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Indonesian Rural Medical Internship: The Impact on Health Service and The Future Workforce

Hardisman Dasman,¹ Lillian Mwanri,² Angelita Martini²

¹Department of Public Health and Community Medicine, Andalas University ²College of Medicine and Public Health, Flinders University of Australia

ABSTRACT

Background: Studies have shown a shortage of medical practitioners in rural areas, and that graduate doctors are reluctant to practice in the rural areas. To address this shortage and reluctance, the Government of Indonesia implemented a rural medical internship program with the aims of preparing medical graduates for primary medical practice, and attracting them to rural areas. The purpose of this study was to understand the experience of medical interns in the rural medical internship program, and to identify the barriers and enablers to achieving the program aims.

Method: A purposive sample of 38 medical interns (70.4%) from five districts of West Sumatera Province, participated in focus group interviews. The interviews were recorded and transcribed verbatim. Data was coded and categorized before thematic analysis for experiences in rural setting specifically to identify factors important for retention of the doctors.

Results: The medical interns indicated that their exposure to rural practice did not influence their decision to practice in rural area in the future, with most interns reporting that they did not intend to undertake clinical practice as rural doctors. The main reasons expressed were due to interpersonal issues with senior clinicians, nurses and hospital staff, which resulted in their autonomy and decision making processes being undermined; and a perceived lack of professional and financial reward for practicing as rural doctors. Overall, the study found that the program improved access to medical services in the five districts, but may not improve the shortage of medical practitioners in rural areas on a long term basis

Conclusion: A rural medical internship program improves rural medical services. However, the program alone will not address the long term goal of improving rural workforce shortage. Providing incentives for rural doctors and structural change are needed in order to make rural practice more attractive.

Key Words: *medical internship, rural, primary care, Indonesia*

INTRODUCTION

A lack of medical practitioners in rural areas is a significant issue affecting health care systems in low and middle income countries. To address this workforce shortage in 2010 the Indonesian government enacted new government regulations and implemented a

rural medical internship program. The government cited evidence that the introduction of new medical graduates to rural practice results in serving rural and remote communities after their internship,¹ and this has been supported in studies showing that placement in rural medical training promotes rural career retention.²⁻⁷

The program aimed to increase the number of doctors in rural areas, and to improve the quality of new medical graduates by preparing them for practice in primary

Corresponding author:

Hardisman Dasman

Department of Public Health and Community Medicine
Faculty of Medicine of Andalas University, Indonesia

Email: hardisman@fk.unand.ac.id

medical services. The new model of internship mandated new graduates undertake their internship in Community Health Centers and District Hospitals for a period of one year. This rural medical internship training aimed to a) improve competencies for the new medical graduates; b) expand the rural medical workforce; and c) improve the health care access of the communities.^{1,8} This study examined medical interns' experience during internship program whether the program improve the health care workforce shortage and rural health service delivery.

METHODS

To understand medical interns' experience in the Indonesian Rural medical internship program, we conducted focus group interviews. Focus groups are used in qualitative research to enable discussion that produces rich data quickly, is undertaken within a social context.⁹ Additionally, direct observation for the internship work was also conducted.

The study was conducted in from 2011 to 2013 in five districts of West Sumatera Province, Indonesia. All medical interns in the five districts were invited via email to participate in the focus groups. Thirty eight of the 54 medical interns (70.4%) agreed to participate in focus group interviews (table 1).

Table 1. Location and Number of Focus Group Interview Participants

Focus Group	District	Geographical Area	Number of Participants
1	Agam	North	5
2	Pesisir Selatan	South	8
3	Solok	Middle	10
4	Tanah Datar	East and Hilly	5
5	Pariaman	West and Coastal	10
Total			38

RESULTS

This study found that issues around workforce, interpersonal relationships, and career choices (table 2).

Improved medical services

The medical interns perceived that the rural internship provided improvement to health services. They expressed the view that many districts suffered from a shortage of doctors and that the interns filled this workforce gap. In district hospitals, the interns were involved in provided treatment or further advanced examination. In the Community Health Centers, the interns were involved in a variety of programs such as epidemic infectious diseases surveillance, household sanitation surveys and public health promotion and education.

Table 2. Main themes and related sub-themes found during interviews

Theme	Sub-theme
Improved medical services	Rural medical shortage
	Filling workforce gap
	Public health programs
Interpersonal relationships	Hierarchical relationship
	Power exertion
	Lack of role understanding and respect by nursing staff
	Support by nursing staff
Incentives	Dissatisfaction with work culture
	Inadequate salary
Career intentions	Better understanding of rural practice

Interpersonal Relationship

A hierarchal relationship between interns and senior clinicians was found. The clinical practices of medical interns were mandated to be under the control of the clinicians who were on duty at that time. The strict hierarchical approach to procedures in medical services led to disharmonious professional relationships between interns and senior clinicians. Within the work environment, medical interns showed disrespect to senior clinicians, they felt that the

senior clinicians exerted their power over interns.

"...maybe in other hospitals, the medical interns are respected similar to other doctors, but our condition in this hospital is totally different. So what is our position? We are doing medical practice, take care patients. Maybe some of them also do not have much clinical experience either. They just show off their seniority" (IA4).

Some participants perceived that many nursing staff undervalued and did not respect the medical interns' work. It was considered that nursing staff did not understand the role of the medical interns and thought that they were similar to medical students who are doing clerkships.

"Here, the nursing staff do not respect and underestimate what the interns do..." (ITD1).

"...If there is any fatal condition of a patient after obtaining treatment, they (nurses) always blame it as our fault" (ITD3).

Unpleasant relationships with the senior clinicians and lack of respect from nursing staff made medical interns feel uncomfortable and caused dissatisfaction with the work culture of the hospitals. The interns expressed their dissatisfaction with this situation as physical and mental burdens.

Incentives

Generally, the interns only received a monthly stipend from the Ministry of Health, which was lower than local average professional monthly salary. Even though the medical interns in the District Hospitals became an important part of the medical workforce, there was no additional reward for them by hospital management. This was considered a major disincentive to the rural medical internship program.

"We do almost every task in emergency department and even minor surgical procedures. We do not get any financial incentive from the hospital, and you know... all the incentive for the procedure that we have done goes to senior clinician" (IA3).

Career Intentions

The rural medical internship program did not change the career intentions of interns to become rural medical practitioners. This study revealed that the internship placement in rural areas provided real clinical experience for the interns and made them aware of the different career choices. However, no one had a clear view that doing the internship encouraged him/ her to become a rural medical practitioner.

"Maybe, the influence of this internship on our career choice is we know what it looks like to be a doctor. We get the pictures: what a hospital medical officer looks like, what a rural doctor in a healthcentre is and what a medical specialist looks like. So, we can make decisions based on those pictures. Before, we only imagined how to be a doctor but now we see it, and we can make our future career based on that" (IA1).

The medical interns expressed several reasons that influenced their decision. One was the uncomfortable relationship between doctors and nurses and other health professionals that they encountered during internship. Additionally, some interns indicated that living as rural doctors was far from the ideal standard of living as a doctor in Indonesia.

"Personally I do not want choose my career as a rural practitioner as long as there is a chance to pursue medical specialist qualifications. We know and we see that living as a rural or general practitioner just like that... there is not sufficient support from the government. Of course, also we cannot obtain more income by doing private practice because of the social and economic condition of people in rural regions" (IS3).

DISCUSSION

Overwhelmingly, the medical interns considered that the program met its strategy to improve access to and enhance health services in rural settings, and they felt an important part of health service delivery. The general perception among medical interns was that rural medical practitioners are not well remunerated.

The most significant result of this study was that the medical interns' exposure to rural practice did not influence their decisions to include practicing as rural doctors in their future careers. These findings are in contrast to many studies that found that training in rural settings can influence future career choice of the trainee.^{2,3,5,7,11,12} The differences in findings in this study were due to factors including negative perceptions and unpleasant experiences that medical interns encountered and the different work culture of rural practitioners in Indonesia. Therefore the rural medical internship program may not help to improve the medical workforce for rural areas over the long term.

The medical interns perceived that there was improvement in access to health services resulting from the additional medical workforce provided through the program, addressing the lack of availability of medical practitioners.¹³ While the implementation of the internship program improved access to medical services in rural areas, the quality of service was also maintained or improved. The interns reported that their supervision by senior clinicians, and their high level of competency that enabled them to practice with minimal supervision, helped to improve services to the rural areas. This is consistent with a recent study in South Africa, where medical interns were found to improve health services in the community while prepare them to be able practice independently¹⁴.

Despite becoming an important part of the medical workforce in the rural District Hospitals, the medical interns faced financial hardship and did not see financial reward in the long term. Financial incentives including

increasing salaries, supplements, allowances, pensions, benefits and loans, introduced in various countries, have demonstrated success in increasing workforce retention.^{3,4,15-17} There is also evidence that non-financial incentives can be applied to increase retention of rural doctors, such as more opportunity to obtain additional training and further medical qualifications.⁴ As recent literature suggests, without addressing these problems and challenges will undervalue both medical internship program and community medical service.¹⁸

It was also observed in earlier studies that unpleasant experiences for medical interns are not uncommon. For example, medical interns may face significant challenges that cause distress or psychological problems during the internship due to mistreatment and work overload.¹⁸⁻²⁰ Our study also shows that some both medical and nursing staff treated medical interns as medical students who were always under his/ her control and instruction without independence, findings that are consistent with the literature.^{21,22}

In some hospitals, the hierarchy between the interns and senior clinicians was strictly applied, with senior clinicians imposing strict control over what medical interns could or could not do. These strict hierarchical procedures can lead to disharmony in the professional relationship. Mutual respect and collaborative efforts between interns and nursing staff need to be promoted,^{21,22} with the appropriate professional behavior to their staff and colleagues.

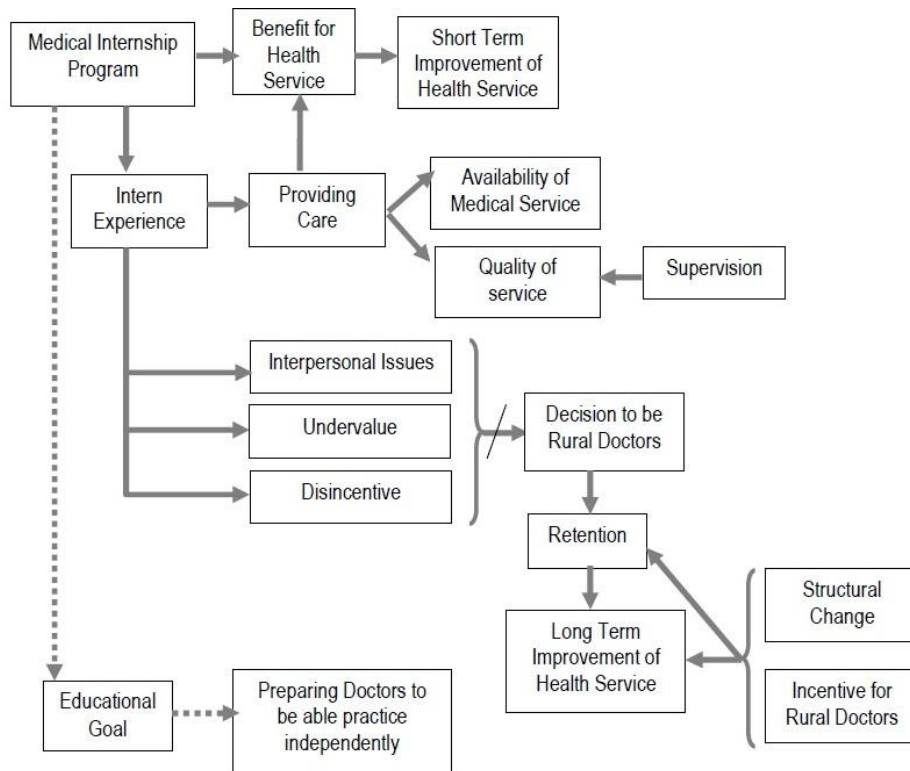


Figure 1. Current Practice of Medical Internship in Indonesia

Importantly, rural doctors in Indonesia do not receive adequate rewards from the National or District Governments.²³ Rural doctors receive only the basic salary with minimal additional support, which is considerably insufficient compares to other government employees who work in the same geographic area. This condition engendered negative attitudes in the medical interns which led them to decide not to practice as rural doctors for their long term career. The current study demonstrated that the medical interns' perceptions about rural practice were negative and this was influenced by a number factor as seen in Figure 1.

CONCLUSION

The rural medical internship program provided valuable, wide-ranging experience to medical interns practicing in rural district hospitals and community health practices. The findings revealed that there was an improvement in health service delivery as a result of the internship program. However, the internship program may not improve the medical workforce for rural areas in the long

term because the exposure to rural practice did not influence their decisions about their future careers to consider practicing as rural doctors. The interns face interpersonal issues, which resulted in their autonomy and decision making processes being undermined. There was also a lack of professional and financial rewards which is a general disincentive for rural doctors in Indonesia. These challenges should be addressed to improve long term benefit of health care services and medical workforce development in Indonesian districts regions through structural changes in rural health services.

Ethical Clearance: Formal permission was obtained from the Department of Health and the Nation and Public Protection Board of West Sumatera Province of Indonesia No.B070/WAS-BKPL/2011. Participation of the medical interns were voluntary and they were advised that their participation would remain anonymous as they would not be personally identifiable.

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Competing interests: The authors declare that there is no competing interests.

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