

論文の内容の要旨

論文題目 **Patients' satisfaction and health workers' job satisfaction: related factors and their association in Callao, Peru**

(ペルーカヤオ市における患者の満足度と医療従事者の職務満足度に影響を与える要因と関連)

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Introduction

Provision of quality health services is one of the ultimate goals of any health system. There is a growing consensus that assessment of quality of health services should be based in part on patient's perceptions of overall care.

Patient satisfaction gives a multidimensional evaluation of various aspects of the health care services. It is considered as a combination of patient's expectations and actual experiences of medical services received. Predictors of patient satisfaction include patients' characteristics such as age, education level, and overall health and emotional status. Those related to the characteristics of the medical provider are age and gender, communication skills, and perceived technical competence of the health care provider.

Job satisfaction is a multifaceted phenomenon that entails an individual's feelings towards his/her job. It is the result of complex interactions between job experience, working environment and motivation. The importance of job satisfaction relies on its potential effect on behaviors and well-being of health workers. It is related to intention to quit, turnover rate, and absenteeism. In addition, job satisfaction is an important factor influencing the health of workers, as lower satisfaction levels increases the risk of anxiety, depression and burnout.

Patient satisfaction and job satisfaction of health workers are recognized as an important dimension within quality of care. Job satisfaction affects health workers' attitudes and behaviors towards patients, which in turn affect patients' perception of health care provided. Physicians who are satisfied with their job tend to be more open with their patients and pay attention to psychosocial aspects. Additionally, higher physician's job satisfaction is associated with higher patient trust, higher continuity of primary physician and higher patient's rating of care provided by their primary physician.

Limited evidence is available on patients' satisfaction and health workers' job satisfaction in Peru. Four studies have shown that patient satisfaction varies from 44.0% to 76.0%. Factors associated with satisfaction are age, gender, level of education. Job satisfaction of health workers in a public hospital in Peru showed that 22.7% of physicians, 26.0% of nurses and midwives, and 49.0% of technical nurses were satisfied with their jobs.

Patients' satisfaction with quality of health services and health workers' job satisfaction are both important measurements of health system performance. Health workers' job satisfaction has been identified as one of the factors associated with patients' satisfaction. However, most of the studies have been focused on physicians' job satisfaction. During their visit to a hospital or a health center, patients not only interact with their

physicians, but also with technical and administrative staff. These encounters can also affect patients' satisfaction, and therefore, is important to study the job satisfaction of the health team rather than by cadres.

Majority of the studies have been done in developed countries to examine the association between patient's and health worker' job satisfactions. It remains unclear whether these findings can be generalizable to developing countries, where health workers are exposed to different working conditions. In addition, in these countries, patients might have different cultural background which can affect their perception of quality of health care services. Given the limited research on this topic in developing countries and especially in Peru, this study was designed to explore patients' satisfaction, health workers' job satisfaction and their association in a local city in Peru.

Therefore, the objectives of this study were 1) to determine patients' satisfaction and health workers' job satisfaction; 2) to examine the association between patient satisfaction and health workers' job satisfaction; and 3) to explore the predictors of health workers' job satisfaction in primary health care centers in Callao, Peru.

Methods

This cross-sectional study was conducted among patients and health workers from 21 public primary health care centers in Callao, Peru. Data were collected during the period between June-July 2013. Participants of this study included patients who were receiving medical services at the outpatient services, who were 18 years old or older, who were able to communicate in Spanish and who voluntarily accepted to participate in the study and signed the informed consent form. Health workers included in this study were those who had been working at least 6 months at the primary health care center, and voluntarily accepted to participate in the study. A simple random sampling method was used to recruit 1,556 patients. A total of 363 health workers were also included in the study. Data were collected through a face-to-face interview with patients and through a self-administered questionnaire for health workers. This study was approved by the Research Ethics Committee of Graduate School of Medicine, The University of Tokyo, and of the Callao Regional Health Directorate in Peru.

This study was divided into two parts, I) patients' satisfaction and II) health workers' job satisfaction. For part I, the outcome variable was patient satisfaction and was measured using SERVQUAL instrument. It consists of 22 paired statements that measure patient's expectation and perception of the health services received. It comprises five domains of service quality which included tangibles, reliability, responsiveness, assurance and empathy characteristics. Statements are evaluated using a seven-point level Likert and the score of quality of service is calculated by summing the difference between the perception and the expectation scores of each of the statements. The statements of the SERVQUAL instrument have been validated for primary health care centers' environment in Peru. The internal consistency reliability of the scale in this study had a Cronbach's alpha = 0.89. Independent variables included socio-demographic characteristics, overall health status of patients, utilization of health insurance, payment for medical services, health care seeking behavior, waiting time, duration of appointment and with which health care professional was the medical encounter.

For part II, the outcome variable was job satisfaction and was measured using the SL-SPC scale. It has 27 items and analyzes four domains which include meaning of the task, working conditions, personal and/or social acknowledgement and economic benefits. Statements are evaluated using a 5 point level Likert. The total score is the sum of the 27 items, with range from 27 to 135. A higher score indicated a higher level of satisfaction, and a health worker with a total score of 103 or above would be classified as satisfied with their job. The internal consistency reliability of the scale in this study had a Cronbach's alpha = 0.75. The independent variables included socio-demographic characteristics of health workers, the types of health workers (health care professional, technical and administrative staff), type of contract, administrative duties, dual practice, working hours per week, years working in the health sector and years working in the primary health care center.

Chi-square test and t-test were used appropriately in descriptive analysis. To identify factors associated with patients' satisfaction, robust multiple logistic regressions clustered by health center were performed. Factors associated with health workers' job satisfaction were assessed by robust multiple ordinal logistic regression clustered by health center. All statistical analyses were conducted using STATA version 11 for Windows.

Results

Patients' satisfaction measured through SERVQUAL instrument showed that 37.5% of 1,556 patients were satisfied with the health services they received in the primary health care centers. Within the 5 domains explored, 46.9 % of all patients were satisfied with the reliability domain; 46.7%, with the responsiveness domain; 75.6%, with the assurance domain; 57.2%, with the empathy domain; and 44.0%, with the tangibles domain.

Results of robust multiple logistic regression model clustered by health center for overall patients' satisfaction showed that patients who expressed a subjective short waiting time were twice as likely to be satisfied with the quality of the medical services (AOR = 2.02, 95% CI 1.21 – 3.37); while those who considered their waiting time as normal, were 1.5 times more likely to be satisfied with health care services (AOR = 1.55, 95% CI 1.19 – 2.01) compared to those who expressed their waiting time was long. Patients who were visiting the health center for a follow-up appointment for their current medical problem were 1.7 times more likely to be satisfied with the service quality than those who were visiting for the first time (AOR = 1.69, 95% CI 1.10 – 2.61). Those patients who did not have to pay for the medical services were 1.5 times more likely to be satisfied with the health services received than those who had to make a payment (AOR = 1.53, 95% CI 1.12 – 2.08).

Self-rated health status and health care professional with whom patients had their appointment were negatively associated with overall patients' satisfaction. Patients who had a good health status were 1.6 times less likely to be satisfied with service quality compared to those who had a poor health status (AOR = 0.59, 95% CI 0.41 – 0.86). Those patients who were seen by a midwife (AOR = 0.56, 95% CI 0.36 – 0.87) or a dentist (AOR = 0.59, 95% CI 0.36 – 0.98) were 1.7 times less likely to be satisfied with the health services received compared to those who were seen by other health care professionals (psychologist, nutritionist or nurse).

Health workers' job satisfaction was associated with patients' satisfaction. Primary health care centers which had a higher mean score of health workers' job satisfaction were more likely to have patients satisfied with the empathy domain (AOR = 1.04, 95% CI 1.01 – 1.06) and assurance domain (AOR = 1.05, 95% CI 1.01 – 1.10) of SERVQUAL instrument.

Job satisfaction measured through SL-SPC scale showed that 32.0% of 363 health workers were satisfied with their jobs. Within the four domains explored, 76.0% of all health workers were satisfied with the meaning of task domain; 36.1%, with working conditions domain; 44.9%, with personal and/or social acknowledgement domain; and 23.1%, with economic benefits domain. Among the different types of health workers, 29.3 % of health care professionals, 39.2% of technical staff and 30.9% of administrative staff were satisfied with their jobs.

Robust multiple ordinal logistic regression model clustered by health center for overall job satisfaction of health workers showed that health workers who did not have a dual practice were nearly twice as likely to be satisfied with their job as those who had a dual practice (AOR = 1.93, 95% CI = 1.02 – 3.67). Those health workers who had a third party contract were three times more likely to be satisfied with their job compared to those who had a permanent contract (AOR = 2.98, 95% CI 1.39 – 6.35). The number of working hours per week was negatively associated with job satisfaction; health workers with higher number of working hours were 1.03 less likely to be satisfied with their job (AOR = 0.97, 95% CI 0.94 – 0.99).

Conclusion

This study found a low patients' and health workers' satisfaction with health services and job, respectively, in the primary health care centers in Callao, Peru. Patients who experienced a shorter waiting time, who were visiting the primary health center for a follow up appointment and who did not have to pay for medical services; were more likely to be satisfied with the service quality. Those patients who had a good self-rated health status and who were seen by a midwife or dentist were less likely to be satisfied with the medical services received. Health workers' higher job satisfaction was associated with patients' higher satisfaction with the empathy and assurance domain of SERVQUAL instrument. Predictors of health workers' higher job satisfaction included not having a dual practice, having a third party contract and having less working hours per week.

The low satisfaction of patients and that of health workers for their job is of a big concern. These are among the measurements of overall health system's performance. Findings of this study indicate that reliability, responsiveness and tangibles elements of the service quality should have priority when targeting policies to improve healthcare services. The association of health workers' and patient's satisfaction provides evidence to support health policy improvements in the working environment. Appropriate working conditions and economic benefits are necessary when implementing policies to improve the job satisfaction of health workers. This in turn will influence patients' evaluation of the health service quality.