A New Instrument for Measuring Surgical Patient Satisfaction in Hong Kong: Development and Reliability

Cheung CSK¹, Bower WF¹, Kwok SCB², Liu WHJ², van Hasselt CA¹

¹Department of Surgery, The Chinese University of Hong Kong
²Department of Surgery, Prince of Wales Hospital
Concept of Patient Satisfaction

Experience

Expectation

Satisfaction

Dissatisfaction

(1) Very satisfied: Experience > Expectation
(2) May/may not satisfy: Experience ~ Expectation
(3) Dissatisfied: Experience < Expectation

Expectation depends on
(1) Cultural values
(2) Beliefs/ thoughts about hospital stay
(3) Personal needs
Patient satisfaction

- From hospital’s perspective, patients’ view of care is important to both clinical and management staff
  - Predictive of future behavior
    - Compliance with treatment (Ware 1983, Gray 2004, Hirsh 2005)
    - Intent to return to the same hospital (Weisman 1985, Linn 1982, Francis 1969)

- An important indicator of performance for healthcare system and primary care

- Enhance and improve holistic patient care
Methods of collecting patients’ views

- Complaints
  - Patient Relation Officer

- Opinion survey
  - Common in evaluation of a new encounter/service => lack of psychometric properties

- Feedback from patient groups

- Patient satisfaction survey
Development of surgical patient satisfaction instrument

- Western measures: ? culturally appropriate for HK Chinese patients
- No validated tool for Chinese surgical inpatients
- ? Applicable to public hospital system in HK
- Robust measure must be based on culture values/beliefs in context and local setting
Study Objectives

- **Phase I**
  - Qualitative study- focus group
  - To understand what matters to surgical patients whilst in hospitals from patients’ perspectives
  - To transform the ideas and opinions into measurable scales
  - To develop a robust patient satisfaction instrument for local population

- **Phase II**
  - To test reliability and validity of our new instrument
Phase I - qualitative study

- 3 focus groups
- 21 subjects aged 20-80 recruited from SUR OPDs between Aug-Sep 2007
- ~ 7-8 informants per group
- A mix of female and male subjects in each FGD
Inclusion and exclusion criteria

- **Inclusion criteria:**
  - Had operation at PWH within last 6 months
  - Had hospital stay $\geq 4$ days
  - Cognitive
  - Cantonese speaking

- **Exclusion criteria:**
  - Deaf or unable to speak
  - Mentally impaired
Focus groups

- ~7-8 informants per group
- Moderator to facilitate discussion
- Interview lasted for 1.5 hrs
Qualitative analysis

- The discussion content was transcribed and analyzed through thematic approach.

- Findings were used to build conceptual framework of patient satisfaction for our local population.
Patient satisfaction is multi-dimensional in context

- **Admission Process & hospital environment**
  - Waiting time
  - Food quality
  - Ward environment

- **Nurses**
  - Attitudes toward patient
  - Technical skills
  - Availability

- **Nursing care**
  - Nursing skills
  - Pain management

- **Doctors**
  - Attitudes toward patient
  - Technical skills
  - Availability

- **Information Provision**
  - Information about illness/ examination results/ surgical procedures/ anesthetics

- **Discharge**
  - Discharge information
  - Explanation of prescription

- **Other**
  - Attitudes toward patient
  - Availability

**Patient satisfaction**
Development of surgical inpatient satisfaction instrument

1st version
50 items generated
5 items removed - due to redundancy/irrelevance

2nd version
45 items selected
• Further 5 items (discharge process) removed
• Wordings and phrases revised - to fit our local population

Initial version
40 items
HK Index of Inpatient Happiness
(HK2Happ) 病人住院快樂指數

- Admission process & hospital environment (5-item)
- Information provision (7-item)
- Nursing care (4-item)
- Doctors (10-item)
- Nurses (7-item)
- Other (7-item)

Adv of this instrument:
- Fit for surgical inpatients
- Applicable to HK public hospital setting
- Easy to administer (<10mins)
Phase IIA - Reliability

- Test retest reliability
  - To demonstrate the instrument is stable over time
- Study period: 2008 February – March
- Sample size: 42 surgical inpatients
- Target population: surgical patients within PWH
  - General surgery, Cardio-thoracic, Urology, Neurosurgery, ENT, Eye and Dental
- Self-administered HK2Happ twice on discharge day with 2-hr apart
## Test-retest reliability

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<tr>
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<td>Information provision</td>
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<td>Nurses</td>
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<td>Doctors</td>
<td>0.893</td>
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<td>Other</td>
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Higher ICC coefficients => The better the internal reliability of the instrument.

An acceptable level of coefficient for a measure defined as > 0.7
Phase IIB - ongoing validity test

- Ongoing; started since 2008 March –
- Sample size: 600
- Target population: all types of surgical patients within NTE hospitals (PWH, NDH, AHNH hospitals)
  - General surgery, Breast surgery, Cardio-thoracic, Urology, Neurosurgery
  - ENT, Eye, Dental
  - Gynaecology
  - Orthopaedics
- Validity test
  - Self-administered HK2Happ and EORTC IN-PATSAT32 questionnaire on discharge day
Preliminary results on concurrent validity

(N=81)

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<th>HK2Happ</th>
<th>INPATSAT32</th>
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### Preliminary results on concurrent validity

(N=81)

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Conclusion

- **Advantages of HK2Happ instrument**
  - Cultural relevant based on views from patients’ perspectives
  - Fit for local surgical patients
  - Applicable public hospital setting in Hong Kong
  - Reliable
  - Easy to administer (<10mins)

- Preliminary results on validity test to be further confirmed

- This instrument can be used to measure and compare satisfaction level of surgical inpatients within and across hospitals
Thank You!