

Relationship between patient experience of primary care and their utilization of hospital care: a cross-sectional study in China

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Background

- Strong primary care in a healthcare system is considered to provide better quality care, with a greater focus on prevention and early management of health problems and is expected to reduce unnecessary hospital utilization.
- This study aims to explore the relationship between patient experience of primary care and their utilization of hospital care in China.

Methods

- Data was collected by one-to-one and face-to-face interview in 16 primary care settings in southern China.
- Patient experience of primary care was assessed using the Assessment Survey of Primary Care (ASPC) scale, which was comprised of six domains, including first-contact care, continuity, comprehensiveness, accessibility, coordination, and patient-centeredness.
- Patient utilization of hospital care was measured by patient-reported hospital admissions, hospital outpatient visits, and emergency department visits during the past six months.
- Spearman correlation analysis was employed to evaluate the association between the two variables.
- Logistic regression analysis was conducted to evaluate the impact of patient-perceived quality of primary care on patient utilization of hospital care.

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- Ethical approval was obtained from the Institutional Review Board of School of Public Health, Sun Yat-sen University, P.R. China(2018.014).
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- The authors declare no competing interest.

Table 1 Relationships between primary care assessment score and hospital utilization in the last six months using logistic regression analyses

	Overall hospital utilization OR(95%CI)	Outpatient visits OR(95%CI)	Hospital admissions OR(95%CI)	Emergency department visits OR(95%CI)
Total score	0.423(0.312,0.572)***	0.392(0.279,0.552)***	0.527(0.299,0.928)*	0.750 (0.247,2.277)
First-contact care	0.815(0.669,0.993)*	0.840(0.674,1.047)	0.849(0.584,1.233)	1.133(0.528,2.431)
Continuity	0.914(0.758,1.103)	0.919(0.744,1.135)	0.911(0.632,1.312)	2.252(1.051,4.825)*
Accessibility	0.856(0.711,1.031)	0.800(0.647,0.988)*	1.044(0.723,1.509)	0.333(0.169,0.656)**
Comprehensiveness	0.704(0.580,0.854)***	0.708(0.570,0.878)**	0.788 (0.546,1.137)	0.715(0.350,1.458)
Coordination	0.143(0.105,0.194)***	0.125(0.089,0.175)***	0.277(0.180,0.424)***	1.059(0.429,2.619)
Patient-centred care	0.732(0.600,0.894)**	0.715(0.575,0.889)**	0.792(0.546,1.149)	0.975(0.450,2.113)

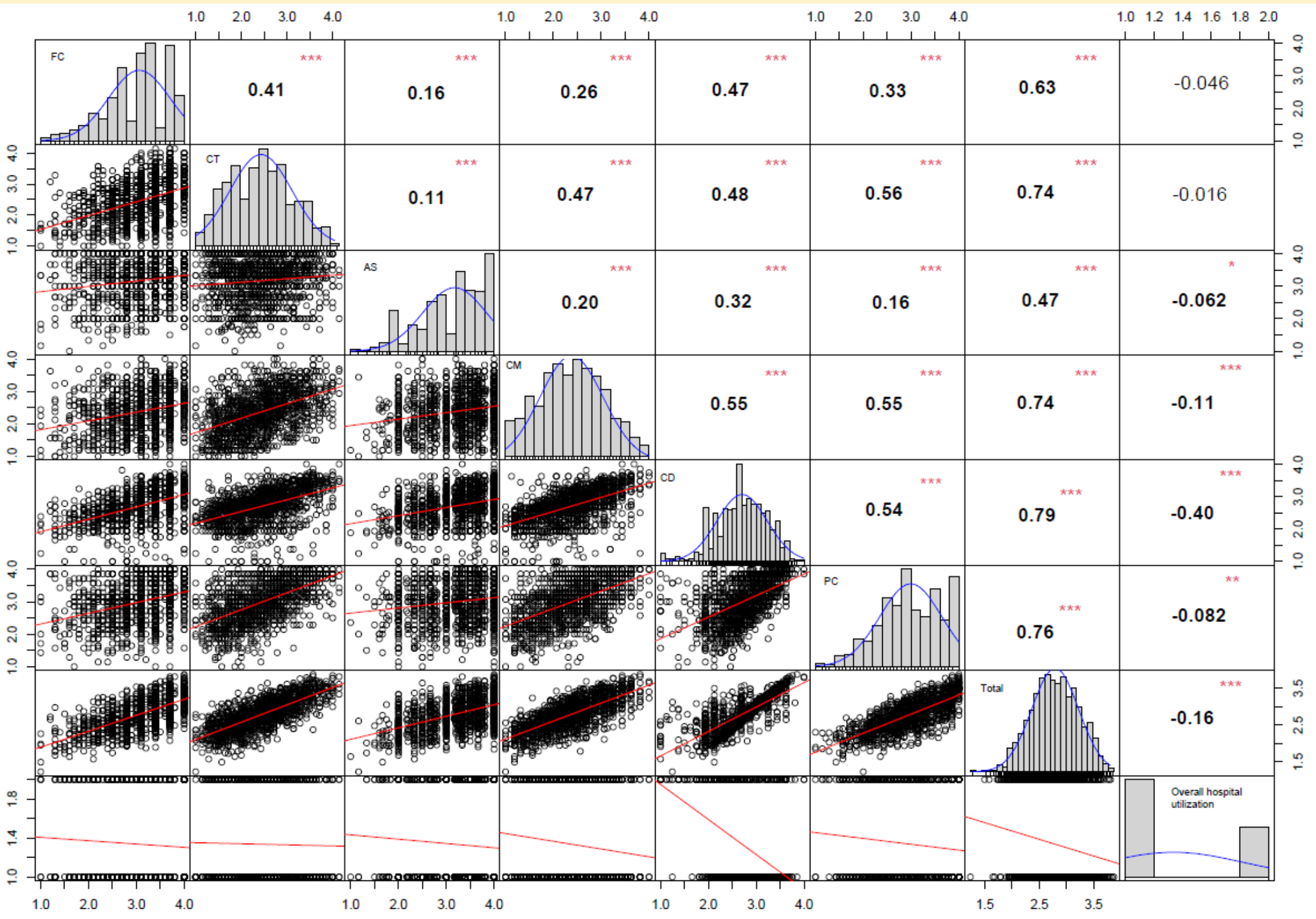


Figure 1. Correlation between patient-perceived quality of primary care and overall hospital utilization in the last six months
FC: First-contact care, CT: continuity of care, AS: accessibility of care, CM: comprehensiveness of care, CD: coordination of care, PC: patient-centred care. Values in the cells refers to the correlation coefficients between the row variable and the column variable. Coefficients with statistical significance are in bold.

Results

- This study recruited 1,185 patients, 398(33.6%) of whom reported utilization of hospital care during the past six months, while the remaining 787(66.4%) did not.
- Correlation analysis indicated that there was negative association between patient experience of primary care and their utilization of hospital care. (Figure 1)
- Logistic regression analysis showed that the total score of patient experience of primary care had negative impact on the odds of patient utilization of hospital care(P<0.001), especially patient outpatient visits(P<0.001) and hospital admissions(P=0.029). (Table 1)

Conclusion

- Better patient experience of primary care was found to negatively impact patient utilization of hospital care in the past six months in China.
- This may inform policy decisions and practice in allocating more resources to develop primary care and build family practice systems, ultimately reducing the burden on the healthcare system.
- To confirm findings of this study, future studies may employ hospital audit data to monitor the association between patient experience of primary care and their utilization of hospital care.