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Is There a 'Know-Do' Gap for Doctors in Timor-Leste? Findings from Clinical Observations and Vignettes

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This briefing note presents the key findings and policy implications of the direct clinical observations (DCOs) and vignettes that were implemented as a part of the Health Worker Survey in Timor-Leste in 2014. The field team observed 632 clinical consultations, including 442 DCOs and 190 vignettes.

The key findings suggest that:

- The overall clinical performance of general practitioners was good in terms of attitude and moderate in regard to history taking, health education and treatment
- However, the average physical examination performance score was considerably low compared to other areas
- The factors that were significantly associated with the clinical performance of doctors were location of the health facility (urban doctors performed better) and consultation time (cases with more consultation time were better)
- Lack of knowledge was significantly associated with non-performance, while lack of motivation and lack of facility functionality were statistically insignificant

The following recommendations are based on the findings:

- Better understand the training gap of doctors working in Timor-Leste
- Improve the knowledge and performance of doctors working in rural health facilities by enhancing in-house trainings, providing effective working conditions and active supervision
- Improve the functionalities of the facilities
- Ensure doctor's compliance with clinical protocols

Background

The competence of doctors is an important factor that directly affects people's lives. Some developed countries regularly assess the clinical performance of individual doctors and use that information to renew their licences accordingly. This assessment practice is not used in most developing countries. Therefore, setting periodic competency assessments using sample surveys may provide useful information and policy guidance.

There are no systematic independent reviews of the performance of doctors in Timor-Leste (Asante et al., 2014). However, there is some anecdotal evidence of a low level of clinical performance among doctors working in Timor-Leste (Asante et al., 2012).

A study on the use of medicine and adherence to clinical guidelines by non-physician heath workers (e.g. nurses and midwives) was conducted in Timor-Leste with encouraging results (Higuchi et al., 2012). However, there is no evidence on the clinical performance of doctors that could support or assuage concerns regarding the competence of doctors in Timor-Leste.

In 2014, a study was conducted in Timor-Leste to better understand facility functionality, labour market dynamics, the preferences of health workers, and the competence of doctors.

This briefing note presents the findings on the competence of doctors working in Timor-Leste.

Methods

Using DCOs and vignettes, field teams explored the skills, competence and knowledge of doctors in order to provide the basis for establishing the 'know-do gap'.

This quality-of-care survey combined a DCO to evaluate doctors' performance in a real clinical setting and vignettes to measure doctors' clinical knowledge and skills in an ideal outpatient setting using a standard simulated 'patient'. Thus the DCO tested the skill/performance of doctors and the vignettes measured their knowledge and the difference between these two components is the 'know-do' gap.

Specialist doctors were excluded from the sampling frame. The team sampled from all three tiers of health facilities, i.e. hospitals, community health centres (CHCs) and health posts (HPs) for the DCO.

Three medical researchers from the University of Gadjah Mada in Indonesia were deployed to administer the DCO and vignette tools. The medical researchers silently observed the entire clinical consultation of the patients and used a structured tool to record the attitude of doctors, history taking, physical examination, diagnosis, treatment, and health advice.

In the vignette, which took place at the end of the consultation period, for the same sampled doctors, the medical researchers observed three simulated cases (fever, cough and diarrhea) where the enumerators presented themselves as patients. The team recorded observations in a structured tool in the same areas as in the DCO.

Doctors' level of clinical competence was determined by assessing their knowledge and skills. We analysed the descriptive statistics on doctors' attitude, history taking, physical examination, treatment accuracy and health education toward real patients (in the DCOs) and simulated cases (in the vignettes). Statistical tests were used to find the significant factors determining clinical performance. Using two different methods to assess clinical quality (following Leonard and Masatu, 2005) allowed the team to compare actual knowledge and clinical performance (the know–do gap) among doctors in Timor-Leste.

Key Findings

Sample distribution

The field team observed 632 clinical consultations, including 442 DCOs and 190 vignettes (see table 1). Among all cases, 40% were from urban and 60% were from rural areas.

Table 1: Sample Distribution

	DCO	Vignette	Total
Hospitals	98	30	128
CHCs	217	88	305
HPs	127	72	199
Total	**442**	**190**	**632**

In total, 70 doctors participated in this study. Of the total participants, 41% were male and 59% were female; 37% were working in urban health facilities and 63% in rural facilities.

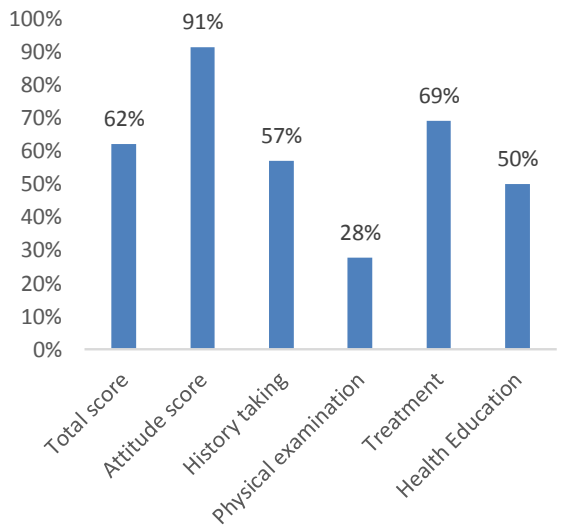
Clinical performance

As shown below in figure 1, the overall clinical performance of general practitioners was very good in terms of attitude and moderate in regard to history taking, health education and treatment. However, the average physical examination performance score was considerably low compared to other areas.

Lack of examination tools was suspected to be the reason for the apparent underperformance in regard to physical examinations. Some health care facilities do not even have any examination bed, blood pressure monitors (sphygmomanometers) or

thermometers, making it seemingly impossible to do complete physical examinations.

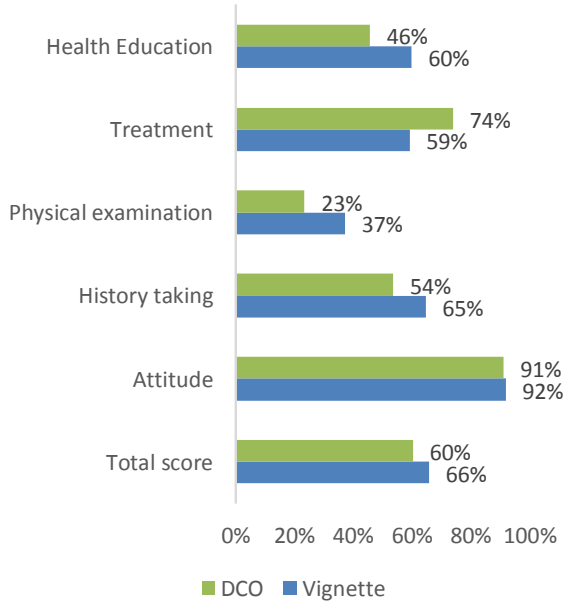
Figure 1: Clinical Performance Score



Know–do gap

DCOs and vignettes were compared based on the score of each component. In the DCOs, where real patient consultations were observed, doctors' actual performance was assessed ("do"); in the vignettes, where the doctors were asked to assess simulated patients, practitioner's clinical knowledge was assessed ("know"). The comparison reveals the "know–do" gap of the doctors. Figure 2 shows the results.

Figure 2: Know–Do Gap



Overall, doctors performed better with simulated cases than with real cases, except for treatment. This means that overall doctors have better knowledge and skills than they actually demonstrated in their daily clinical practice. This indicates that there is the potential to improve performance by ensuring better compliance.

Determinant factors

The data was analysed to find the factors determining the clinical performance of the doctors surveyed. The variables used include: location of the health facility (urban/rural), consultation time per patient, age, gender, years of experience and type of health facility.

Two factors were statistically significant:

- **Location of the health facility:** the clinical performance of doctors working in urban facilities was better.
- **Consultation time:** consultations that were given more time were better.

Statistical tests were performed to determine factors associated with low-performance and revealed that the lack of knowledge was significantly associated with the lack of performance. However, the lack of motivation and the lack of facility functionality were not statistically significant.

Policy Implications

Understanding the training gap

Further studies can be carried out to understand the training gap of doctors working in Timor-Leste. This will help clarify health workers perceived need for training and may be used to guide adjustments to the medical curriculum, so that the future health workforce is adequately trained.

Improving the supportive working environment of doctors working in rural health facilities

Improving the performance of doctors working in rural health facilities is important. It was observed, in the other module of the survey that rural practitioners receive less

training and supervision than doctors working in urban health facilities.

The health facility survey data show that rural facilities also lack basic infrastructure and supplies, which might affect the performance of rural doctors. It is therefore also important to improve the functionality of rural health facilities.

Ensuring compliance with clinical protocols

Since the survey findings suggest that doctors' knowledge is better than their practice demonstrates and since the consultation time was one of the significant determinants, it can be assumed that the clinical performance of doctors can be improved by ensuring compliance with clinical protocols.

The data suggest that doctors' patient load is not too high (on average 10 patients per day). Therefore, time constraints should not prohibit doctors from spending sufficient time on patients and following the appropriate clinical protocols. Active monitoring and performance management will help ensure compliance with standard guidelines and should improve the clinical performance of doctors working in Timor-Leste.

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