

Factors Affecting the Rural Retention of Medical Graduates in Lower Northern Thailand

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Objective: To examine the factors affecting the rural retention of medical graduates in lower northern Thailand.

Material and Method: A mixed method study was applied to examine factors affecting the rural retention of medical graduates in the lower northern Thailand. Target groups under the study were physicians graduated between 2002 and 2011 from Naresuan University under the Collaborative Project to Increase Production of Rural Doctor (CPIRD) and the One District One Doctor Project (ODOD). A cross-sectional survey to a stratified random sample of medical graduate was done, involving the collection of quantitative data, presented in frequency, percentage, mean, standard deviation. A qualitative research was done on 17 physicians who worked at community hospitals and 9 physicians who had left community hospitals using in-depth interview. Content analysis was done with qualitative data.

Results: Response rate for quantitative survey was 66.3%. Factors affecting rural retention of medical graduates with high scores were the practice factors (good relationship between manager and peer), community factors (community growth and security), personal factors (rural background), education factors (admission of students from rural areas), financial factors (payment for on-call and after-hour work), and regulator factors (privileges for continuing education). In-depth interviews confirmed enabler factors such as career development and continuing education opportunity. Respondents raised the issues of future training specialties that were appropriated for Thai rural hospitals in the future, the adverse effect of Universal Coverage Scheme, and communication problem in the referral system.

Conclusion: Factors influencing the rural retention of medical graduates of lower northern Thailand was good relationship between manager and peer. Universal coverage scheme and society changes were also important factors for rural retention.

Keywords: Factors affecting, Rural retention, Medical graduates

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Thailand has faced the problems of physician shortage and inequitable distribution to rural area over several decades. The government policies are to increase production of medical graduates and develop new government bonding schemes for medical and healthcare personnel to work longer in rural area. The phenomenal initiative to increase retention of medical graduates in rural area has been the distribution of medical education opportunities for high school students with rural background through the Collaborative Project to Increase Rural Doctors (CPIRD) since 1994⁽¹⁾. Yet, the governments have to resolve the shortage of doctors in rural areas with more interventions. The Ministry of Public Health (MOPH), in cooperation with the Consortium of Thai Medical Schools (COTMES) has executed the One District One Doctor Project (ODOD) since 2005 to focus on the

shortage of physician at district area by selection high school students from rural districts to study medicine⁽²⁾. The ODOD project carefully selects competent rural students including financial subsidy over six-year medical study, while the graduates are expected to work 12 years in rural districts.

The issue of resignation of the physicians from the rural area before fulfilling the government contract between 2001 and 2007 increased from 10.7 to 42.7% despite an increase of additional remuneration to authority⁽³⁾. Physicians partly approved the effectiveness of the financial strategy but mentioned that other professional opportunity strategies were as effective in retaining physicians in rural area⁽⁴⁾. The review on how to increase the number of rural physicians reveals many factors affecting the rural retention of health workforce including education, practice, financial, regulation, community, and personal factors⁽⁵⁾.

Chronic shortage of rural doctors in the lower northern Thailand since 1980s triggered the government approval of setting up the Faculty of

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Medicine at Naresuan University (NU) in Phitsanulok in 1994. The NU closely cooperated with the Ministry of Public Health of Thailand in producing a large number of physicians for the rural lower northern Thailand under the CPIRD and ODOD. The NU also initiated the so-called “New Tract” entry by recruiting graduates in health science disciplines with at least two years experience to medical program in response to rural area retention. At present, NU had graduated at least 1,123 physicians. Therefore, the authors conducted a questionnaire survey and in-depth interview to explore factors affecting rural retention of medical graduates. In the present study, the medical graduate who has worked more than three years of compulsory service and still working at community hospital in rural district is interpreted as ‘rural retention’.

Material and Method

The present study was mixed method research that combined a cross-sectional quantitative survey and a qualitative research approach. The populations under study were 897 physicians graduated from NU over the last ten years that should complete a three-year service in rural area (from 2002 to 2011). Of these, 755 were graduates from the CPIRD, 112 from the New Tract, and 30 from the ODOD. Stratified random sampling technique was applied for the questionnaire survey, hence 230 graduates were randomly taken from the CPIRD, 30 from the New Tract, and 10 from the ODOD. The questionnaire was constructed to include demographic data, five-point-scale opinion on factors affecting rural retention and open-ended questions for commenting and suggesting on other factors that may influence rural retention. The questionnaire was approved by three experts in medical education, then, was piloted to thirty medical graduates of 2013. Questionnaires were distributed to collect data between October 2015 and February 2016. Between March and April 2016, a face-to-face qualitative in-depth interview was done to sub-sample of physician graduates who were still working at or resigned from the rural hospitals. Participants were informed about the research study and gave consents before the interviews. The interviews were digitally recorded and transcribed into text. No new samples were recruited after the researchers agreed that no new issues had emerged (or reaching data saturation). All transcribed data were kept confidential. The Naresuan University Research Ethics Board had approved the study.

Statistical analysis

Descriptive statistics including frequency, percentage, mean, and standard deviations were used to describe the characteristics of the samples and the study variables. The authors used content analysis for qualitative data.

Results

Quantitative survey

One hundred sixty nine graduates responded to the survey. Absolute response rate was 66.3%. The demographic data were shown in Table 1. Most were female and the highest age group was 25 to 30 years. Most physicians (71.0%) were graduated from the CPIRD. Sixty-nine physicians (40.8%) were domiciled

Table 1. Demographic data and baseline characteristics (n = 169)

Characteristics	Number (%)
Sex	
Male	57 (33.7)
Female	112 (66.3)
Age (year)	
25 to 30	114 (67.5)
>30 to 35	41 (24.3)
>35	14 (8.2)
Marriage status	
Single	143 (84.6)
Married	26 (15.4)
Income (Baht/month)	
25,001 to 50,000	62 (36.7)
50,001 to 75,000	78 (46.2)
75,001 to 100,000	28 (16.6)
>100,000	1 (0.6)
Hometown	
Urban area	100 (59.2)
Rural area	69 (40.8)
Entry tract	
CPIRD	120 (71.0)
ODOD	28 (16.6)
New Tract	21 (12.4)
Rural retention	
Yes	136 (80.5)
No	33 (19.5)
Duration of rural retention (years)	
1 to 2	33 (19.5)
2 to 3	64 (37.9)
>3	72 (42.6)
Specialist training	
Yes	77 (45.6)
No	92 (54.4)

CPIRD = Collaborative Project to Increase Rural Doctors;
ODOD = One District One Doctor

in the rural area and one hundred thirty six physicians (80.5%) still practiced in rural hospitals.

The opinions on factors affecting rural retention of medical graduates were shown in Table 2. Graduates exactly agreed with six factors influencing the rural retention. The practice factors had the highest group mean score ($\bar{x} = 4.17$), individual highest score was especially for good relationship between manager

and peer ($\bar{x} = 4.44$) and support from peer and community ($\bar{x} = 4.38$). The second highest group mean score was the community factors ($\bar{x} = 4.11$) that involving community security and growth ($\bar{x} = 4.17$), recognition from community ($\bar{x} = 4.11$), and transportation ($\bar{x} = 4.11$). The third was personal factors ($\bar{x} = 4.02$) in the item of rural background ($\bar{x} = 4.33$), working with familiar team ($\bar{x} = 4.17$), and impression

Table 2. The opinions on factors affecting the rural retention of medical graduates in lower northern Thailand

Factors	Mean	SD	Interpretation
Education factors			
1. Admission of students from rural areas	4.18	0.642	Agree
2. Learning experience linked to community problems	4.06	0.705	Agree
3. Clinical practice location in rural areas	4.08	0.787	Agree
4. Medical curriculum contributes to positive attitude toward rural practice	3.86	0.859	Agree
5. Continuing professional development and education involving the community problems	3.93	0.768	Agree
6. Specialist training opportunity while working in community hospital	3.98	0.883	Agree
Total for education factors	4.01	0.538	Agree
Practice factors			
7. Good relationship between manager and peer	4.44	0.644	Agree
8. Heavy workload at community hospital	4.22	0.792	Agree
9. Career options and autonomy	4.15	0.636	Agree
10. Peer and community support	4.38	0.555	Agree
11. Job rotation	3.95	0.892	Agree
12. Professional recognition	4.11	0.798	Agree
13. Continuing support by government and professional organization	3.98	0.883	Agree
Total for practice factors	4.17	0.515	Agree
Financial factors			
14. Payment for on-call and after-hour work	4.02	0.929	Agree
15. Payment based on skills and experiences	3.95	0.977	Agree
Total for financial factors	3.98	0.892	Agree
Regulatory factors			
16. Length of compulsory service	3.80	0.949	Agree
17. Medical licensing procedure	4.07	0.704	Agree
18. Job location	3.99	0.752	Agree
19. Privileges for continuing education	4.11	0.787	Agree
Total for regulatory factors	3.99	0.624	Agree
Community factors			
20. Recognition from community	4.11	0.812	Agree
21. Community security	4.17	0.769	Agree
22. Community accommodation for family	4.04	0.922	Agree
23. Community transportation	4.11	0.845	Agree
24. Community size and growth	4.17	0.792	Agree
Total for community factors	4.11	0.699	Agree
Personal factors			
25. Impression in rural lifestyle	4.13	0.828	Agree
26. Rural background	4.33	0.721	Agree
27. Working with familiar team and environment	4.17	0.769	Agree
28. Experience and interest	3.94	0.730	Agree
29. Hospital administration	3.66	1.00	Agree
30. Opportunity for community development	3.92	0.664	Agree
Total for personal factors	4.02	0.514	Agree

in rural lifestyle ($\bar{x} = 4.13$). The fourth was education factors ($\bar{x} = 4.01$), the principle part was the admission of students from rural areas ($\bar{x} = 4.18$), and clinical practice location in the rural areas ($\bar{x} = 4.08$). For the regulatory factors ($\bar{x} = 3.99$), the regulation of giving privileges for continuing education ($\bar{x} = 4.11$) was emphasized as retention factor. The lowest group mean score was financial factors ($\bar{x} = 3.98$) with regard to the payment for on-call and after-hour work ($\bar{x} = 4.02$) that had individual item score higher than the group mean score.

Qualitative approach

Twenty-six physicians were chosen for specific in-depth interviews, 17 were those who had worked in community hospitals more than three years (retention group) and nine were those who had worked less than three years and had left community hospitals. The findings according to the themes related to the factors affecting rural retention were shown in Table 3.

Respondents agreed with the previous findings that student selection focusing on rural background was a direct factor for rural retention as they themselves were the rural residents and they were happy working close to their home.

Table 3. Findings from in-depth interviews exploring factors affecting rural retention

Factors	The findings of the interviews
Education factors	Admission of students from rural areas Learning experience linked to community problems
Practice factors	Good relationship between manager and peer Peer and community support Heavy workload at community hospital
Financial factors	Payment for on-call and after-hour work
Regulatory factors	Privileges for continuing education
Community factors	Recognition from community Community size and growth Community accommodation for family
Personal factors	Rural background Working with familiar team and environment
Others	Career development and continuing education support system Future training that appropriate for Thai rural hospital Effect of Universal Coverage Scheme Communication problem in the referral system

“I was an admission from rural areas. My entry tract is CPIRD, so I had an opportunity to work near my hometown.” (03, Retention, CPIRD)

Furthermore, learning experiences at medical school outside Bangkok gave them better opportunity to understand community health problems than studying in Bangkok.

“I had an opportunity to practice in rural hospital while I was studying in medical school. It made me understand community problems. After graduation, I came back to work at rural hospital. So, I was familiar with work conditions here.” (02, Retention, ODOD)

The working environments were mentioned as important retention factor. The good relationship between the manager and peer was conducive for retention in rural hospital. Not only the vertical relationship, but also the relationships with peer and with the community helped increase rural retention.

“Good relationship between supervisors and colleagues made me stay here longer.” (04, Retention, CPIRD)

“At the community here we help each other. In addition, we had good supportive resources from the community.” (08, Retention, CPIRD)

On the other hand, bad working environments in hospital could reduce the rural retention, such as heavy workload at community hospital, on-call payments that deemed unfair.

“Increasing workload of rural hospital made me burnout.” (05, Resignation, CPIRD)

“I got the information from my friends about inequity payment for on-call and after hour services. It made me failed.” (02, Resignation, CPIRD)

More often, the regulatory factors could complicate the decision to leave rural area before completing compulsory services. The MOPH rule that allowed physician graduates to go directly to specialist training in certain specialties, such as family medicine, psychiatry, general surgery, made physician leave rural areas much earlier.

“The different criteria (in terms of number of years of compulsory services) for applying to different specialist training programs made physicians early terminated.” (03, Resignation, CPIRD)

Respondents were concerned with many aspects of community factors. The size and growth of the community came with more convenient lifestyle. Recognition from the patients in the community made the graduates proud of the role. Staying in the community close to their families also made their life

happy and peaceful. If the community factors matched with personal factors, such as having rural background, that created more favorable conditions for rural retention.

“I decided to select the rural hospital from community growth.” (10, Retention, CPIRD)

“Patients and their family respect us, it made me proud and heighten motivation.” (01, Retention, ODOD)

“I thought this community accommodation is appropriate for my family.” (09, Retention, CPIRD)

“I loved community environment. Also, my lifestyle was peaceful.” (03, Retention, ODOD)

“The only reason was near my hometown and my family need me to work close to them.” (07, Retention, CPIRD)

“The hospital is located near my hometown. I wanted to take care of my parents and my family.” (02, Retention, ODOD)

“Because I was born here and I worked with my close friends too.” (06, Retention, CPIRD)

Other factors mentioned by respondents included career development and continuing education support system and the future opportunity to be trained as medical specialist.

“In my opinion, the support system of continuing education for those who are working in the community hospital is important factor for rural retention.” (05, Resignation, CPIRD)

“In my opinion that obstetrics, pediatrics, internal medicine, and general surgery are important specialists for community hospital services. So, the support system for specialist training in these fields should be considered.” (06, Resignation, CPIRD)

“Working in the rural areas lack the opportunities to learn the new knowledge.” (05, Resignation, CPIRD)

The other common factors that mentioned by many physician graduates included the effects of the universal coverage policy that created higher burden to health services in terms of quantity of service and quality of service (from higher expectations). This aggravated the basic problems of referring cases from community hospitals to general hospitals and regional hospitals. They were mix between communication issues and competency issue. Respondents raised the emerging needs for having emergency medicine specialty at community hospitals.

“Effect of Universal Coverage Scheme made more patients came to the hospital with more expectations such as check-ups with a specialist

doctors. I felt stress and unhappy.” (03, Resignation, CPIRD)

“The 30 baht policy caused an increase in needs and expectations of patients. Physicians who working in the rural area were insulted.” (08, Resignation, CPIRD)

“Communication problem occurred when referring patient from rural hospital to provincial hospital, such as referral cases of pediatrics and obstetrics.” (09, Resignation, CPIRD)

“The complicate referral system was the major problem for me. Sometime I got the refusals and blames from referral center staffs. It made me burnout.” (07, Resignation, CPIRD)

“Changing the way of life in the rural areas to urban society, emergency medicine, and elderly caring may be required in the future.” (04, Resignation, CPIRD)

Discussion

The present study confirmed previous findings on the factors affecting the rural retention including education, practice, financial, regulation, personnel, and community factors. In addition, the present study found new factors that affect rural retention for example: training on emergency medicine and elderly care were required at community hospital in the future, universal coverage scheme made more patients came to the hospital and demanded high expectations such as check-ups with specialist doctors.

Practice factors in the community hospital

The main factor affecting the performance in a community hospital is the good relationship between manager and peer. A relaxed workplace can be beneficial by enhancing job satisfaction and reducing stress. Workplace culture in which healthcare team builds up relaxed, friendly attitude toward one another typically raises productivity. This helps the physicians to contribute more insights resulting in the rural retention. The previous study described the nice and friendly rural colleague created the positive attitudes towards rural work of Thai medical, dental, and pharmacy professionals⁽⁶⁾. In addition, a study in remote areas of New South Wales found that interprofessional rapport and previous rural experience were more important factors affecting retention of pharmacists in rural areas, more than higher income⁽⁷⁾. The present study added that the problem on personnel administration in the community hospital together with high workload, lack of opportunity for training in some

fields of specialist program, inadequate supervision, and problematic referral system were directly related to resignation from rural areas. The previous study argued that government's special allowance scheme did not reduce the high turnover rate of physicians in community hospitals. Non-financial factors should be considered also⁽³⁾. Furthermore, new graduated physicians deemed the supervision from the senior doctors affected their workplace selection⁽⁸⁾. Work motivation included policies and administration, supervision, relationship with supervisor, peer and subordinates and working conditions as described in Herzberg theory. If these factors were scarce, it would lead to dissatisfaction and resignation. Hence problems could be approached in a variety of ways.

Community factors

At present, the rapid growth of community makes transportation easier. More convenient transportation may aggravate retention problem. The present study found some physicians migrated to the urban areas because they wanted their sons or daughters to study in urban areas, the same as the previous study that explored the factors influencing the retention of medical graduates from Khon Kaen University in the northeast region that child education was the one factor for choosing or changing the location of work⁽⁹⁾.

Personal factors

Personal factor especially rural background, rural experience and impression with rural lifestyle caused good attitude for working in the rural areas. The previous study found rural background was the factor associated with intention to work in the rural area of newly graduated doctors⁽⁸⁾ and the other study found that rural familiarity and rural experience were the factors affecting the recruitment and retention of pharmacists to practice in the rural and remote areas⁽⁷⁾. Absolutely, the family and rural background was the key personal factor for rural retention because proximity to their hometown allowed them to take care of their parents and family⁽⁸⁾. However, the progression in hospital administration career was not the main factor of interest to newly graduated physicians because they did not prefer hospital management job.

Education factors

Student selection of the rural background is the key factor for rural retention of medical graduates because they prefer to stay close to their family. Like the other studies, the student selection through the

CPIRD and ODOD tracts could help increase the number of physicians serving the rural community^(6,8,9). Curriculum design and the teaching of clinical practices in the rural areas nurtured learning experiences of medical student before graduation. The collaboration with the MOPH affiliated hospitals during study in the clinical years also helped deliver medical education in real situations. It was interesting that creating a good experience in education did cause a good attitude towards working in the future.

Regulatory factors

The MOPH ministerial rule giving privileges to medical graduates working at community hospitals for specialist training was the important factor resulting in resignation before completing the contract. Differential criteria in applying for different specialist trainings especially having different duration of compulsory years affected the decision of earlier training (e.g., it required only one year of compulsory service to go for training as family medicine specialist). Like the study of medical graduates of Khon Kaen University, postgraduate training was the factor of changing the location of work⁽⁹⁾, however the present study found that shorter duration of compulsory service was the main factor affecting rural retention.

Financial factors

The payment for on-call and after-hour work was the motivation factor for practicing in the community hospital. However, medical graduates commented on the income inequality in each hospital and the other region. So far, few studies in Thailand discuss this issue. The authors suggest that there should be further studies to evaluate about income inequality of the payment in after-hour work.

The present study recommends on the following concerns to increase rural retention:

1. Rural physicians should demonstrate leadership capacity in working as team and reforming themselves when working with communities. Medical school ought to manage and design the curriculum responding to these aspects. These internal factors were exactly affecting the attitude toward working in the rural areas.

2. The Universal Coverage Scheme encouraged more patients came to the hospital and demanded high expectations resulting in increasing workload and job stress to physicians. Most physicians were anxious about medical accusation. Some physicians early resigned for continuing education in specialist

program. Some physicians did not return after completing the training because the community hospital could not support the facilities of specialist care. Appropriate workload to community hospital should be studied.

3. Social changing to urbanity and elderly society shaped new demands on the present health systems and services. The present study suggested exploration of planning for the new aspect of care such as emergency medicine and elderly care.

4. Well-functioning of the referral system was the key element for continuing care. Good communication and transferring the patient's data were support the physicians who worked in the rural areas. There should be research and development to improve good communication of the referral system.

5. Specialists in obstetrics, pediatrics, internal medicine, and surgery were found to be the crucial factors in providing supervision to newly graduated physicians at community hospital. Moreover, having these specialists working at community hospital would decrease the patients refer to urban hospital. There should be a study on the appropriate proportion of specialists in the community hospital that would help increase retention of physicians.

Conclusion

Key factors affecting the rural retention of medical graduates from NU in the lower northern Thailand included good relationship between manager and peer, appropriate workload, community growth, accommodation and community safety, student selection from the rural background, rural experience, good curriculum design, clinical teaching at community hospital, opportunity for continuing education, and appropriate payment for after-hour work. Further research should focus on the impact of universal coverage scheme to health system in rural area and society changes that affect rural retention of physicians.

What is already known in this topic?

Several factors affecting rural retention of medical graduates were the rural background, opportunity for continuing education, and appropriate payment for performance in the rural hospital.

What this study adds?

Universal coverage scheme to health system in rural area, the referral system, and society changes affect rural retention of physicians.

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Potential conflicts of interest

None.

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Appendix 1.

This questionnaire is divided into 3 parts:

- Part 1** Demographic data
- Part 2** Factors retention of medical graduates
- Part 3** Other suggestions and recommendations

Please response all items

Part 1: General Information.

Instruction: Please mark (✓) in the box that represent the fact.

1. Sex
 - Male
 - Female
2. Age
 - 25-30 years
 - >30-35 years
 - >40-50 years
 - >50 years
 - >35-40 years
3. Status
 - Single
 - Marriage
 - Widow/Divorce/Separate
4. Monthly income
 - 25,001-50,000 Bath
 - 50,001-75,000 Bath
 - 75,001-100,000 Bath
 - >100,000 Bath
5. Hometown
 - Urban area
 - Rural area
6. Project of graduate
 - CPIRD
 - ODOD
 - New Tract
7. Rural retention
 - Yes
 - No
8. Duration of rural retention
 - 1-2 years
 - 2-3 years
 - >3 years
9. Specialist training
 - Yes
 - No

Part 2: Factors affecting the rural retention information.

Instruction: Please mark (/) in the columns that represent the fact.

5 = strongly agree, 4 = agree, 3 = neither, 2 = disagree, 1 = strongly disagree

Factors	Level of Agreement				
	5	4	3	2	1
Education factors					
1. Admission of students from rural areas					
2. Learning experience linked to community problems					
3. Clinical practice location in rural areas					
4. Medical curriculum contributes to positive attitude toward rural practice					
5. Continuing professional development and education involving the community problems					
6. Specialist training opportunity while working in community hospital					
Practice factors					
7. Good relationship between manager and peer					
8. Heavy workload at community hospital					
9. Career options and autonomy					
10. Peer and regional support					
11. Job rotation					
12. Professional recognition					
13. Continuing support by government and professional organization					
Financial factors					
14. Payment for on-call and after-hour work					
15. Payment for experience					
Regulatory factors					
16. Length of capitalization					
17. Licensure					
18. Job location					
19. Privileges for continuing education					
Community factors					
20. Recognition from community					
21. Community security					
22. Community accommodation for family					
23. Community transportation					
24. Community size and growth					

Appendix 1. (cont.)

Factors	Level of Agreement				
	5	4	3	2	1
Personal factors					
25. Impression in rural lifestyle					
26. Rural background					
27. Working with familiar team and environment					
28. Experience and interest					
29. Hospital administration					
30. Opportunity for community development					

Part 3: If you have any other suggestions and recommendations, please feel free to mention them below.

Education factors

.....

Practice factors

.....

Financial factors

.....

Regulatory factors

.....

Community factors

.....

Personal factors

.....

Other

.....

Appendix 2. Interview guide: retention group

Instructions: This interview guide is composed of two sections. The details are as follows:

Section One: Demographic data

Section Two: Identify the factors affecting the rural retention

Introduction: Good morning, my name is I am a researcher from Naresuan University.

Before I start, I would like to explain a little bit about what I am going to do for, the study is “Factors affecting the rural retention of Medical Graduates, Naresuan University.” This study aims to find out what are the factors that affect the rural retention of Medical Graduates, Naresuan University.

Your information will help me to understand what factors affecting the rural retention of Medical Graduates. With your permission, I will tape-record our conversation. I have prepared some questions to guide the interview. If you are ready, we can go ahead with this interview. Please sign this consent form to allow me to tape-record our interview.

Section One: Demographic data

Code..... Age: years

Marital status:

Education Level.....

Year Experience as in rural hospital: years

Section Two: Identify the factors affecting the rural retention

S1: Think back over your own work experience what are the key factors affecting rural retention?

Please describe your experience. Tell me that story, and include details, such as when the incident took place, what made it a great experience, who was involved.

S2: Now please describe an impressing experience you have had learning from peers or supervisors in your work environment at rural hospital.

Again, as you tell the story, please include details, such as when the incident took place, where it took place, who was involved, and what difference it made in your experience.

S3: Please describe, after you have had the learning experience in your rural hospital, what are the advantage and disadvantage between rural hospital and urban hospital?

S4: What are the skills that are needed for rural hospital?

S5: In your opinion, what specific recommendation would you make to improve on elements to support or provide the physician’s retention in rural areas?

Appendix 3. Interview guide: resignation group

Instructions: This interview guide is composed of two sections. The details are as follows:

Section One: Demographic data

Section Two: Identify the factors affecting the rural resignation

Introduction: Good morning, my name is..... I am a researcher from Naresuan University.

Before I start, I would like to explain a little bit about what I am going to do for the study is “Factors affecting the rural retention of Medical Graduates, Naresuan University.” This study aims to find out what are the factors that affect the rural retention of Medical Graduates, Naresuan University.

Your information will help me to understand what factors affecting the rural retention of Medical Graduates. With your permission, I will tape-record our conversation. I have prepared some questions to guide the interview. If you are ready, we can go ahead with this interview. Please sign this consent form to allow me to tape-record our interview.

Section One: Demographic data

Code.....Age:years

Marital status:

Education Level.....

Year Experience as in rural hospital:years

Section Two: Identify the factors affecting the rural resignation or Termination

S1: Think back over your own work experience what are the key factors affecting rural resignation or termination?

Please describe your experience. Tell me that story, and include details, such as when the incident took place, what made it a great experience, who was involved.

S2: What was the last incident caused you to terminate from rural hospital? Now please describe the last incident that caused you to terminate from rural hospital?

Again, as you tell the story, please include details, such as when the incident took place, where it took place, who was involved, and what difference it made in your experience.

S3: Please describe, after you have had the learning experience in your rural hospital, what are the advantage and disadvantage between rural hospital and urban hospital?

S4: What are the skills that are needed for rural hospital?

S5: In your opinion, what specific recommendation would you make to improve on elements to support or provide the physician’s retention in rural area?

ปัจจัยการคงอยู่ในชนบทของศิษย์เก่าแพทยศาสตรบัณฑิต มหาวิทยาลัยนเรศวร

รัฐพล แสงรุ่ง, ไพฑูริย์ ช่วงจำ

วัตถุประสงค์: ศึกษาปัจจัยการคงอยู่ในชนบทของศิษย์เก่าแพทยศาสตรบัณฑิต คณะแพทยศาสตร์ มหาวิทยาลัยนเรศวร

วัสดุและวิธีการ: การศึกษาแบบผสมผสานถึงปัจจัยการคงอยู่ในชนบทของศิษย์เก่าแพทยศาสตรบัณฑิต กลุ่มเป้าหมายเป็นศิษย์เก่าแพทยมหาวิทยาลัยนเรศวรที่สำเร็จการศึกษาปี พ.ศ. 2545-2554 ภายใต้โครงการผลิตแพทย์เพิ่มเพื่อชาวชนบทและโครงการกระจายแพทย์หนึ่งอำเภอหนึ่งทุน การสำรวจภาคตัดขวางใช้การวิเคราะห์ข้อมูลแบบพรรณนาด้วยวิธีการแจกแจงความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และสัมภาษณ์เชิงลึกแพทย์ปฏิบัติงานในชุมชน 17 คน และลาออก 9 คน โดยการวิเคราะห์เชิงเนื้อหา

ผลการศึกษา: ผู้ตอบแบบสอบถามกลับ 66.3% ให้คะแนนสูงต่อปัจจัยที่มีการคงอยู่ในชนบทของศิษย์เก่าแพทยศาสตรบัณฑิต ได้แก่ ปัจจัยการปฏิบัติงาน (ความสัมพันธ์ที่ดีระหว่างผู้บริหารและผู้ร่วมงาน) ปัจจัยชุมชน (การเจริญของชุมชนและความปลอดภัย) ปัจจัยในระดับบุคคล (ภูมิถิ่นานชนบท) ปัจจัยการศึกษา (การรับนักศึกษาแพทย์จากภูมิลำเนาชนบท) ปัจจัยค่าตอบแทน (การจ่ายค่าตอบแทนนอกเวลา) และปัจจัยระเบียบการชดใช้ทุน (สิทธิในการศึกษาต่อเนื่องตามข้อบังคับการชดใช้ทุน) ผลการสัมภาษณ์เชิงลึกยืนยันว่าปัจจัยที่เอื้อต่อการคงอยู่ในชนบทของศิษย์เก่า ได้แก่ ความก้าวหน้าในอาชีพและโอกาสในการศึกษาต่อเนื่อง อีกทั้งประเด็นในการฝึกอบรมความเชี่ยวชาญของแพทย์ที่เหมาะสมสำหรับโรงพยาบาลชุมชนในอนาคต ผลกระทบจากนโยบาย 30 บาท และปัญหาการสื่อสารในระบบการส่งต่อ

สรุป: ปัจจัยที่มีอิทธิพลต่อการคงอยู่ในชนบทของศิษย์เก่าแพทยศาสตรบัณฑิตภาคเหนือตอนล่างของไทย คือ ความสัมพันธ์ที่ดีระหว่างผู้บริหารและผู้ร่วมงาน นโยบาย 30 บาท และการเปลี่ยนแปลงของสังคมชนบทที่มีความสำคัญต่อการคงอยู่
