

## **Assessment of patients' satisfaction with rural health services**

**Jerzy Kuzma, Jennifer Solomom,  
Absalom Masono, Brian Manari,  
Jessica Hopping, Emmanuel Pasum,  
Jonah Yvia and Pinzo Tenge**

### **Abstract**

This article reports on a study of patients' satisfaction with services in rural health-care facilities at different locations in Papua New Guinea. The research addresses the problem of improving the quality of health care services to rural populations. Gaining views of patients was considered important as they are the recipients of the services and increasingly there is recognition that patient satisfaction is an important indicator of the quality of health care. The study was designed as a semi-structured qualitative interview study and 265 participants were involved across nine sites. On the one hand, the study found that about 60% ranked services positively, while on the other hand, the majority of participants were turned away at least once due to the absence of staff, lack of drugs or inadequate equipment. Most patients believed that they would get better after a visit to a health centre and appreciated the health education advice provided by staff. The authors argue for more in-depth research and further refinement of research tools to assess patients' satisfaction as a key indicator of quality health care and data needed by health policy makers.

**Key words:** patient satisfaction, quality of care, rural health

### **Introduction**

During the last decade increasing attention has been paid to quality of health care as a means to enhance the effectiveness of health care systems in developing countries. There is also increasing recognition of patient satisfaction as an important indicator of the quality of health care (Ahmad & Din, 2010; Baltussen et al., 2002; Garner et al., 1990; Shrestha et al., 2008).

Patient satisfaction is the degree of congruency between a patient's expectation of ideal care and their perceptions of actual care received (Messner & Lewis, 1996). It is worthwhile noting that patient satisfaction is a multidimensional concept. Some of the recognized dimensions of health care satisfaction include: the technical aspects of care related to the process of diagnosis and treatment; interpersonal aspects such as staff attitude; accessibility/availability; affordability; efficacy/outcomes; continuity of care; and facilities (Shrestha et al., 2008).

Furthermore, understanding populations' perception of quality of care is vital to the utilization of primary care services. Policy makers should value patients' preferences as a means to improve the quality of care and thus, potentially, to increase patients' use of care (Baltussen et al., 2002).

Patient satisfaction has long been considered an important component of care outcomes and is frequently integrated into evaluations of overall quality of health services. However, the concept and the methodology of assessing patient satisfaction with primary health care remains underdeveloped in low resource countries. With a move toward patient-centered holistic care in these countries, the need for structured and continuous assessments of patients' perceptions of the quality of care became evident (Harutyunyan et al., 2010).

In Papua New Guinea (PNG), quality assessment of health facilities included checking patients' satisfaction has been developed (Garner et al., 1990); however, the authors are not aware of papers on assessing patient satisfaction from Rural Health Services.

Therefore, the present study was designed to evaluate the expectations and degree of patients' satisfaction with the quality of health care provided at various rural health centers in PNG. The secondary aim of this paper is to inform policy-makers about the strengths and weaknesses of the quality of health care in primary care facilities in PNG, which can help in defining starting points to improve quality of care.

## **Methods**

The study was designed as a semi-structured qualitative interview study to assess the level of patient satisfaction at rural health-care facilities at different locations in Papua New Guinea. We selected and interviewed 265 patients immediately after contact with health services. The study was done between August and October 2010. The interviewers (students in the Rural Health program at Divine Word University) informed the participants about the purpose of the study and asked for consent to be interviewed with assurance of no retribution for non-participation. Those unwilling to participate were excluded. Patients below 18 years of age were also not included in the study. Ethical clearance was obtained from the institutional review board.

The patient satisfaction questionnaire was developed based on literature (Baltussen et al., 2002; Haddad et al., 1998) and adapted to the local setting. The items in the questionnaire included staff attitudes and performance, rating of services provided, accessibility, treatment, health education, equipment, drugs availability, and trust towards health workers. We also collected some socio-demographic data from patients.

Because some respondents were likely to have low literacy, the questionnaire was written in simple language in English and Pidgin English. The questionnaire consisted of sixteen questions, grading patient satisfaction level over a five-point Likert scale: from 1=very poor; to 5=excellent.

As with most rapid appraisal methods, a major source of bias was using purposive or convenience sampling so that extrapolations to other populations might not be entirely appropriate.

The major ethical issue encountered was maintaining the confidentiality of the patients and of the health centers. We ensured this by omitting patient identities from the questionnaires and aggregating the results at the district level.

## Results

**Sample characteristics** We recruited 265 participants across 9 sites in Madang, Simbu and Eastern Highlands provinces. The median age in the sample was 36 years (range 18-65) and the majority of respondents were females (60%; n = 126). A characteristic feature was a high level of illiteracy (42%, n = 111) among participants.

### Attitude

The majority of patients (60%) were satisfied with attitude of health workers (mean satisfaction score of 3.7 out of maximum 5). However, 17% (n=44) perceived a poor attitude of some staff (see Fig.1).

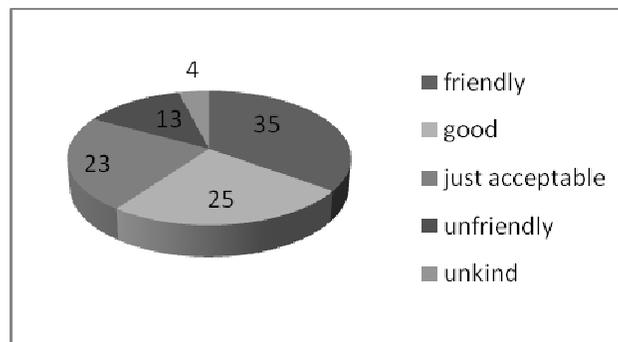


Figure 1. Assessment of patients' satisfaction (expressed in percentages) regarding attitudes of health workers in rural health centers at various sites in Papua New Guinea (2010)

### Staff performance

Across the study the patients' satisfaction with staff performance was generally lower (mean score 2.8 out of 5) than their satisfaction with staff attitude. Only 32% (n= 85) were positive, 44% (n=116) neutral and 24% (n=64) had a negative opinion of staff performance (see Fig. 2).

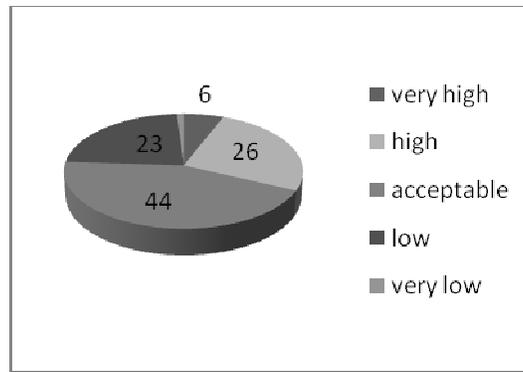


Figure 2. Assessment of patients' satisfaction (expressed in percentages) regarding staff performance in rural health sites in Papua New Guinea (2010)

**Service**

Overall 61% of participants assessed service received in the primary rural facilities as very good and good, 27% as just acceptable and only 12% as not good or very bad. The mean score for patient satisfaction with their providers was 3 out of a maximum of 5.

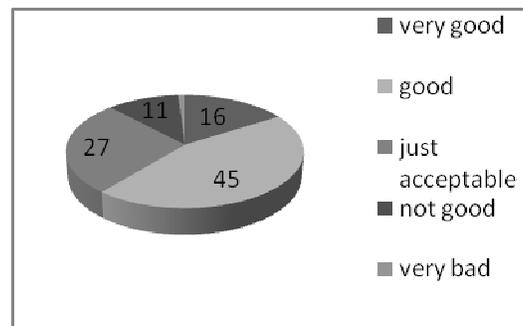


Figure 3. Assessment of patients' satisfaction (expressed in percentages) with service received at rural health centers at various sites in Papua New Guinea (2010)

Considering health education as one of the indicators of quality care, our results showed that 89% of participants received some form of health education. Although the majority of patients were generally satisfied with the care they received, a surprisingly high proportion of respondents had been turned away without help due to staff absence (65% [n=172]) or lack of drugs (61% [n=162]). Even with the low educational status of the participants, about half of them (48%, n=127) perceived that the facilities have inadequate equipment. Finally, the study showed that almost all participants trusted that they get better after visiting a health center (95%, n=252).

## Discussion

This study explored patients' satisfaction as one of the key indicators of quality health delivery in rural facilities in Papua New Guinea. Several authors pointed out that assessing patients' satisfaction is not only an important indicator of the quality of health care, (Ahmad & Din, 2010; Baltussen et al., 2002; Garner et al., 1990; Shrestha et al., 2008), but also, identifying areas of weakness in the system helps to evaluate and adjust health policies, enhancing healthcare delivery in the region (Baltussen et al., 2002; Turkson, 2008; Waitzkin et al., 2009). Along the same vein, (Ahmad & Din, (2010) emphasize that the patient is the best judge since he/she accurately assesses the system's weaknesses and provides help in improving the overall quality of health care. The World Health Organization underlined the importance of quality in the delivery of health care, as defined by its cost effectiveness and social acceptability. Another study indicated that patient satisfaction plays a major role in the acceptance of health services (Kovai et al., 2010).

It has been suggested that if health programs are to be successful in resource-poor countries, it is vital to get the opinions and the level of patients' satisfaction with available services. The patient's perception of the quality of care is critical to understanding the relationship between the quality of health care and utilization of services (Ross et al., 1993; Reerink & Sauerborn, 1996).

When considering patients' satisfaction with health care, one has to view it as a multidimensional concept, which consists of three components including the structural, technical and interpersonal aspects of care (Sitzia & Wood, 1997). Many experts maintain that the interpersonal aspect in many settings shows the strongest influence on patients' satisfaction (Aldana et al., 2001; Fitzpatrick, 1991; Messner & Lewis, 1996; Shaikh et al., 2008; Shrestha et al., 2008).

In this study, patients' high satisfaction levels conflict with the current state of primary health-care services in PNG. This study showed dissonance between a relatively high general assessment of rural services and detailed questions about service delivery. On the one hand, about 60% ranked services positively, while on the other hand the majority of participants were not served at least once due to absence of staff or lack of drugs. In the present study, the attitude of the staff was regarded as excellent and good by most patients (60%), which could be one of the reasons for a high satisfaction level among the patients treated. Similarly Messner and Lewis (1996) stated that the major part of patient satisfaction with healthcare is connected with simple human values such as respect, good communication skills, trust and service adjusted to the patient's personality. They further elaborated on this statement by pointing out the eight secrets of patients' satisfaction as recognition of individual needs, reassuring presence, provision of information, demonstration of professional knowledge and skills, assistance with pain, amount of time spent, promotion of autonomy and surveillance (Messner & Lewis, 1996).

Several other studies from low income countries noted that the most powerful predictor for client satisfaction with the government services was the provider's behaviour, especially respect and politeness (Shaikh et al., 2008; Shrestha et al., 2008). For patients in Bangladesh, health workers' attitude and behavior was much more important than the technical competence of the provider (Aldana et al., 2001). Among the factors suggested to influence how patients experience a service are responsiveness and empathy (Smith & Engelbrecht, 2001).

Saultz and Albedaiwi (2004) indicated that health workers' interpersonal skills and patients' trust influence the satisfaction with provider stronger than the actual quality of medical care (Saultz & Albedaiwi, 2004). In our study, where 95% of participants showed trust that they would be better after their visit in a health centre, this factor may strongly contribute to general good satisfaction with the provider of health care.

Another possible explanation of the observed dissonance could be the low educational status of participants. Several studies indicated that the less educated and those in rural areas were more likely to be satisfied with the care provider's quality (Harutyunyan et al., 2010; Quintana et al., 2006; Selman et al., 2009). Less educated people have little knowledge of what ideal care should look like and are also less likely to have had the experience for an informed comparison (Harutyunyan et al., 2010). According to Selman et al. (2009, p 9) 'low expectations and social desirability seem to play a role here; some service users feel that they should seem grateful for the care they receive, even when their needs are not being met.'

In the same line, Harutyunyan et al. (2010) noted in their study that satisfaction with a provider and respondent education level were inversely related and that patients served at town clinics were significantly less likely to be satisfied with a provider than those at rural facilities.

In our study a majority of participants (89%) were happy with the education about their illness provided by health workers. As has been indicated by Nelson et al. (1997) good communication and education of patients about their illness is a key component of patient satisfaction.

Taking into account the general setting of outpatient clinics in rural facilities, we have not evaluated the respect for patients' privacy; however, other authors found respect for patients' privacy to be the second most powerful predictor for patients' satisfaction (Aldana et al., 2001).

### **Conclusions**

In Papua New Guinea, with limited resources in health sector, further cost-effective improvement of health care delivery can be achieved with a focus on quality. At the completion of the study the authors concur that with a move towards better quality health care, it seems important to develop research tools to better assess patients' satisfaction as a key indicator of quality care.

Assessments of patients' perceptions of the quality of care will also indicate the strengths and weaknesses in the health system and guide health policy makers to plan and implement more effective health programs. Understanding the determinants of client satisfaction will help policy and decision-makers to plan and implement programs that meet the needs of patients as perceived by users of health services. In the context of the present study, it seems important that promoting client-oriented health services should require more in-depth research and further refinement to ensure that the research provides the robust measures needed policy makers.

## References

- Ahmad, I., & Din, S. (2010). Patients' satisfaction from rural health care services. *Gomal Journal of Medical Science*, 8(1), 95.
- Baltussen, R.M., Ye, Y., Haddad, S., Sauerborn, R.S. (2002). Perceived quality of care of primary health care services in Burkina Faso. *Health Policy and Planning*, 17(1), 42-48. Oxford University Press.
- Garner, P., Thomson, J., & Donaldson, D. (1990). Quality assessment of health facilities in rural Papua New Guinea. *Health Policy Plan*, 49-59. doi: 10.1093/heapol/5.1.49
- Shrestha, A., Dosh, D., Rao, A., Sequeira, P. (2008). Patient satisfaction at rural outreach dental camps – a one year report. *Rural and Remote Health*, 8: 891. (Online). Retrieved January 5, 2012 from Web: <http://www.rrh.org.au>
- Messner, R., L. & Lewis, S., J. (1996). *Increasing patient satisfaction: A guide for nurses*. United States of America: Spring Publishing.
- Harutyunyan, T., Demirchyan, A., Thompson, M.E., Petrosyan, V. (2010). Patient satisfaction with primary care in Armenia: good rating of bad services? *Health Services Management Research*, 23(1), 12-17.
- Haddad, S., Fournier, P., Potvin, L. (1998). Measuring lay people's reception of the quality of primary health services in developing countries. Validation of 20-item scale. *International Journal for Quality in Health Care*, 10, 93-104.
- Turkson P K, (2009) Perceived Quality of Healthcare Delivery in a Rural District of Ghana. *Ghana Medical Journal*, 43(2): 65–70.
- Waitzkin, H., Schillaci, M., and Willging, C., E. (2008). Multimethod evaluation of health policy change: An application to medical aid managed care in a rural state. *Health Research and Educational Trust. Health Services Research*, 43(4), 1325–1347.
- Kovai, V., Rao, G., N., Holden, B., Sannapaneni, K., Bhattacharya, S, .K., Khanna, R. (2010). Comparison of patient satisfaction with services of vision centers in rural areas of Andha Pradesh, India. *Indian Journal Ophthalmology*, 58(5), 407–413.
- Ross, C., K., Steward, C., A., Sinacore, J., M. (1993). The importance of patient preferences in the measurement of healthcare satisfaction. *Medical Care*, 25, 1138–1149.
- Reerink, I., Sauerborn, R. (1996). Quality of care in primary care settings in developing countries. Recent experiences and future directions. *International Journal Quality Healthcare*, 8, 131–139.

- Sitzia, J., & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. *Social Science and Medicine*, 45, 1829-1843.
- Aldana, J., M., Piechulek, H., & al-Sabir, A. (2001). Client satisfaction and quality of health care in rural Bangladesh. *Bulletin of the World Health Organization*, 79(6), 512-517.
- Fitzpatrick, R. (1991). Survey of patient satisfaction I: Important general considerations. *British Medical Journal*, 302, 887-889.
- Shaikh, B.,T., Mobeen, N., Azam, S., I., & Rabbani, F. (2008). Using Serqual for assessing and improving patient satisfaction at a rural health facility in Pakistan. *Eastern Mediterranean Health Journal*, 14,(2), Retrieved January 5, 2012 from Web, <http://www.emro.who.int/publications/emhj/1402/article24.htm>
- Smith, M., & Engelbrecht, B. (2001). *Guide to assessing client satisfaction at district hospitals*. South Africa: National Department of Health and the Health Systems Trust.
- Saultz, J., W., & Albedaiwi, W. (2004). Interpersonal continuity of care and patient satisfaction: a critical review. *Annals of Family Medicine*, 2, 445-51.
- Quintana, J., M., González, N., Bilbao, A., et al. (2006). Predictors of patient satisfaction with hospital health care. *BioMed Central Health Services Research*, 6, 102.
- Selman, L., Higginson, I., J., Agupio, G., Dinat, N., Downing, J., Gwyther, L., Mashao, T., Mmoledi, K., Moll, A., P., Sebuyira, L., M., Panajatovic, B., Harding, R. (2009). Meeting information needs of patients with incurable progressive disease and their families in South Africa and Uganda: multicentre qualitative study. *British Medical Journal*, 338:b1326.
- Nelson, A., M., Wood, S., Brown, S., Bronkesh, S., Gerbarg, E. (1997). *Improving patient satisfaction now: How to earn patient and payer loyalty*. Gaithersburg MD: Aspen.

### Authors

**Dr Br Jerzy Kuzma**, PhD, MBBS, MS, HDS (orthopaedic), is currently an Associate Professor with the Faculty of Health Sciences at Divine Word University, and also works at Modilon General Hospital as a consultant in general and orthopaedic surgery. He is the author and co-author of more than 20 publications in international and PNG medical journals and has made many presentations at medical conferences. He has a wide range of research interest including clinical, epidemiological and evaluation of health system studies. He facilitated the research study undertaken by final year Divine Word University Rural Health students: Jennifer Solomom, Absalom Masono, Brian Manari, Jessica Hopping, Emmanuel Pasum, Jonah Yvia and Pinzo Tenge.