recruited for the baseline 6-month interview, giving a 61% response rate. In contrast to survey responders, nonresponders were older (52 years vs 50 years; $P < .0001$), more likely to be Asian/Pacific Islanders and less likely to be Latina and white (11.6%, 37.6%, and 26.5% vs 7.4%, 53.4%, and 31.7%, respectively; $P < .05$). Further details about the recruitment flow of the study can be found in a previously published article.[11] Because of death, loss to follow-up, patient refusal, poor cognition, or unavailability of medical records, data for 669 women (73%) was available for analysis at the 3-year interview.

A majority of the patients (88.4%; n = 589) had seen an oncologist for their breast cancer care during the past 12 months; 34.7% (n = 231) had seen a surgeon and 21.9% (n = 145) had seen an FP/GP to obtain such care.

Of the 145 women who visited an FP/GP, 73.4% reported that they were extremely satisfied with their treatment by the FP/GP. Table 1 lists the characteristics of the two groups. Women who reported being extremely satisfied with the care provided by their FP/GP were more likely to be younger, have fewer FP/GP visits, and were more likely to have asked the FP/GP questions about their breast cancer. In addition, they were more likely to report that the FP/GP listened carefully to them, explained things in a way they could understand, showed respect for what they had to say, and spent enough time with them.

Table 2 shows the results of the stepwise regression model. Women who were able to ask their FP/GP questions about their breast cancer had six times greater odds of being extremely satisfied compared with women who were not able to ask any questions (odds ratio, 6.02; 95% CI, 2.04–17.78). Women who scored the FP/GP higher on the ability to explain things in a way she could understand had higher odds of being extremely satisfied compared with women who scored their FP/GP lower (odds ratio, 15.95; 95% CI, 4.73–53.81).

Discussion

Three years after their diagnosis of breast cancer, more than three quarters of the women saw an oncologist for their breast cancer care, with nearly a third seeing a surgeon for similar care. Only a fifth reported seeing their FP/GP for breast cancer care. This low number could be because the population in our study comprised low-income women who may not have had easy access to an FP/GP; only 48% reported that they had enough money to cover their needs. Approximately 52% of women in our sample were Latina, and some could have been in the country illegally, thus creating another barrier to accessing a regular source of care. The California BCCTP program enabled these women to obtain breast cancer treatment, which is provided by oncologists and surgeons. It is thus possible that the only avenue available to these women for their after-treatment care was the oncologist and/or surgeon from whom they had received earlier treatment and were therefore familiar with.

Despite the low number of patients who received such care from a FP/GP, more than three of every four women reported that they were extremely satisfied with this care. This high number is not unusual, and similar high satisfaction rates

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Table 1. Characteristics of Women "Extremely Satisfied" Versus "Not Extremely Satisfied" With Breast Cancer Care Provided by Family Physicians/General Practitioners (N = 145)

Characteristics	Not Extremely Satisfied (n = 39)	Extremely Satisfied (n = 106)	*P*
Patients			
Age (years)	53.2*	49.1*	.026
Race (%)			
White	35.9	32.4	.312
Latina	43.6	55.6	
Other	20.5	12	
Marital status (%)			
Single	43.6	46.3	.771
Married/partnered	56.4	53.7	
Education (%)			
≤Grade 12	35.9	41.7	.529
>Grade 12	64.1	58.3	
Insurance status (%)			
Uninsured	10.5	13	.694
Insured	89.5	87	
Income adequacy (%)			
No	59	51	.390
Yes	41	49	
General health status	3.4*	3.1*	.102
Stage (%)			
0/1	47.1	34	.327
2	35.3	38.7	
3	17.6	27.3	
Structure of care			
FP/GP sex (%)			
Male	41	39.3	.846
Female	59	60.7	
FP/GP ethnicity (%)			
Discordant	66.7	57.3	.323
Concordant	33.3	42.7	
Language spoken by FP/GP (%)			
Discordant	28.2	11.1	.012
Concordant	71.8	88.9	
FP/GP visits (n)	4.2*	2.9*	.06
Process of care			
Most recent mammogram ordered by FP/GP (%)			
Yes	18	23.2	.500
No	82	76.8	
Most recent clinical breast exam done by FP/GP (%)			
Yes	20.5	27.8	.374
No	79.5	72.2	
Asked FP/GP questions about my breast cancer (%)			
No	51.3	15	.000
Yes	48.7	85	
How often did the FP/GP:			
listen carefully to you?	3.46*	3.91*	.000
explain things in a way you could understand?	2.97*	3.85*	.000
show respect for what you had to say?	3.36*	3.95*	.000
spend enough time with you?	2.97*	3.95*	.000

*Denotes mean.
FP, family physician; GP, general practitioner.

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Table 2. Stepwise Logistic Regression Results of Determinants of Satisfaction With Care Provided by Family Physicians/General Practitioners (n = 141)

	Odds Ratio (95% CI)
Age (years)	0.95 (0.89–1.01)
Asked FP/GP questions about breast cancer	
No	–
Yes	6.02 (2.04–17.78)
How often did the FP/GP explain things in a way you could understand?	15.95(4.73–53.81)

FP, family physician; GP, general practitioner.

have been reported in the literature.[14,19–25] In our context, this could indeed reflect the high quality of care that these women received from the FPs/GPs, or it could reflect the sense of gratitude these women felt toward the system that enabled them to receive care for a life-threatening illness against which they had few resources. Another explanation is that patients may deny dissatisfaction because they fear that their care may be negatively impacted if they reveal this.[26]

From the perspective of Cleary and McNeil's[17] model, the only factors that were significantly associated with patient satisfaction in the multivariate regression model were from the process of care domain. None of the patient or the structure of care characteristics were significant. Though we did find younger age to be associated with satisfaction in the bivariate analysis, this association weakened considerably in the multivariate regression analysis. This is in contrast to the literature, in which older age is one of the most consistent predictors of patient satisfaction.[12,18,27–32] The two processes of care characteristics that were significant were asking the FP/GP questions about breast cancer and the ability of the FP/GP to explain things in a way that the patient could understand. Taken together, these two communication aspects highlight the need to make the consultation as patient-centered as possible.

Asking questions of the FP/GP about the breast cancer can influence satisfaction through different mechanisms. Evidence suggests that psychosocial issues are the most common issues raised during follow-up,[5] and asking a question about breast cancer could directly or indirectly lead the physician to alleviate such concerns. Other literature suggests that satisfaction is associated with information giving,[14,16] and the process of asking questions may provide the FP/GP an opportunity to furnish information, thus affecting patient satisfaction. In addition, the act of asking a question could indicate that the woman has at least a modicum of control in the encounter, which may be linked to her satisfaction.

In a similar vein, the ability of an FP/GP to explain matters in a manner that the patient can understand could alleviate the psychosocial concerns referred to above. Again, this could reflect the patient receiving, and understanding, information they need. Evidence suggests that using unclear terminology to inform patients about a cancer diagnosis can lead to increased psychologic morbidity.[33] A large study in Sweden also found provision of clear medical information to be strongly associated with a global measure of satisfaction in the outpatient setting.[18] Similar results were obtained in a study examining nine university-based practices in San Francisco, which found that greater clarity and explaining results were positively associated with patient satisfaction.[12] The treatment and posttreatment periods of breast cancer are marked by high stress, and efforts by the physicians to communicate effectively clearly pays dividends from the patient satisfaction perspective.

From a clinical policy perspective, our findings attest to the need to make the clinical encounter as patient-centered as possible.[34,35] In the case of an FP/GP providing follow-up care for a breast cancer patient, efforts should be made to encourage patients to ask questions of the provider. On the other hand, FPs/GPs must communicate in a way that patients understand. These recommendations are congruent with the characteristics of patient-centered communication for cancer patients enunciated in a recent National Cancer Institute monograph.[36] Though simple, these recommendations may not be easy to follow, especially in a busy practice that is constrained by time or when there are cultural and/or language differences between the patient and provider.

A few caveats pertaining to our study must be kept in mind. First, because of the cross-sectional nature of the analysis, we can only attest to the presence of associations and not infer causality. Second, our study sample comprised of low-income medically underserved women in a specific Medicaid breast cancer treatment program in California;

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thus, the generalizability of our findings to non-Medicaid populations in other states may be limited. Third, although we achieved a 61% response rate, differences between the responders and non-responders in observed characteristics (age and ethnicity) and/or unobserved characteristics may bias the results. Fourth, except for disease stage (obtained from medical records), all our data are from patient self-report, which may be subject to bias, especially recall bias.[37,38] Lastly, the small sample size does not allow us to test for possible interactions, nor does it allow sufficient power to ascertain small but possibly significant clinical differences.

Conclusion

Our research indicates that, in a sample of low-income patients with breast cancer, patient satisfaction with follow-up care provided by FP/GPs can be increased by facilitating questions asked by patients and by taking steps to explain matters in a way patients can understand. Our findings should be replicated in other populations to confirm their generalizability in other contexts.

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