



University Health Science
Faculty of Odonto-Stomatology



Organization of International
Support for Dental Education

Student Experience Tour in Rural Area (SETRA)



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Message from Dean



Professor IM Puthavy

Dean of Faculty of Odonto-Stomatology University of
Health Sciences, Phnom Penh, Cambodia.

I would like to take this opportunity to express my gratitude and sincere thank to Organization of International Support for Dental Education (OISDE), Japan and Ladies and Gentlemen who spare time to read this booklet informing about the activities of Student Experience Tour for Rural Area (SETRA) which has been conducted Faculty of Odonto-Stomatology, University of Health Sciences (UHS), Phnom Penh, Cambodia, sponsored by OISDE.

The aims of this booklet are:

1. To inform about the background of SETRA
2. To inform about the result of the study on the problem of oral diseases, that was conducted by staff of UHS and students during SETRA
3. To enhance the awareness of SETRA at UHS and address the future plan of SETRA

SETRA has developed and has taken actions against oral disease in rural area in Cambodia because people in rural area have difficulty to access oral healthcare due to huge obstacles such as living in remote area, low income and education and the shortage of human resource including dentists and dental nurses.

Furthermore, SETRA has provided dental students with important experiences so that they can use their experience to improve their knowledge, skills and attitude and to contribute to reduction of the oral health problem in Cambodia.

On behalf of UHS, I would like to express my heartfelt thank to OISDE, Professor Takashi Miyata, Director of OISDE, Ladies and Gentlemen who read this booklet.

At the end May I extend my best wishes to all of you.

Introduction of SETRA

Professor Vorn Vutha and Uy Sophorn

Faculty of Odonto-Stomatology University of Health
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I. Background

The Student Experience Tour for Rural Area (SETRA) has been implemented, being supported by Organization of International Support for Dental Education (OISDE) since December 2009 after signing memorandum of understanding between Faculty of Odonto-Stomatology, University Health Science (UHS) and OISDE.

With reference to OISDE's survey, UHS and OISDE had agreed to choose Mondulkiri as main target area because the province was the least developed one among the others, had poor infrastructure and lack of financial and human resource. Villagers not just only suffered from tropical infectious disease such as Malaria, typhoid fever and diarrhea, but also suffered from oral disease like decay, periodontitis, oral cancer and mastication disorder.

In terms of dental students, UHS expected students to obtain much experience, which they could not receive during their usual practical practice in UHS hospital, through the SETRA.

A year implementing the project for Mondulkiri, although public health condition in Cambodia was improved, some health condition such as infection and oral disease were still concerning factors for people living in rural area not just in Mondulkiri. UHS had made new proposal to extend the project one year more in order to distribute treatment and education for many provinces such as Mondulkiri, Pursat, Shihanouk Ville, Ratanakiri, Kampong Thom and Battambang.

II. Overall goal

Our goal is to reduce poverty of villagers by providing dental treatment for free, and to draw governmental institutions as Ministry of Health or UHS attention to dental status of villagers and to persuade these institutions to distribute budget to sustain this project. Furthermore, we expect dental students to start considering to allocate their knowledge and skills to the rural community rather than to Phnom Penh after graduating from UHS.

III. Project purpose

- To promote oral health situation and provide dental treatment to people in rural area
- To help UHS students to build up their capacity such as knowledge, practical skill and survey and observation skills through this project

IV. Project outline

Period : May 2011- May 2012

Target area : Mondulkiri province (4), Pursat, Shihanouk Ville, Ratanakiri,
Kampong Thom and Battambang

Beneficiaries : Dental students in UHS and population in rural area

V. Outcome

	The place where SETRA was implemented		Number of participants			Contents of treatment		
Date	Village name	Province name	Instructor	Students	Villager	Extraction	Scaling	Filling
May 25 th -27 th , 2011	Pou Loung	Mondulkiri	6	14	85	87	81	35
Jul 29 th -01 st , 2011	Pursat	Bakan	6	16	138	156	136	35
Aug 16 th -18 th , 2011	Pou Taing	Mondulkiri	6	14	95	107	89	31
Oct 16 th -18 th , 2011	Stung Hav	Shihanoukville	6	14	160	107	202	49
Dec 29 th -31 st , 2011	Borkeo	Ratanakiri	6	20	125	98	95	25
Feb 08 th -10 th , 2012	Krava	Kampong Thom	6	14	120	85	102	25
Mar 25 th -27 th , 2012	Sre Y	Mondulkiri	6	14	40	40	30	20
Apr 09 th -11 th , 2012	Sang Ke	Battambang	6	14	188	65	185	35
May 23 th -25 th , 2012	Pou Loung	Mondulkiri	6	18	48	48	40	20

VI. Future vision

- Make proposal to UHS to obtain budget for SETRA in order to sustain this project by UHS without budget support by OISDE in the future.
- Ask previous post graduate students to donate some budget for continuing this project.

VII. Acknowledgement

The special thank to our helpful colleague of UHS, and the supervision and support that it gave truly help the progression and smoothness of the program. The cooperation is much indeed appreciated.

My grateful thanks also go to our counterpart, OISDE, which has contributed, hard worked and been patient in helping us complete this program.

The whole project activities really brought us together to appreciate the true value of friendship and respect of each other.

Report of SETRA Activities in Sre Y village, Senmonorom District, Mondulkiri, 24th to 26th March 2012

Professor Vorn Vutha

Faculty of Odonto-Stomatology University of Health Sciences,
Phnom Penh, Cambodia.



I. Background of Sre Y village

Sre Y village is around 25 kilometers long from Senmonorom town. The number of permanent resident is 547 (120 householders). The internet connection is partly covered at this village. Although most of villagers are minority, they can understand and speak Khmer language. Their basic income depends on selling honey bee, cashew bar and vegetable. As for primary school in the village, there is one school which consists of 86 students from grade 1 to 6 and one school director and two school teachers. The school is made by one wooden building with two classrooms and one library. That is why each three grade 1, 2 & 3 and 4, 5 & 6 has to study in one classroom. All students can obtain water from open well in the school.

There is only one health post in this village. It is really hard for the villagers to seek for dental health services because there is neither dental nurse nor dentist in the health post. Thus, they can only receive traditional medicine by the health post. Furthermore, villagers are reluctant to visit the referral hospital in the Senmonorom town. One of the reasons is that they have to pay much money to receive dental treatment. The other reason is that especially elderly people still believe to use traditional treatment rather than modern medical care. In addition, villagers can access the hospital only in the dry season because of the road condition.

In terms of oral health behavior, some villagers have toothbrush and toothpaste at their house. There are two glossary shops in the middle of the village where they can get toothbrush with 2,000 riel (\$0.50) and 25 g toothpaste with 2,500 riel (\$0.625) in price.

Based on real aspect of the village background such as oral health problems, religion and beliefs condition, geographical location, the needs of villagers and authority, and accessibility to the health sector, UHS, OIDSE and local authority (Provincial Health Department officer and a dentist in the referral hospital) decided to implement SETRA project in Sre Y village, 24th to 26th March, 2012.

II. Objectives of SETRA in Sre Y village

For Villagers:

SETRA tried to provide the villagers with oral health education, prevention and dental treatments (scaling, filling and extraction) in order to make villagers relieve from oral disease. Especially education was expected to change villagers' incorrect belief for dental field.

For Students:

The most important objective for students was to improve their capacity through learning, practicing and obtaining experiences in the village where the life style and the environment was quite different from Phnom Penh and other province conditions.

For UHS:

According to the shortages of the number of cases in the UHS hospital, UHS intended to secure the number of cases for dental students. Additionally, UHS tried to develop and progress human resources of the faculty through this mission.

III. SETRA Activities in Sre Y village

Under the management and leadership of UHS dental team, students and doctors were divided into several groups. Group1 focused on oral health education. This group member advised villagers how to take medicine, educated them how to brush their teeth properly. Group 2 focused on dental screening (dental survey, diagnosis). Group 3 provided dental treatment (scaling, filling and simple extraction). Additionally, there was observer group which had to monitor and to supervise all steps of the SETRA activity.

After implementing for 3 days in SETRA project, over 70 villagers received dental treatment and education:

- 72 people received the oral health education
- 62 people received dental scaling
- 52 teeth were extracted
- 10 teeth were filled

Through this project, students could

- Describe the tradition, culture and religion of minority living in Sre Y village
- Experience many types of oral diseases
- Explore their knowledge and skill in dental treatment and dental survey
- Share experiences together

Furthermore, UHS could obtain many patients for students, and could develop and progress human resources of the faculty through this project.

IV. Discussion

This project was truly vital work for villagers, dental students and UHS. It did not only play a important role to promote oral health among villagers who lived in rural area, but also provided dental students with the valuable opportunity to explore their real practice linked with theory. Students had an opportunity to learn and to understand the villager's living situation, oral health behavior, believe and religion which would be a great initiative and the useful input for their future dental professional. Thus, this project was important for villagers and efficient on the establishment of student capacity and human resources of UHS.

V. Acknowledgement

On behalf of Faculty of Odonto-Otomatology, University of Health Sciences, Cambodia and my own self, we would like to express our sincere thanks and gratitude and appreciation to OISDE and humanitarian aids supporters for OISDE to process the SETRA project and to promote oral health care in Cambodia.

My Experience from SETRA Project in Mondulkiri Province

Chroeung Kanitha

Faculty of Odonto-Stomatology University of Health Sciences,
Phnom Penh, Cambodia.



Oral health poses a very significant discussion among global health since it is the most common issue that people around the world have faced, and the majority poor people have suffered the most from oral and dental diseases, including dental caries, gingivitis, periodontitis and so on and so forth. The causal factors of these problems are normally related to the socio-economic status, culture and environment with which those people live.

In Cambodia, the rural poverty is still a great challenge since it accounted for 92 percent of the total poverty in Cambodia in 2009¹. Those rural poor people are prone to have no access to both private and public oral healthcare due to significant barriers, such as living in remote area, low income and even low education. This situation reflects the very need of enhancing oral health promotion including education and care distribution to them through outreach dental projects. SETRA standing for Students Experience Tour in Rural Area has been functioning as a very helpful dental project sponsored by Organization of International Support for Dental Education (OISDE) collaborating with the faculty of Odonto-stomatology of the University of Health Sciences (UHS) in Phnom Penh. The objective of SETRA project is to implement oral health education and deliver the free dental service to Cambodian people living in the rural area, particularly who have no full access to the public and private service to some extent, and providing the dental students from UHS to absorb both on-job experiences from the voluntary teamwork. I had a great opportunity to join SETRA project in Mondulkiri province, which last from 23rd to 25th May, 2012, and I would like to share my experiences I obtained from this volunteering activity.

During SETRA, my responsibility was to assist a doctor who did oral-health examination for diagnosis. I wrote down the information into the observation chart. Moving from one patient to another quickly and carefully was necessary, because there were many patients standing nearby and waiting for receiving diagnosis as well. Moreover, I dealt with the post-treatment distribution of drug and oral-health questionnaire after treatment. I provided the medicaments to the in-need patients who were mainly extracted their teeth. Meanwhile, I also gave them advice of “Do and Don’t”. Last but not least, I asked the patients a set of questions put in SETRA oral-health questionnaire, pertaining to their socio-economic status, their attitude and behavior in oral hygiene, the frequency of their acceptance of dental service, and their perception and suggestion to SETRA project.

I think participating in this SETRA project is very necessary for dental students since it provides us the chance to hone our clinical skill besides our usual practice at school's dental clinic. Compared with the dental treatment procedure in my dental school, the procedure in SETRA project significantly taught me how to manage the time and options of treatment well. The duration of each mission was short; it lasted only a full morning. Hence, the team had to deal with each patient as quick as possible, yet we never forgot to focus on the quality of treatment. In other words, I learnt a lot from how to improve speed of working, and make proper decision on treatment plan within the short given time. Talking about teamwork, I never forgot the momentous experience of working and helping with each other as if we came from the same family. Without good cooperation within the team, I am sure that we could not achieve our goal of engagement in the SETRA project. Thank to this project, I get to know the advantages of cooperation and solidarity among members in this project.

Being different from the people living in the city, people in the rural areas had much more caries due to the low level of education; among the patients we provided the treatment, only small numbers of patients went to school. In fact, education is a basic issue when we deal with the high prevalence of dental caries, and poor oral hygiene in the rural area. Because of the SETRA project, being different from the previous time, now I understand more clearly the situation with which those rural people have been living. Of the agenda in the whole mission, I am really interested in the post-treatment stage in which we got a chance to briefly educate the patients on how to clean their teeth and oral cavity properly and regularly. In so doing, I am certain that those people will be gradually aware of preventing way of dental caries.

The project also equipped me with the skill for doing survey in oral public health sector. Among the survey chart the team had to fill out during pre- and post-treatment, I noticed that the pre-treatment part of the chart is similar to what I have done at my school's clinic. However, what I was intrigued in the most is the post-treatment one in which a bundle of important questions was posed, pertaining to the attitude and behavior of the patients towards oral healthcare, and their root causes including low-level education, less access to oral healthcare service, and low socio-economic status. By seeking answers to solve these questions well, I strongly believe that the SETRA project will find the way to close any gap, and even better itself for the next missions.

Last but not least, besides the working aspect, I also enjoyed happy time with the other participators and the rural people. Actually I was bit tired of the long-distance and time-consuming journey, but I resumed my energy and felt so fresh in doing the task because the rural landscape was nice and green. What is more, I felt that the daily living and culture of the rural people taught me something different from what exists in the city, and this drove me to an idea of where and how the social development should be implemented.

In conclusion, I really appreciate OISDE and the UHS who have cooperated and coordinated with each other to make the SETRA project happen, and provided the dental

students the golden opportunity in voluntarily participate in this project. Moreover, I am really happy to join this project, and willing to go on engaging in this project if this project will be renewed in the next mandate.

Reference

- 1 The world Bank overview Cambodia
 <http://www.worldbank.org/en/country/cambodia/overview> (Accessed 23 July, 2012)

Report from SETRA Mondulkiri Mission

San Daneth
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Phnom Penh, Cambodia.



I. Introduction of SETRA

SETRA (Student Experience Tour in Rural Area) is initiated by University of Health Sciences, Faculty of Odonto-stomatology (UHS) and Organization of International Support for Dental Education (OISDE), in order to give oral health education and treatment for people living in rural area, where it is impossible for inhabitants to receive any dental service either government or private sector. This project also intends to provide dental students with opportunity for obtaining experience including implementation of oral health education, treatment and learning rural area situation through communicating with villagers. Moreover, this project is expected to generate the students' interest in rural area. I joined SETRA in Pou Long village, Mondulkiri province in Cambodia from 23rd to 25th, May, 2012. I would like to report my experience.

II. Mission Outline

This mission was set in Pou Long village's health center. (Fig1) There were five teachers and 18 students joined this project. On the mission day, students prepared the place for educating, treating the villagers, and organizing dental equipment, instruments and some medicine. The sterilizer was also prepared. (Fig.2)



Fig.1: The mission was held at the health center



Fig.2: Sterilizer which was used in the mission

Students were divided into four groups. First group members worked with the teachers to diagnosis patients and ask their general information such as gender, ethic and age, the reason of attending SETRA, the history of treatment and the oral health behavior such as frequency of tooth brushing. (Fig.3) In addition, these group members distributed medicine to patients after their treatment. According to the diagnosis, second group members were responsible for treating patients including ultrasonic scaling, extraction and filling supervised by teachers. (Fig.4 and 5) The third group members were distributing and sterilizing instrument. (Fig.6) Then the fourth group members played the role in educating the local people how to brush their teeth correctly using a dental model and big tooth brush. (Fig.7)



Fig.3: Students worked with teacher in diagnosis



Fig.4: Student implemented ultrasonic scaling for the patient



Fig.5: Student extracted decayed tooth



Fig.6: Students worked very careful with sterilized instruments because the next step was to use instruments for patients. Students wore gloves, mask and use twisters to catch all the instruments



Fig.7: Students educated the local people how to brush their teeth correctly. Education may motivate the local people to keep and improve their oral health sustainably

III. Achievement

During one day of outreach program, the total of 29 villagers (8 male and 21 female) was present at SETRA project. The mean age of villagers was 23.4 ± 15.8 .

Most of patients received scaling or simple extraction. (Table 1)

Type of Treatment	Number of Patients
Ultrasonic scaling	25
Simple extraction	13*
Restoration	3**

Table 1: The type of the treatment which villagers received from SETRA

*10 out of 13 villagers received both simple extraction and ultrasonic scaling.

** 2 out of 3 villagers received both scaling and restoration.

According to our questionnaire survey, all of the patients said that they were satisfied with our project because they could receive dental treatment without any charge.

IV. Discussion

According to the contents of treatment in SETRA, most of patients received ultrasonic scaling or simple extraction. This means that most villagers had periodontal disease or caries.

In my opinion, prevention especially education is the most effective way to promote oral health in Mondulkiri because there is the shortage of dental personnel and limitation of dental treatment in this area. For example, people need to receive education how to brush their teeth by themselves and remove plaque properly. Furthermore, villagers have to know the importance of oral health behavior because sugar consumption, tobacco smoking, betel chewing and alcohol drinking lead oral condition to be worsen. In terms of making teeth strong, villagers need to be informed about usage of fluoride including fluoride tooth paste.

In my conclusion, while the aspect of treatment in SETRA project can contribute to the villager's oral health absolutely, this project has to promote villager's oral health through education which enables villagers to maintain their oral health sustainably.

Patients' satisfaction and students' impression for SETRA in Mondulkiri province

Ratanak Lim

Faculty of Odonto-Stomatology University of Health Sciences,
Phnom Penh, Cambodia.



I. Introduction

Although dentist is popular occupation among Cambodian students in recent days, the number of dentists is still not enough in Cambodia. According to the report from the Ministry of Health in Cambodia (not published), there are around 600 qualified dentists in Cambodia. Most of dentists work in Phnom Penh for a better income. On the other hand, there are few dentists who treat and promote oral health condition in rural area, even though some 85% of Cambodian people live in rural areas.¹ Therefore, rural people could hardly to access oral health treatment and education. Such situations lead to poor oral condition for rural people. I could find that especially elderly people had poor oral hygiene and most of them had missing teeth, through my experience in Mondulkiri. (Fig.1)

Organization of International Support for Dental Education (OISDE), which is Japanese NGO, launched SETRA (Student Experience Tour to Rural Area) collaborating with the faculty of Odonto-stomatology of the University of Health Sciences (UHS) in 2009, in order to implement oral health education and treatment for people living in the rural area such as Mondolkiri, Ratanakiri, Kampong Thom, Battambang, Pursat and Sihanoukville. Additionally, SETRA has provided students, especially 5th and 6th grade, with great opportunity including educating and caring villagers, in order to generate the students' interest in isolated area.

The purpose of this paper is to reveal villagers' satisfaction from SETRA mission and to show how students felt through the mission. Then, I would like to propose how to improve SETRA in the future.



Fig. 1: Elderly person in Mondulkiri.
She said that she had never brushed her teeth in her life

II. Materials and Methods

In terms of villager's satisfaction, several trained dental students conducted the oral health questionnaire survey for villagers who were present at SETRA dental mission in Mondulkiri, May 2012. (Fig.2) The questionnaire consisted of multiple choice options including general information such as gender, ethnic and age, the reason of attending SETRA, the informational source of SETRA, the history of treatment, the oral health behavior such as frequency of tooth brushing and the degree of satisfaction with SETRA.

As for students' impression, the self-administrated written questionnaires were conducted for students who had attended SETRA at least once. The questionnaires examined the reason why students participated in SETRA, what students expected for SETRA, how students changed before and after attending SETRA, what students learnt from SETRA and what it needs to improve SETRA more. Qualitative content analysis was implemented. At first, I read through each student's answer by each questionnaire, and checked frequently-appearing words and set these words as key words. Then, each student's comment was categorized according to such key words.

All analysis was conducted by Microsoft EXCEL 2007.



Fig. 2: Students asked a patient about his oral health behavior

III. Result

A. Villagers' satisfaction from SETRA

Total 29 villagers received dental treatment, namely ultrasonic scaling, GIC restoration and dental extraction. According to the questionnaire survey, all patients answered that they were satisfied with this project, because they could receive proper treatment. In addition, every patient answered that they wanted to receive treatment from SETRA, again.

B. Students' impression for SETRA

Forty one dental students, who had attended at SETRA, joined this questionnaire survey. Fig. 3 shows why students participated in SETRA. Students wanted to educate and treat rural people in order to improve their oral hygiene, equally 66.7% which is the highest percentage among all purposes - providing effective treatment (43.6%), realizing living situation (20.5%), getting more experience (38.5%) and making good friendship (7.7%).

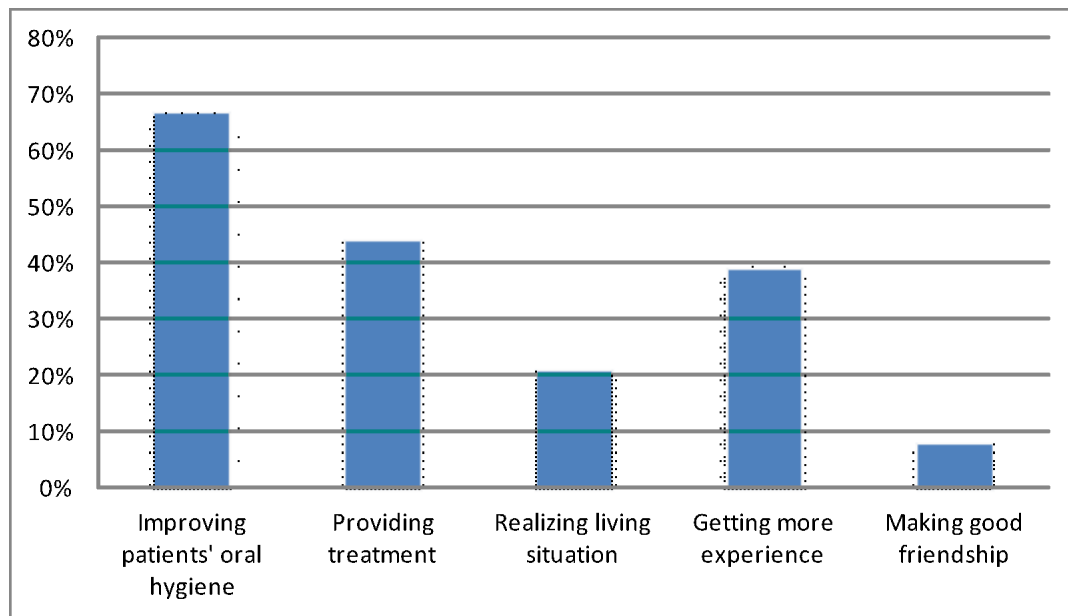


Fig. 3: The reason why students wanted to participate in SETRA

In terms of students' expectation for SETRA, over 70% students wanted to contribute to improve oral health status in rural area through SETRA. 30.8% of students strongly expected that they would be able to gain clinical experience such as filling, dental extraction and scaling. Furthermore, 23.1% of them expected to make good relationship between students and teachers. Moreover, the result of "How students changed before/after participating in SETRA?" is shown in Fig.4. Over 50 % of students believed that they could obtain more experience and skill after joining this project. Figure 5 shows what students obtained and learnt from SETRA. Over 70% of students were able to gain their experience after the project which was the highest percentage, compared with other variations. Approximately 20% of them believed that they could exchange culture in rural village and realize how to diagnose and treat new cases.

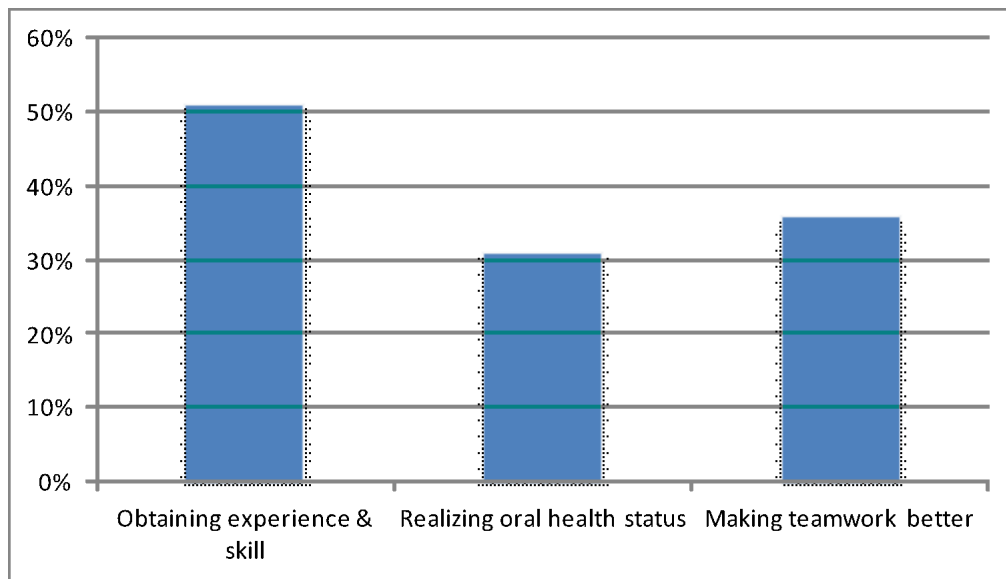


Fig. 4: How students changed before and after participating in SETRA

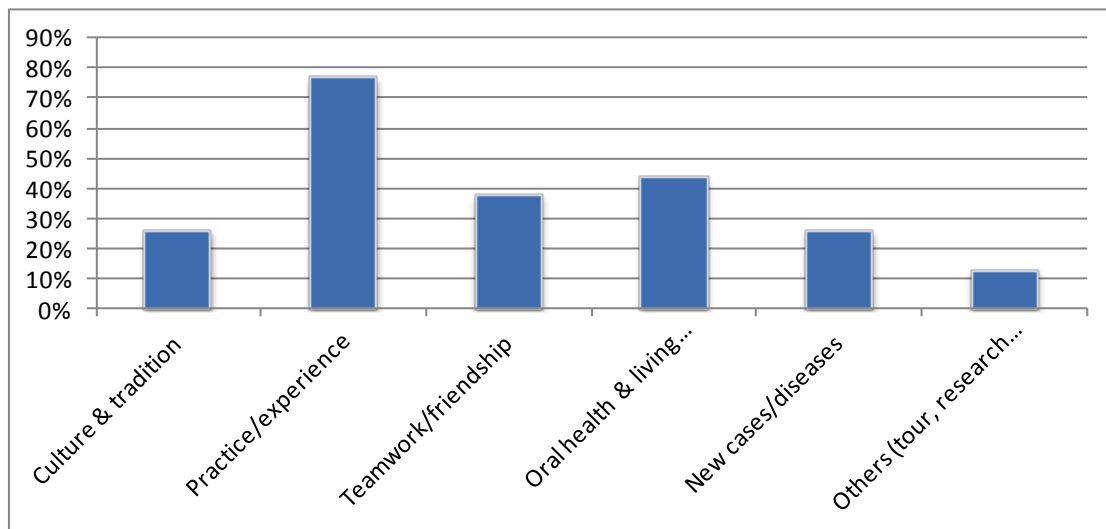


Fig. 5: What students obtained and learn from SETRA

According to students' suggestion for improving SETRA in the future, 15.4% of them suggested that UHS and OISDE should provide new materials and instruments. 56.4% of them suggested for increasing working time and number of students. They also requested to expand working place (53.9%) and to provide villagers with toothbrush and toothpaste (10.3%).

IV. Discussion

According to this survey, all patients were satisfied with SETRA mission. Actually, it is difficult for villagers to find dental clinic and qualified dentist in isolated area. Thus, outreach program such as SETRA can solve villagers' problems. Furthermore, SETRA may enable villagers to start caring of their oral health condition and change their behaviors, because SETRA do not only focus on treatment, but also focuses on education.

SETRA is absolutely important for the dental students in UHS. It is hard for students to receive enough clinical training in dental clinic in UHS, because the number of the patients is limited. Thus, SETRA may provide students with extra clinical experience. Additionally, students may have opportunity to find rare cases which they have never seen in the urban hospital. Also, they can make a good relationship with villagers through SETRA and understand the culture and living situation in villages.

Almost all students mentioned that they were extremely interested and proud of themselves to participate in this project. For instance, some tribe people in Mondulkiri had never brushed their teeth since they were born. UHS students advised them how to brush their teeth properly and tried to change their oral health behavior. Students felt that they could contribute to change villager's oral health behavior.

In fact, every dental student answered that they wanted to join SETRA again. It means that SETRA exactly could generate students' interest in rural area.

According to the results of this survey, in order to improve SETRA in the future, students hope that UHS and OISDE will provide new materials and instruments for making treatment more effective. Also, increasing working time and number of students, expanding working place and providing toothpaste and toothbrush to patients seems to be effective for future SETRA project. Furthermore, all villagers should be informed about the date when the mission takes place, in advance, because some of villagers said that they did not obtain any information about SETRA until the mission day.

In conclusion, SETRA definitely contribute to improve oral health situation in rural area and to provide dental students' with worth experiences.

V. Acknowledgement

We would like to say thank to OISDE for creating SETRA program to promote oral health status of rural people and provide students with chance to obtain more experience and practice on patients. Hopefully, we expect that OISDE will continue this program for next year.

VI. Reference

1. Chu CH, Wong AW, Lo EC, Courtel F. Oral health status and behaviors of children in rural districts of Cambodia. Int Dent J. 2008 Feb;58(1):15-22.