

# Promotion of Pain as Fifth Vital Sign and Implementation of Pain Management Protocols Improve Post-operative Pain Management in NTWC

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# Background

- “Cross-section Audit on Post-operative Pain Management in 2008” revealed that **77%** of patients after surgery without Acute Pain Service experienced **moderate to severe pain**.
- Only **46%** of patient were satisfied with post-operative pain control.



# Root Cause Analysis of the Barriers to effective Post-operative Pain Management

- Inadequate pain assessment
- Inappropriate pain assessment tools
- Inadequate staff education
- Inappropriate use of analgesics
- Inadequate Patient education



# Cluster Pain Management Committee 2009

- Promote Pain as the **Fifth vital sign**.
- Initial & regular **pain assessment**.
- **Standardize** pain assessment tools
- **Departmental** (SUR, O&T, GYN) **pain management protocol** since 2010.
- **Staff training and education** on pain management.
- **Pain management leaflet** for patients.
- **Cluster webpage** for useful information and resources in pain management.



# Achievement

Demographic data	2008	2012
No. of patient recruited	60	85
Patient's mean age	47	51
Gender of patients	31.7%	56.5%
<b>Clinical outcomes comparison between Audits result in 2008 and 2012</b>		
Regular pain assessment by ward nurses ( $p < 0.01$ )	62%	98%↑
Pain reassessment after analgesics ( $p < 0.01$ )	3%	52%↑
Use of Numerical Rating Scale ( $p < 0.001$ )	11%	59%↑
Provision of pain pamphlet for patient education ( $p = 0.16$ )	48%	59%
Analgesic-related side effects ( $p = 0.014$ )	40%	21%↓
Patients ever having moderate to severe pain ( $p = 0.018$ )	77%	58%↓
Overall, patients feel very satisfied about the pain treatment ( $p = 0.024$ )	46%	64%↑

Paired student t-test and Chi-squared test ( $P < 0.05$ )



## Other Changes ...

- Opioids carrying unsafe profiles are discouraged
  - Use of **Pethidine** was reduced by **73%** in wards
  - **Dextropropoxyphene** was eliminated

## Conclusion

- Taking pain as fifth vital sign improves pain assessment.
- Implementation of pain management protocols lead to safer and more effective pain management.
- Better pain assessment and pain management improve patient satisfaction.

## Way Forward ...

- Increase pain reassessment after medication administration.
- Promote the use of pamphlet for patient education.
- Promote the use of non-pharmacological intervention.
- Launch pain resource recognition program for nurse to strengthen pain education.





# Thank you



- <http://ntwc.home/pain/membership.htm>

