



The prevalence and impact of nonadherence to analgesic medications, a cross-sectional study

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Introduction

Non-adherence to medication is common problem among chronic diseases (8-62%).

Non-adherence to medication

- ➡ Suboptimal treatment outcome
- ➡ Increase healthcare cost

Objective

- Determine prevalence & nonadherence to pain medication
- Identify factors associated with adherence to medication

Method

- ❖ Cross-sectional study
- ❖ Patients n =150
- ❖ Sep-Dec 2021 (3 months)
- ❖ Pain clinic Siriraj hospital

Outcome measurement

- Thai version of the Morisky Medication Adherence Scale-8 (MMAS-8)
- Pill count and drug disposal questionnaire
- Self-administered questionnaire
- Brief pain inventory (BPI)
- Cost calculated based on market value

Inclusion criteria

- ✓ Age ≥ 18 years
- ✓ Chronic pain
- ✓ Receive medication > 2 weeks

Exclusion criteria

- X Could not communicate Thai
- X Psychiatric disorder

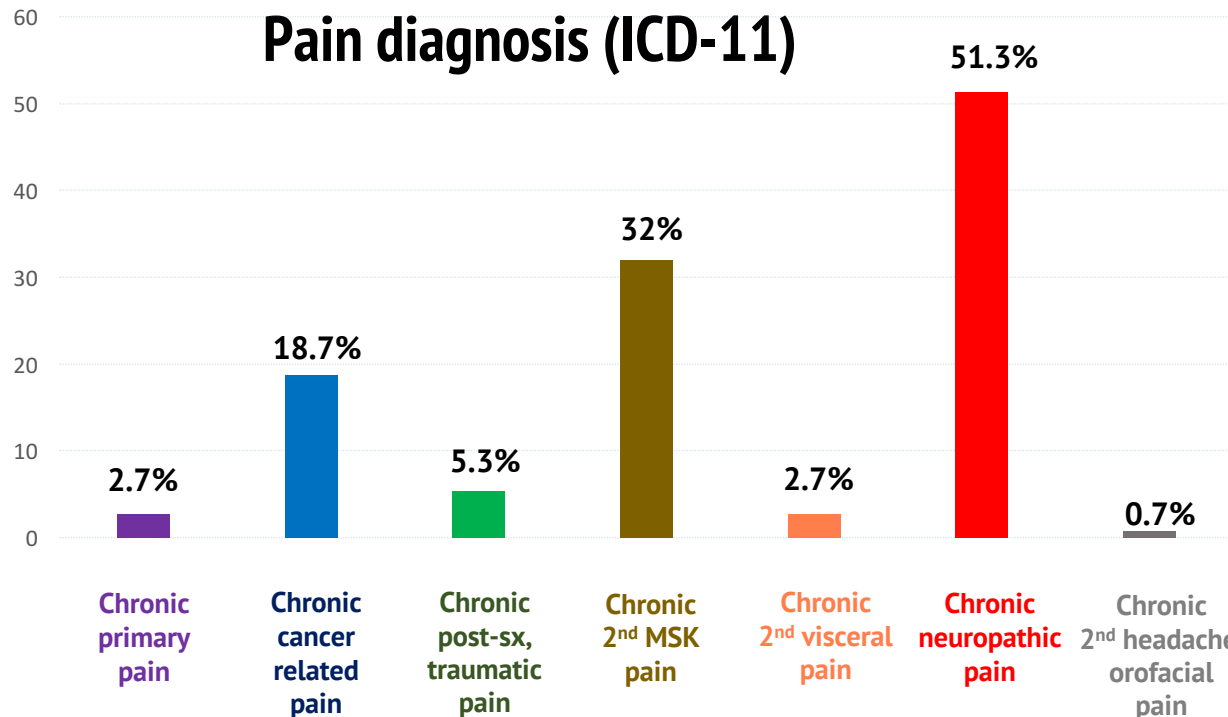
Definition of non-adherence

- MMAS-8 score <6
- Percentage of drug usage <80%

Result

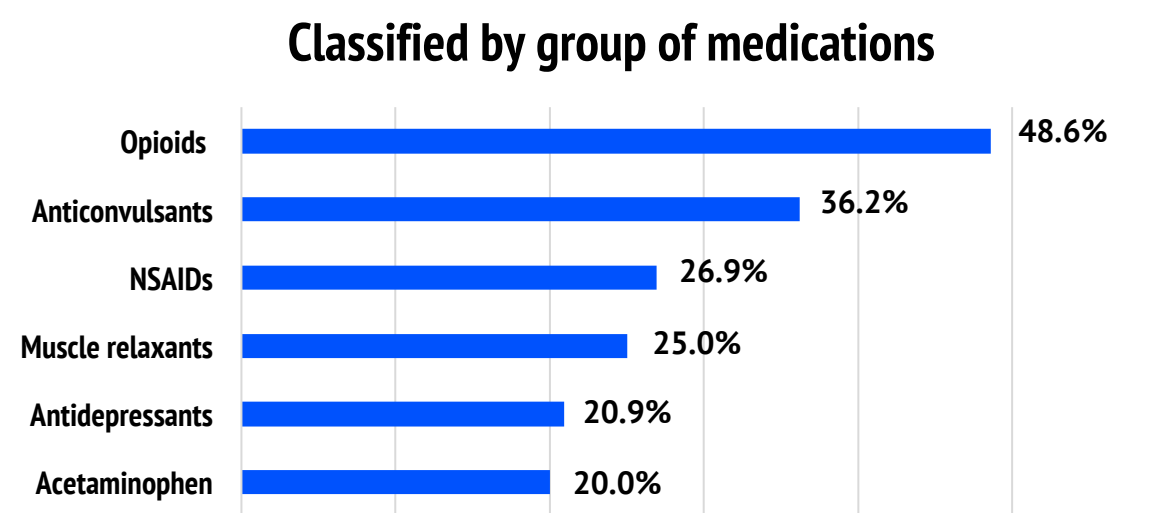
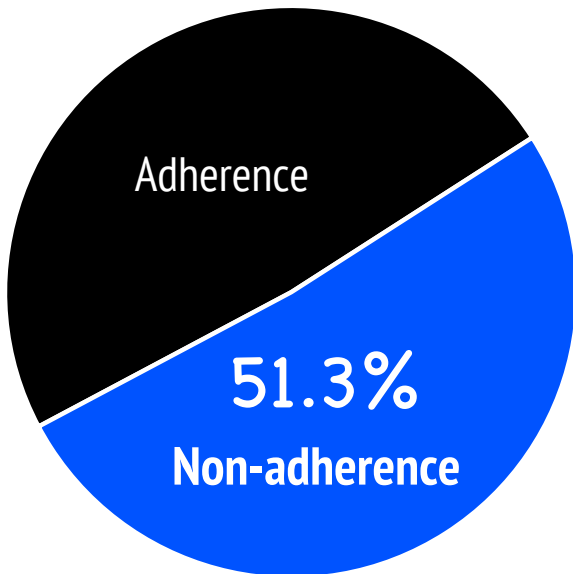
Baseline characteristic

Parameter	Patients (n=150)
Age (years), Median (IQR)	57 (45, 64)
Sex (Female)	113 (75.3%)
Undergraduated	92 (61.3%)
Health Security Scheme	
<ul style="list-style-type: none">Universal coverageSocial security schemeGovernment officerFull pay	<ul style="list-style-type: none">70 (46.7%)23 (15.3%)54 (36%)3 (2%)

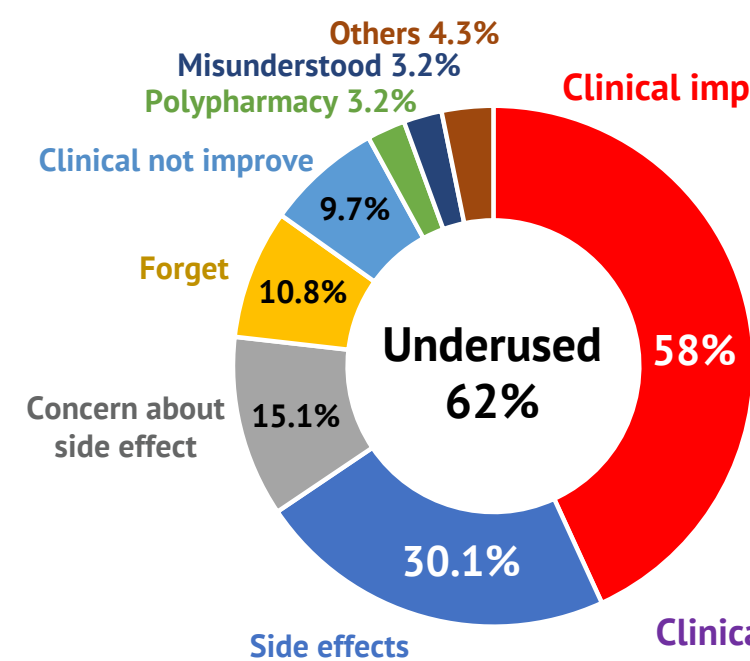


Prevalence of non-adherence to pain medication

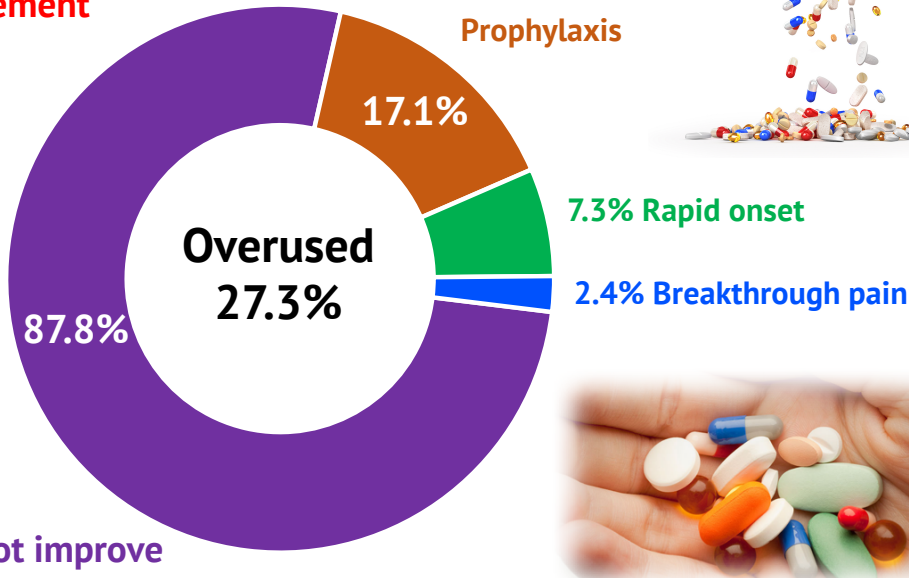
Assessment tools	Number (%)
MMAS-8	38 (25.3%)
Drug counting	57 (38%)
MMAS-8 & Drug counting	77 (51.3%)



Reason for undermedication



Reason for overmedication



Factors associated with non-adherence to medication

No significant association

- Sociodemographic data
- Diagnosis
- Type of analgesics
- Number of prescribed drugs
- Frequency of analgesic management
- Drug compliance

Significant association

- Less pain reduction after treatment
- Greater impact of pain on normal work
- Decreased enjoyment of life

Drug disposal management

- 72.4% Store at home
- 5.3% Throw away
- 11.8% Distribution
- 11.8% Return



Value of leftover drugs

150 patients in 3-month period
76,981.5 ฿

7,000 patients visiting pain clinic in a year
3,6000,000 ฿
100,000 USD



Conclusion

- High prevalence of nonadherence to analgesic medications among patients with chronic pain.
- Non-adherence is associated with negative impacts on clinical outcomes and function.
- Non-adherence results in increased healthcare costs.