



Extended Work Hours and Physical Health Status of Registered Nurses Working in Community Hospitals, Thailand

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Introduction



Thailand

The center of the Indochina peninsula in Southeast Asia

Population - 65.4 million (2010)

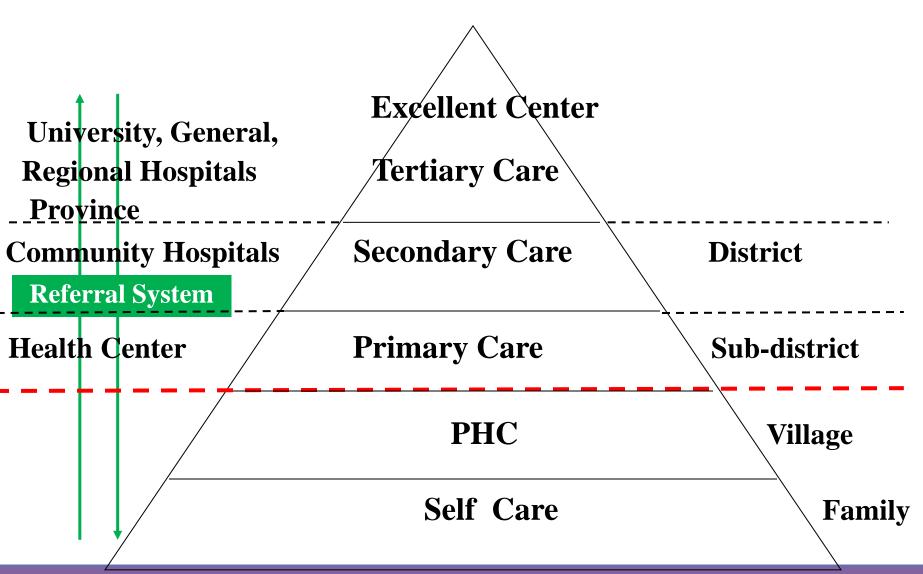
- 76 provinces
- 877 districts
- 7255 sub-districts



Five Level of Health Service System in Thailand







Background



- Health Service System in Thailand have faced nursing shortage
- Shortage of nurses have affected to quality of care
- To solve this problem
 - Overtime work of nurses
- Long working hours of nurses → physical health status

Objectives





- To describe nurses' extended work hours and physical health
- To examine the relationship between extended work hours and physical health.

Methodology





- Descriptive correlational research design
- Cross-sectional study

Population and Sample





- **Population**: registered nurses working more than 40 hours/week in five regional community hospitals in Thailand. (25,923)
- Sample size: based on Yamane's formula (394) (Yamane, 1967)
- Multi-stage sampling by region and province.
- Stratify random sampling by size of community hospitals

Instrument



- Self-administered questionnaire
 - Part 1: Personal data
 - Part 2: Extended work hour of nurses
- Part 3: Physical risks (sharp and needlestick injury and musculoskeletal disorders: pain in the neck, upper back, lower back, refer down the leg, and calf of the leg)
- Content validity six nursing experts
- **Reliability** Cronbach's Alpha = .87

Data collection



- IRB approval
- Between June July 2012
- Return rate = 85.03% (335)

Results



Demographic data

- Sex	Female	95.82 %
- Age (year)	Min	23.00
	Max	55.00

Mean (SD)

- Educational Level

Bachelor degree 94.03 %

- Hospital size

Small 56.42%

Large 24.48%

33.96 (6.55)

Extended work hours





- Nurses' extended hour of work -- 8.82-19.34 hours per week
- The average of extra work = 14.00 hours per week

Physical health status of nurses





The incidence rates of sharp and needle-stick

24.80 % Sharp

Needle-stick 27.80 %

Musculoskeletal disorders

The calf of the leg pain 69.00 %

57.90 %, Neck pain

Upper back pain 46.10 %,

Lower back pain 45.10 %

Refer pain down the leg 25.10 %

Relationship between extended work hours and physical health





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• There are relationships between Extended work hours and lower back pain (r=.12, p=.05) and refer pain down the leg (r=.17, p=.01).

• There is no relationship between extended work hours and sharp and needle-stick injury, pain in the neck, upper back, and calf of the leg

Conclusions



- Risk of nurses occurred from long working hours.
- Risk preventing system should be set to protect nurses from hazard.
- Nurse administrators should identify risk management policy in their organizations.

Implications



Nursing administration

- Staff working hour policy
- Follow up staff physical health

• Future research

- Effects of extended work hours on patient safety and outcome





Dekuji

Kob Kun Ka

Thank you for your attention