## [Original Article]

# The use of medicines and standard treatment guidelines in rural Timor-Leste

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#### Abstract

# Background

Under resource-limited circumstances, standard clinical practice for prioritized illnesses and conditions were introduced to nurses and midwives in primary health care (PHC) facilities in Timor-Leste. This research aims to asses the use of medicines and standard treatment guidelines (STGs) in community health centers (CHCs) in Timor-Leste and to analyze factors that influence adherence to STGs.

#### Methods

Randomly sampled 20 CHCs without beds were visited from February to August, 2006. In each CHC, 100 retrospective samples from patient registration books and 30 prospective observations were collected and then quantitatively analyzed. Open-ended interviews to three members of health personnel per CHC were qualitatively analyzed.

### Results

Use of injections in Timor-Leste was extremely low when compared to results from other countries that used the same international indicators. The percentage of encounters with an antibiotic prescribed was significantly lower for prescribers with clinical nurse training than those without the training. A significantly higher level of prescribing adherence was observed among clinical nurse prescribers. None of the facility characteristics investigated was associated with the CHC's overall prescribing adherence to STGs. Open-ended interviews to CHC health personnel revealed that changes brought about by the introduction of STGs were positively perceived by respondents, especially clinical nurses.

#### Discussion

Unlike previous studies on physician adherence to STGs in western countries, changes brought about by the introduction of STGs were positively perceived by PHC health personnel in Timor-Leste. STGs were developed and introduced in a policy framework that reflected local needs and reality and related with the Basic Package of Health Services policy and other policies and programs, such as human resource development, medicines policy and resource allocation plans. That fact was considered to have produced positive results in this study. Timor-Leste's experience implies a potential of STGs for non-physician health personnel working at PHC level in other resource-limited areas.

Keywords: practice guidelines, primary health care, nurses, essential medicines, Timor-Leste