

FACTORS INFLUENCING PATIENT SATISFACTION WITH PUBLIC HEALTHCARE INSTITUTIONS IN SINGAPORE



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I Introduction:

- Patient satisfaction is increasingly recognized as a valid outcome measure of a healthcare system.
- Satisfaction ratings reflect personal preferences of the patient, patient's expectations and the realities of the care received.
- Determining which factors contribute most to patient satisfaction can assist healthcare providers in improving care.

II Objective:

Market Research Company conducted a survey and found "On the whole how satisfied were the respondents with Public health care Institutions". The result is shown below.

Total interviewed = 4752

Excellent 825 (17.2%)	Good 2584 (54.3%)	Satisfactory 1143 (24%)	Poor & very poor 200 (4.3)
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Using this data set we sought to determine possible factors associated with patient's overall satisfaction with public institutions.

III Method:

Description of data set:

A total of 4752 patients [Primary care = 601(12.6%) and Tertiary care = 4151(87.4%)] were surveyed by telephone interviews. Centre for Health Services Research carried out the secondary analysis.

Questionnaire:

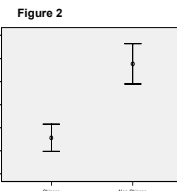
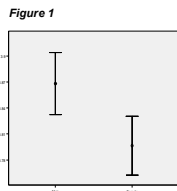
- All the answers were measured on Likert scale.
- Questions were categorized as overall satisfaction, overall experience, service quality, value for money in terms of quality and facilities and recommendation level.
- Data audit showed 99.98% accuracy. Analysis was carried out using SPSS (14.0). Some of the Statistical tests used were "t" test, chi square test and step wise regression analysis.

IV Results:

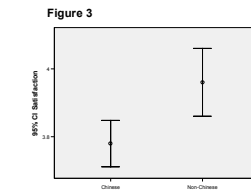
Respondents earning <1500\$ per month as house hold income were over represented in our sample as compared to National population (59% v 19%). Chinese were under represented as compared to National population (68% v 75.6%).

A Gender and ethnic difference

Tertiary care: Gender and racial difference



Primary care: Racial difference



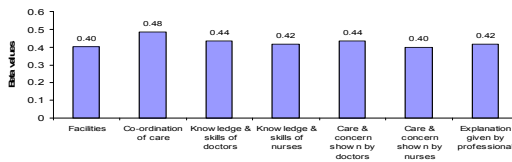
Male: 3.87 ± 0.8; Female: 3.80 ± 0.82; p = .007

Chinese: 3.78 ± .8; Non-Chinese: 3.94 ± 0.82; p = .0001

Chinese: 3.78 ± 0.72; Non-Chinese: 3.96 +/- 0.66 ; p = .004

Figure 1,2,3 confirm the significant differences. Overall, men were more satisfied than women with tertiary care. Ethnicity wise significantly non_Chinese were more satisfied than Chinese with primary and tertiary care.

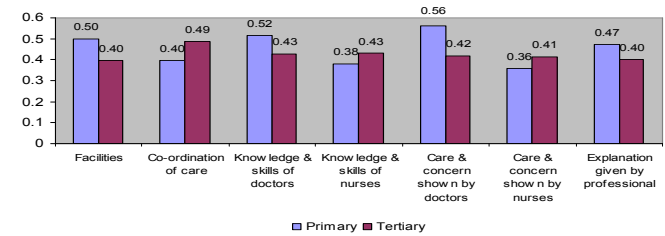
B1 Factors associated with overall satisfaction



Univariate analysis showed all factors were important showing strong association with overall satisfaction. p<.0001.

- Co-ordination of care from one service point to another
- Knowledge and skills of doctors and
- Care and concern shown by doctors showed largest impact on satisfaction.

B2 Factors associated with overall satisfaction stratifying into Primary care (N = 601) and Tertiary care:(N = 4151) (Univariate analysis); p<.0001 for all.



Factors with most impact on satisfaction

- | | |
|---|--|
| Primary care
•care and concern shown by doctors
•Knowledge and skills of doctors | Tertiary care
•Co-ordination of care from one service point to another
•Knowledge and skills of doctors and nurses showed equal impact. |
|---|--|

Factors with least impact on satisfaction

- | | |
|--|--|
| Primary care:
Care and concern shown by nurses
Knowledge and skills of nurses | Tertiary care:
Facilities (ambience, equipment...)
Explanation given by professionals on procedure and care was clear |
|--|--|

C Table 1 Predictors of overall satisfaction using step wise multiple regression

Services	Primary	P-value R = .605	Tertiary	P-value R = .670	Total	P-value R = .689
Facilities (ambience, equipment)	.240	.041	.178	.015	.184	<.0001
Co-ordination of care from one service point to another	.119	.037	.235	.014	.229	<.0001
Knowledge and skills of doctor	.107	.045	.108	.017	.109	<.0001
Knowledge and skills of nurses	.076	.022	.112	.018	.103	<.0001
Care and concern shown by doctors	.248	.042	.074	.017	.090	<.0001
Care and concern shown by nurses			.039	.017		
Explanation given by professional on procedures and care is clear			.080	.015	.081	<.0001

V Summary of findings:

From Table 2, after adjusting, 1st, 2nd and 3rd important factors associated with satisfaction were

- | | | |
|--|---|--|
| At primary care,
•Care and concern shown by doctors.
•Facilities (ambience, equipment...)
•Co-ordination of care from one service point to another | At tertiary care,
•Co-ordination of care from one service point to another,
•Facilities (ambience, equipment...)
•Knowledge and skills shown by nurses. | For overall healthcare,
•Co-ordination of care from one service to another,
•Facilities (ambience, equipment...)
•knowledge and skills of doctors. |
|--|---|--|

Satisfaction showed no association with care and concern shown by nurses. (Table 2)

Few differences were observed. Men and Non-Chinese were more satisfied than women and Chinese.

Conclusion:

•Overall, patients were satisfied with the healthcare provided at public institutions.

Recommendations:

- Continue the good work of serving patients.
- Maintain the emphasis on knowledge and skills of doctors and nurses.
- Strengthen the areas of service quality to increase patient satisfaction at primary and tertiary healthcare.
- Study further expectations of "Chinese" and "women".

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