AN ASSESSMENT OF FACTORS INFLUENCING LEVELS OF PATIENT SATISFACTION IN KOUGA PRIMARY HEALTH CARE FACILITIES IN CACADU DISTRICT (EASTERN CAPE PROVINCE) IN 2009

¹S. Munyaka, ¹ I. Senekal, ¹ N., Phaswana-Mafuya, ² I. Jubane ¹, A. Davids ².

¹University of Fort Hare, Health Management and Leadership Programme; East London

Introduction

The Patient Satisfaction Survey tool (PSS) is routinely used for monitoring and evaluation within the Department of Health to assess patients' satisfaction with their experience of the primary health care (PHC) system. The PSS utilises a set of indicators that examine the patient's experience of health care providers and the health care system. Indicators express the aggregate satisfaction with service delivery of patients upon exit. The underlying argument is that performance against these indicators is a reliable method for assessing health care delivery and can be used to inform continuous health system improvement that is responsive to patient's needs. (HST 2008) A hidden assumption is that improved health services will lead to improvement in the health status of the population. The researchers were contracted by the Eastern Cape Department of Health, Cacadu District (Kouga Sub-district) to use the PSS to assess the satisfaction levels of patients in 12 PHC facilities in the Kouga sub district and subsequently reviewed the PSS methodology and conducted additional statistical analysis to assess factors that might influence patient satisfaction.



Figure 1 Dimensions of Patient Satisfaction

Methods

Ethical approval for the study was obtained from University of Fort Hare and the Human Sciences Research Council. Utilising convenience sampling, patients aged 18 years and older, were surveyed upon exit across purposively selected PHC facilities in Kouga between 16 and 20 November 2009. A total of 939 respondents were sampled and 836 (89% response rate) agreed to complete the questionnaire. Data was analyzed using a statistical package. A t-test was used to assess differences in mean satisfaction for dichotomous variables such as gender and disability status. (A p-value of 0.05 and a confidence interval (CI) of 95% was set). The analysis was extended using nonparametric ANOVA in considering variables with more than two factors. A p-value of 0.00 in the omnibus F-test indicates strong evidence of differences in the mean, and the Tukey-Kramer test (p-value 0.05), identifies the factors which caused the difference.

²Human Sciences Research Council, Port Elizabeth

Limitations: Response biases introduced through the methodology of using exit interviews might act as filters and influence patient satisfaction ratings. For example, exit interviews automatically select out those who do not have access to public health facilities, but would otherwise have used services. In addition, using exit interviews in health facilities identified by the Kouga sub-district, means that respondents are purposively selected. Non-randomisation in the selection of respondents means that results are more difficult to generalise to a feeder population around a health facility. The study compensated for this limitation by collecting data from each facility over a week during a period of normal use and through achieving a high number of respondents. A further limitation is that the existing PSS methodology does not enable the relationship between aggregate satisfaction scores and changes in health status of populations to be explored.

Results

Domain

| | General Satisfaction | Access | Assurance | Empathy | Health Promotion | Referral | Reliability | Service Standards | Tangibles |
|-----------------------------------|-------------------------|-------------|-----------|---------|---------------------|----------|-------------|----------------------|-----------|
| Variable | p-value | p- value | p-value | p-value | p-value | p-value | p-value | p-value | p-value |
| Gender | 0.000* | 0.352 | 0.088 | 0.006 * | 0.447 | 0.007* | 0.501 | 0.240 | 0.009* |
| Disability Status | 0.643 | 0.327 | 0.949 | 0.485 | 0.918 | 0.165 | 0.239 | 0.724 | 0.119 |
| Employment Status | 0.414 | 0.662 | 0.895 | 0.785 | 0.357 | 0.558 | 0.195 | 0.593 | 0.427 |
| Self-rated Health | 0.109 | 0.329 | 0.000* | 0.128 | 0.466 | 0.335 | 0.000* | 0.680 | 0.514 |
| Age | 0.335 | 0.239 | 0.072 | 0.322 | 0.070 | 0.883 | 0.077 | 0.462 | 0.003* |
| Population Group | 0.060 | 0.876 | 0.343 | 0.000* | 0.000* | 0.440 | 0.004* | 0.002* | 0.013* |
| Level of Education | 0.073 | 0.440 | 0.456 | 0.502 | 0.027* | 0.466 | 0.246 | 0.167 | 0.654 |
| Perception of Income | 0.108 | 0.258 | 0.083 | 0.010* | 0.000* | 0.263 | 0.366 | 0.010* | 0.010* |
| User Frequency Clinic | 0.200 | 0.550 | 0.848 | 0.230 | 0.162 | 0.406 | 0.155 | 0.210 | 0.382 |
| User Frequency Hospital | 0.659 | 0.576 | 0.300 | 0.513 | 0.143 | 0.002* | 0.194 | 0.938 | 0.188 |
| Other Provider-GP | 0.309 | 0.052 | 0.530 | 0.920 | 0.411 | 0.329 | 0.409 | 0.067 | 0.026* |
| Other Provider-Traditional Healer | 0.000* | 0.006* | 0.208 | 0.003* | 0.167 | 0.012* | 0.011* | 0.009* | 0.204 |

^{*} significant difference

Analysis of variables influencing patient satisfaction showed that **some demographic variables appear to influence patient satisfaction**:

- **Gender** influenced patient satisfaction with females being more satisfied within the domains relating to Empathy (p=0.006), Referral (0.007) and Tangibles (0.009).
- **Population groups** differed with Coloured patients being more satisfied than African patients in the domains of Empathy (0.000), Health Promotion (0.000), Reliability (0.004), Service Standards (0.002) and Tangibles (0.013).
- **Perception of income** influenced domains of Empathy (0.010), Health Promotion (0.000), Service Standards (0.004) and Tangibles (0.013).

Patients' **self-assessed health status** was another variable which influenced patient satisfaction. Patients who perceived their health status as being poor, had higher satisfaction levels within the domains of Assurance and Reliability.

Discussion

Additional statistical analysis of PSS data appears to deliver a more nuanced understanding of factors affecting patient satisfaction amongst respondents. Some demographic variables appear to influence aspects of patient satisfaction:

- Evidence for gender differences in mean satisfaction levels is mixed. Some authors, like in the current study, report evidence that women are more satisfied than men with medical care received (Weiss, 1988) and some report that women are more critical of medical care than men (Phaswana-Mafuya et al, in print). Yet others report that there are no differences at all (Hall & Dornan, 1990). In this study, given that substantially more women than men used public health services (Munyaka et al 2009), it is possible that these results might be influenced by non-response bias.
- In line with other studies, the current study found that population group influence satisfaction with services (van Vuuren& Botes, 1994).
- Like other studies, this study shows that other demographic factors such as employment status and disability did not appear to influence satisfaction with services (Peersman et al, 2002). However, education, income, and age did contribute significantly to satisfaction with PHC services in some domains.

In other studies, patient's health status also influenced satisfaction ratings. Patients undergoing long term aggressive treatment in developed countries are reported to have lower levels of satisfaction. (lezzoni et al 2002). Patients with underlying mental health conditions report lower satisfaction levels. (Kroenke et al., 1997). Probst et al (1997) found that patient satisfaction who perceived their health status as good, were more satisfied with the care they received.

Conclusion

This mix of evidence suggests whilst patient characteristics may act as confounders within the way that the current PSS survey tool is used, a deeper understanding of patient characteristics that influence satisfaction is needed to interpret patient satisfaction reliably. Public health managers need to be mindful of these factors when using the results of patient satisfaction surveys in judging health care services. Additional qualitative research will enable a more holistic understanding of the relationship between patient variables and the health care delivery in a South African context. The PSS might benefit from some methodological changes and additional statistical analysis.

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