

Oral Health Survey of the Military Personnel Deployed to the Southernmost Provinces of Thailand

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Background: Dental problems are some of the major health problems of deployed military personnel. There have been no systematically reports of oral health information survey among the deployed military personnel in Thailand.

Objective: The present study was to determine the oral health problems of the deployed military personnel and effects on personnel fitness.

Material and Method: A cross-sectional study and a cluster sampling were conducted during April 2011 and March 2013. The Royal Thai Army (RTA) personnel 12 out of 21 task forces in southern most provinces were invited to participate in the study. A standardized questionnaire was used.

Results: In total, 2,884 RTA deployed personnel voluntarily participated and completed the questionnaire information. Their mean age was 27.8 ± 9.4 years old. Fifty percent admitted that they had oral problems during the past six months and the most common ones were toothache/hypersensitivity (32.4%), and dental caries (21.5%). The majority of the participants (60.7%) reported that they experienced oral health problems less than 3 times and 2.8% reported sick leave during deployment because of oral conditions. 64.4% reported that their oral problems affected their quality of life and disturbed their duties.

Conclusion: A relatively high prevalence of oral health problems was reported by the deployed RTA personnel. The problems affected their quality of life and assigned duties. Most of the problems were neglected. In order to keep the RTA personnel fit for deployment, an effective dental health program should be developed.

Keywords: Oral health, Oral survey, Deployed military personnel, Southern most provinces, Thailand

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A dental problem is one of major health problems of the deployed military personnel worldwide. The oral diseases include dental caries and gum diseases that cannot heal by themselves but require treatment to halt the progression of the diseases. However, most of the initial oral lesions usually have no apparent signs and symptoms, which easily result in neglecting dental care and are thus the reasons for the development of more severe conditions that lead to pain, suffering, insomnia, no attentiveness to work, infections of the oral cavity and face, etc⁽¹⁻³⁾. Oral health is an integral part of general health. For the military personnel who are deployed in field operations, sub-optimal care of oral health problems jeopardize the combat effectiveness of the unit if the number of dental emergencies accumulate, even indirectly. Previous

research has shown that untreated oral conditions can result in increased rates of disease and non-battle injury for deployed soldiers⁽⁴⁻⁶⁾. Problems with an impacted tooth were the most common reported, which caused pain and emergencies during deployment⁽⁶⁻¹¹⁾. Since there have been no systematic reports of oral health studies on deployed military personnel in Thailand, the objectives of the study were to determine the oral health status of the deployed personnel and to identify the factors related to oral problems that might affect personnel fitness.

Material and Method

A cross-sectional study was conducted during April 2011 and March 2013. A cluster sampling of the RTA personnel who were deployed to the southern most provinces of Thailand was performed. Of twenty-one task forces in these provinces, twelve were selected. All personnel in these selected task forces were invited to participate in the study. A self-administered, standardized questionnaire was used to collect the

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demographic data, oral problems during the past six months and their related dental care behavior as well as the dental utilities. The standardized questionnaire was developed according to WHO guideline and a Thai dental health survey that aimed to fit in the military circumstances. Pre-testing in a military camp was performed before the study.

The questionnaires and consent forms were mailed to the selected task forces. Those personnel, who agreed to participate in the study, signed the consent forms and completed the questionnaires. The completed questionnaires were then sent to the Data Management Unit of Phramongkutklao College of Medicine in Bangkok.

The data analysts used a descriptive analysis including prevalence, mean, and standard deviation. This study was approved by the Ethical Committee of the Royal Thai Army Medical Department (ID: S031h/51, 17 October 2008).

Results

A total of 2,884 RTA deployed personnel from 12 out of 21 task forces in Narathiwat, Pattani, and Yala provinces voluntarily participated in the survey and completed the questionnaire information, with following distribution: 56 (1.9%) commissioned officers (COS), 1,076 (36.2%) non-commissioned officers (NCOS), 1,560 (52.4%) privates, and 192 (6.4%) member of the military rangers (MR). Their mean age was 27.8 (± 9.4) years old (range 19-58) and the characteristics of the personnel are shown in Table 1.

The oral health problems, from self-reported information showed that 50.6% of the RTA personnel had encountered problems during the past six months of deployment to the southern most provinces of Thailand. The most common oral problems were toothache/hypersensitivity 766 (32.4%), dental caries 497 (21.5%), bad breath 419 (18.3%), swollen gum/bleeding when brushed 355 (15.4%), and broken or fractured teeth 288 (12.5%) (Table 2). Almost 40% of the study volunteers reported they had experienced dental problems at least 3 times during the six months period of deployment (Table 2). Seventy-nine 79 (2.8%) applied for sick leave during deployment because of oral difficulties. In addition, 1399 (64.4%) admitted that their oral problems affected their quality of life and disturbed their duties because of pain and suffering 491 (63.4%), stress and anxiety 291 (37.6%), inattentiveness to work/duty 276 (35.6%), diminished outcome and ability to work 224 (28.9%), and sleep deprivation 225 (29.1%), (Table 3).

Regarding the utility of dental care, there were 1,597 (61.0%) personnel, who believed that it was essential to have their oral conditions treated prior to deployment. The majority of the participants would like to have healthy oral cavities 1,070 (73.8%), while 728 (51.8%) desired to recover from their current oral diseases, and 51.2% did not want to encounter problems in the operational field. In contrast, there were 1,144 (45.7%) who believed that it was unnecessary to have their oral problems treated prior to deployment, as their conditions represented only minor symptoms 66.3% and would be cured after self-administration of analgesics 33.4%, or antibiotics 21%, and it was not a vital matter 12.4%, (Table 4). 472 (16.9%) persons visited dentists seeking oral treatment in the last six months. The treatment received was oral examination 261 (57.5%), tooth extraction 162 (37.2%), fillings 157 (38.1%). The reasons for not having sought dental treatment were that these were only minor symptoms which could be self-healing 543 (19.7%), were inconvenient 403 (17.4%), or no dentists available in the vicinity 374 (16.2%) (Table 5). Additionally, some personnel had behavior that may have affected their oral health: drinking soda 62.7%, sweetened beverages 60.1%, consuming crispy snack 59%, sweetened snacks 57.5%, smoking 37.8%, alcohol consumption, forgot to brush their teeth before going to bed 34.2%, and 28.5% biting of non-food items, such as opening cans or bottles, Table 6.

The oral cleaning methods during deployment of the personnel were as follows: brushed their teeth 2,700 (93.6%), rinsed the mouth 1,366 (47.7%); used mouth wash 1,171 (85.7%), rinsed with salt 217 (15.9%), and hand rubbed their teeth 37 (1.3%). In addition, the personnel also used other tooth cleaning devices every day; tooth picks 455 (15.8%), dental floss 42 (1.5%). The oral cleanings were mostly performed every day after waking up in the morning 2,588 (97.9%) and before bed time 1,652 (89.6%). Additionally, there were 100 (3.8%) persons, who had dental prostheses. There were 80 (80%) with removable dentures which were worn 78 (88.6%) during deployment. The condition of removable dentures of the personnel that had a good fitting and allowed them to chew well was 65 (67.7%).

Discussion

Approximately half of the RTA personnel had oral health problems in the last six months during deployment to the southern most provinces. Most of the oral problems reported in this study were toothache/hypersensitivity, and dental caries. Although a few

Table 1. Characteristics of the deployed Royal Thai Army personnel

Characteristic	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
Age (years)					
Mean ± SD	44.41±8.8	35.06±10.88	22.39±1.06	22.39±1.06	27.77±9.39
≤29	6 (11.1)	487 (47.1)	1,530 (99.8)	136 (78.6)	2,159 (77.2)
30-39	10 (18.5)	220 (21.3)	3 (0.2)	33 (19.1)	266 (9.5)
40-49	15 (27.8)	125 (12.1)	0 (0)	3 (1.7)	143 (5.1)
≥50	23 (42.6)	203 (19.6)	0 (0)	1 (0.6)	227 (8.1)
Sex					
Male	56 (100)	1,069 (100)	1,555 (100)	157 (88.7)	2,837 (99.3)
Female	0 (0)	0 (0)	0 (0)	20 (11.3)	20 (0.7)
Religion					
Buddhism	55 (98.2)	1,021 (95.2)	1,327 (85.2)	169 (88.9)	2,572 (89.4)
Christian	1 (1.8)	45 (4.2)	228 (14.6)	18 (9.5)	292 (10.1)
Muslim	0 (0)	7 (0.7)	3 (0.2)	3 (1.6)	13 (0.5)
Marital status					
Single	13 (24.1)	447 (42)	1,262 (81.6)	129 (70.5)	1,851 (65.1)
Married	41 (75.9)	594 (55.8)	275 (17.8)	53 (29)	963 (33.8)
Widowed	0 (0)	3 (0.3)	3 (0.2)	1 (0.5)	7 (0.2)
Divorced	0 (0)	21 (2)	3 (0.2)	0 (0)	24 (0.8)
Educational level					
Primary	1 (1.8)	6 (0.6)	312 (20.2)	17 (9.2)	336 (11.8)
Secondary	10 (17.9)	518 (48.5)	978 (63.2)	103 (55.7)	1,609 (56.3)
Army NCO	12 (21.4)	176 (16.5)	0 (0)	17 (9.2)	205 (7.2)
Vocational	4 (7.1)	267 (25)	234 (15.1)	27 (14.6)	532 (18.6)
Bachelor degree/cadet	27 (48.2)	101 (9.5)	22 (1.4)	21 (11.4)	171 (6.0)
Graduate	2 (3.6)	0 (0)	1 (0.1)	0 (0)	3 (0.1)
Underlining health conditions					
None	16 (88.9)	541 (92)	1,026 (96.3)	87 (100)	1,670 (95)
Yes	2 (11.1)	47 (8)	39 (3.7)	0 (0)	88 (5.0)
Hypertension	1 (50)	30 (63.8)	4 (10.2)	0 (0)	35 (39.7)
Heart disease	0 (0)	1 (2.1)	4 (10.2)	0 (0)	5 (5.5)
DM	1 (50)	7 (14.9)	0 (0)	0 (0)	8 (8.8)
Type of assignment					
Administrative	8 (21.6)	87 (18.7)	33 (7.3)	10 (10.8)	138 (13.2)
Active field operation	29 (78.4)	378 (81.3)	416 (92.7)	83 (89.2)	906 (86.8)

SD = standard deviation; NCO = non-commissioned officer; DM = diabetes mellitus

previous studies showed different rates of dental emergencies of the deployed military personnel, the majority of emergencies were dental caries^(6,12), fractured teeth/fractured restoration without pulpal involvement⁽¹³⁾, pain from third molars; pericoronitis was also in the top list of emergencies^(4,6,10,12); gingival or periodontal conditions were also reported as the leading cause of dental visits overall⁽¹⁴⁾.

During the deployment, one-third of the military personnel reported a history of symptomatic

oral problems including toothache and hypersensitivity. Even though, the reported dental problems were not very severe; sick leave reported related to oral problems during the six months prior to deployment was only 2.8%. However, almost 40% of them had frequencies of occurrence of more than three times and 8.4% of the study population reported that their problems occurred every day, every time during chewing, after mealtime, and at nighttime, which inevitably affected their duty in this frontline military operation. The privates had

Table 2. Oral problems occurred in the past 6 months during the deployment

Oral problems	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
Over all oral problems	40 (71.4)	628 (58.4)	689 (44.2)	101 (52.6)	1,458 (50.6)
Toothache/hypersensitivity	21 (42)	349 (37.8)	340 (28.2)	56 (29.9)	766 (32.4)
Dental caries	9 (18.4)	210 (23.4)	234 (19.8)	44 (23.7)	497 (21.5)
Bad breath	12 (24.5)	219 (24.5)	161 (13.9)	27 (14.5)	419 (18.3)
Swollen gum/bleeding when brushed	13 (26.5)	164 (18.3)	165 (14.1)	13 (7)	355 (15.4)
Fractured teeth	8 (16)	128 (14.4)	135 (11.5)	17 (9.2)	288 (12.5)
Oral ulcer	12 (24.5)	133 (15)	99 (8.5)	12 (6.5)	256 (11.2)
Impacted tooth	4 (8.2)	64 (7.3)	51 (4.4)	14 (7.6)	133 (5.8)
Swollen gum with pus exudate	2 (4.1)	57 (6.5)	41 (3.5)	3 (1.6)	103 (4.5)
Pericoronitis	1 (2)	35 (4)	15 (1.3)	1 (0.5)	52 (2.3)
Swollen cheek/swollen face	1 (2)	12 (1.4)	16 (1.4)	0 (0)	29 (1.3)
Number of episode of oral problems					
Less than 3 times	25 (62.5)	346 (56.8)	439 (62.7)	66 (71)	876 (60.7)
3-5 times	8 (20)	143 (23.5)	135 (19.3)	21 (22.6)	307 (21.3)
6-10 times	2 (5)	38 (6.2)	30 (4.3)	2 (2.2)	75 (5)
More than 10 times	2 (5)	31 (5.1)	30 (4.3)	0 (0)	63 (4.4)
Sick leave during deployment due to oral problems					
Never	54 (98.2)	999 (96.5)	1,488 (97.1)	181 (97.8)	2,722 (97)
Yes	0 (0)	35 (3.4)	40 (2.6)	4 (2.2)	79 (2.8)

Table 3. The oral problems that affected to the personnel's quality of life and work

The effects	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
Affected personnel	23 (44.2)	493 (57.7)	781 (70.4)	102 (65.4)	1,399 (64.4)
Pain and suffering	14 (48.3)	242 (66.5)	205 (62.5)	30 (55.6)	491 (63.4)
Depression and anxiety	16 (55.2)	157 (43.4)	99 (30.2)	19 (35.2)	291 (37.6)
Lack of concentration on duty	13 (44.8)	141 (38.7)	101 (30.8)	21 (38.9)	276 (35.6)
Diminution of ability of work	7 (24.1)	108 (29.6)	88 (26.8)	21 (38.9)	244 (28.9)
Sleep deprivation	5 (17.2)	105 (28.9)	100 (30.5)	15 (27.8)	225 (29.1)

the highest percentage of oral problem complaints that affected their quality of life and of duties compared with the other higher ranks. This may indirectly influence the effectiveness of military units since the privates represent the greatest number of military personnel deployed by the RTA.

Dental problems among the deployed military personnel of Thailand seemed to be neglected. Almost a half of the study population experienced dental problems, with or without symptoms, during deployment; however, less than one-third of them

visited dentists for treatment. In addition, 40.5% of the study population reported their opinions that it was not necessary to have their oral problems treated prior to the deployment. During the deployment, the reasons for not visiting dentists were related to the unavailability of such a service in the vicinity, inability of leaving their duty and security reasons. Dental services in the field may be beneficial; however, its cost-effectiveness has to be considered. Dental emergencies and several consequences such as the potential of engagement with the enemy during

Table 4. Personnel reported whether oral problems treated prior to deployment was a necessity

	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
No, not necessary	21 (40.4)	384 (40.7)	662 (50.2)	77 (41)	1,209 (46.5)
Reason					
Only minor symptoms	12 (60)	227 (65.4)	403 (67.6)	48 (62.3)	690 (66.3)
Symptoms-free after self-administration of analgesics	5 (27.8)	96 (28.7)	201 (36.4)	25 (33.8)	327 (33.4)
Symptoms-free after self-administration of antibiotics	2 (11.1)	77 (23.5)	100 (19.3)	18 (24.3)	197 (21)
No time	3 (15.8)	44 (13.6)	74 (14.5)	5 (6.8)	126 (13.6)
Allow to self healing	2 (11.1)	40 (12.4)	76 (15)	6 (8.1)	124 (13.4)
It is not important matter	2 (11.1)	47 (14.6)	58 (11.6)	6 (8.1)	113 (12.4)
Symptoms-free with saltgargle	4 (22.2)	27 (8.5)	46 (9.1)	4 (5.4)	80 (8.7)
Yes, necessary	39 (70.9)	66 (65.1)	784 (57.8)	111 (59)	1,597 (61)
Reason					
Wish for healthy oral cavity	30 (78.9)	474 (77.3)	473 (68.8)	93 (83.8)	1,070 (73.8)
Would like to recover from the diseases	14 (41.2)	299 (51.3)	365 (53.7)	50 (45.9)	728 (51.8)
Do not want to have problems during deployment	19 (55.9)	304 (52.6)	335 (50.5)	51 (46.4)	709 (51.2)
If symptoms neglected, the symptoms might get worse	15 (45.5)	285 (50.7)	272 (41.9)	23 (21.1)	595 (44)
Wish for the improved work ability	13 (39.4)	240 (42.3)	238 (37.2)	36 (32.7)	527 (39)

transportation and reduced combat effectiveness from decreased work force should be balanced. On the other hand, pre-deployment oral screening and treatment is essential in order to decrease the dental conditions during deployment⁽⁴⁾.

Policy reinforcement may be useful.

Besides that, the personnel had behavior that affected the oral health such as smoking, which had been identified as a contributing risk factor to both dental caries and periodontal diseases⁽¹⁵⁻¹⁷⁾. In addition, alcohol consumption and going to bed without brushing, drinking soda, consumption of crispy snacks and sweetened snacks are all factors that represent supplementary risks of dental caries because of frequent sugar intake and poor oral hygiene⁽¹⁸⁾. Biting of non-food items or wrongful usage of teeth (for example can/bottle opening) also endangered broken or fractured teeth.

Health education promoting proper oral care should be performed in this population before deployment. The data from this survey will be useful for the RTA to establish the oral health policy for the deployment readiness.

This report apparently matched some aspects

of the dental neglect criteria for not visiting a dentists for routine check ups, no dental treatment for a long period of time, poor oral status with severe caries, toothache, despite experiencing toothaches or other symptoms, swollen face or gum exuding exudates pus⁽¹⁹⁻²²⁾. Toothache/sensitivity demonstrated that oral lesions progressed to the more severe or advanced stages. In addition, dental neglect demonstrated through behavior and/or attitudes related to the undervaluing of oral health can be used as a predictor of the poor oral health⁽¹⁵⁾.

These study results served as baseline information of the RTA to conduct further studies and the implementation of forecasting and/or preventing dental emergencies of the deployed personnel. Further study surveys should be conducted in order to set up priorities of treatment. In addition, it is essential to develop a more active dental health programs to keep personnel fit for deployment readiness.

Conclusion

A relatively high prevalence of oral health problems was reported in the RTA deployed personnel. The problems affected their quality of life and work.

Table 5. The dental utilities of the personnel during deployment

	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
Dental visit last 6 months	23 (42.6)	259 (25.1)	153 (10)	37 (20.2)	472 (16.9)
Treatments received					
Oral examination	14 (63.6)	141 (57.6)	88 (58.7)	18 (48.6)	261 (57.5)
Tooth extraction	7 (31.8)	95 (39.1)	44 (32.4)	16 (43.2)	162 (37.2)
Filling	4 (20)	82 (35)	58 (43.3)	13 (35.1)	157 (38.1)
Medication (analgesics/antibiotics)	1 (5)	35 (15.4)	40 (29.9)	12 (31.6)	88 (21)
Dentures	2 (10)	15 (6.6)	7 (5.5)	2 (5.4)	26 (6.3)
Emergency treatment	1 (5)	10 (4.5)	7 (5.5)	3 (8.1)	21 (5.2)
Places where dental visit					
Dental unit at work	9 (39.1)	80 (33.6)	47 (30.6)	5 (12.8)	141 (31.2)
Provincial hospital	7 (30.4)	79 (32)	40 (29.2)	12 (30)	138 (30.9)
District hospital	5 (25)	80 (33.6)	50 (34.7)	12 (28.6)	147 (33.1)
Private clinic	9 (40.9)	68 (27.2)	48 (34.5)	20 (50)	145 (32.2)
Primary care unit	2 (10)	24 (10.3)	20 (14.8)	6 (16.2)	52 (12.2)
Other	0 (0)	21 (9.3)	11 (8.3)	5 (13.5)	37 (8.9)
Reason for those who did not visit the dentist					
Symptoms-free after self-administration of analgesics/antibiotics	3 (6.4)	121 (14.3)	309 (24.6)	20 (12.9)	453 (19.7)
Inconvenience	11 (23.4)	203 (24)	152 (12.1)	37 (23.9)	403 (17.5)
No dentist	6 (12.8)	173 (20.4)	175 (13.9)	20 (12.9)	374 (16.2)
Could not leave the duty	5 (10.6)	69 (8.1)	115 (9.2)	13 (8.4)	202 (8.8)
Far away	0 (0)	50 (5.9)	82 (6.5)	14 (9)	146 (6.4)
Other	7 (14.9)	64 (7.6)	110 (8.7)	4 (2.6)	185 (8)

Most of the problems were neglected and created risks of more severe orofacial problems, which diminished their unit effectiveness. These study results served as an information baseline for the RTA to develop a more active dental health program to keep personnel fit for deployment readiness.

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Potential conflicts of interest

None.

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Table 6. Behaviors related to oral health of the deployed personnel

Behaviors	Commissioned officer n = 56 n (%)	Non commissioned officer n = 1,076 n (%)	Private n = 1,560 n (%)	Member of ranger unit n = 192 n (%)	Total n = 2,884 n (%)
Alcohol drinking and going to bed without brushing					
Yes	16 (28.6)	356 (33.3)	551 (32.7)	137 (47.6)	1,020 (34.2)
Everyday	1 (6.3)	36 (10.1)	68 (13.3)	26 (19.0)	131 (12.8)
Sometimes	15 (93.7)	320 (8.9)	443 (86.7)	111 (81.0)	889 (87.2)
Smoking					
Yes	6 (26.1)	357 (33.4)	625 (39.9)	138 (47.9)	1,126 (37.8)
Everyday	3 (50)	168 (47.1)	308 (49.3)	67 (48.6)	546 (48.5)
Sometimes	3 (50)	189 (52.9)	317 (50.7)	71 (51.4)	580 (51.5)
Soda drinking					
Yes	12 (21.4)	574 (53.6)	1122 (93.9)	91 (85.9)	1,869 (62.7)
Everyday	1 (8.3)	70 (12.2)	257 (21.5)	16 (15.1)	344 (19.1)
Sometimes	11 (91.7)	504 (87.8)	865 (72.4)	75 (70.8)	1,459 (80.9)
Drinking of sweetened beverages					
Yes	23 (41.1)	620 (57.9)	984 (62.9)	164 (55.9)	1,791 (60.1)
Everyday	2 (8.7)	91 (14.7)	169 (17.2)	27 (16.8)	293 (16.4)
Sometimes	21 (91.3)	529 (85.3)	815 (82.8)	134 (83.2)	1,498 (83.6)
Crispy snacks consumption					
Yes	21 (37.5)	578 (54)	993 (63.5)	166 (57.6)	1,758 (88.5)
Everyday	0 (0.0)	60 (10.4)	191 (19.2)	28 (16.9)	279 (15.9)
Sometimes	21 (100)	518 (91.4)	802 (80.8)	138 (86.3)	1,479 (84.1)
Sweetened snacks consumption					
Yes	21 (37.5)	616 (57.6)	924 (59.0)	153 (53.1)	1,714 (57.5)
Everyday	1 (4.8)	53 (8.6)	139 (15.0)	21 (13.7)	214 (12.5)
Sometimes	20 (95.2)	563 (91.4)	785 (85.0)	132 (86.3)	1,500 (87.5)
Biting of non-food items					
Yes	4 (7.1)	220 (20.6)	566 (36.2)	58 (20.1)	848 (28.5)
Everyday	0 (0)	20 (9.1)	55 (9.7)	5 (8.6)	80 (9.4)
Sometimes	4 (100)	200 (90.9)	511 (90.3)	53 (91.4)	768 (90.6)

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การสำรวจสถานะช่องปากของกำลังพลที่ถูกส่งไปปฏิบัติภารกิจจังหวัดชายแดนใต้ของประเทศไทย

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ภูมิหลัง: ปัญหาในช่องปากเป็นปัญหาที่สำคัญอันหนึ่งในทหารที่ถูกส่งไปปฏิบัติหน้าที่ในหน่วยสนามซึ่งในประเทศไทย ยังไม่มีการศึกษาปัญหาในช่องปากอย่างเป็นระบบในทหารหน่วยสนามเหล่านี้

วัตถุประสงค์: เพื่อศึกษาหาปัญหาในช่องปากของทหารที่ถูกส่งไปประจำการ ณ จังหวัดชายแดนใต้ และประเมินปัญหาที่จะมีผลต่อการปฏิบัติหน้าที่ของกำลังพลในหน่วยสนาม

วัสดุและวิธีการ: การศึกษาแบบตัดขวางและการสุ่มแบบกลุ่ม ในช่วงเวลาตั้งแต่ เดือนเมษายน พ.ศ. 2554 ถึง มีนาคม พ.ศ. 2556 โดยกำลังพลกองทัพบกที่ถูกส่งออกไปปฏิบัติหน้าที่จังหวัดชายแดนใต้จำนวน 12 จาก 21 หน่วยเฉพาะกิจ ได้รับเชิญให้เข้าร่วมในการวิจัยโดยใช้แบบสอบถาม

ผลการศึกษา: กำลังพลกองทัพบกที่กำลังปฏิบัติหน้าที่อยู่ในสามจังหวัดชายแดนภาคใต้จำนวน 2,888 นาย อายุเฉลี่ย 27.8±9.4 ปี ที่สมัครใจเข้าร่วมตอบแบบสอบถามกำลังพลร้อยละ 50 มีปัญหาในช่องปากในช่วงหกเดือนที่ผ่านมา ที่พบมากที่สุดคือปวด/เสียวฟันร้อยละ 32.4 ฟันผุร้อยละ 21.5 มีกลิ่นปากร้อยละ 18.3 ส่วนใหญ่ร้อยละ 60.7 มีปัญหาเกิดขึ้นน้อยกว่า 3 ครั้งแต่มีผู้ขอลาป่วยเนื่องจากปัญหาในช่องปากร้อยละ 2.8 กำลังพลร้อยละ 64.4 ยอมรับว่าปัญหาดังกล่าวมีผลกระทบต่อคุณภาพชีวิตและการทำงาน

สรุป: กำลังพลกองทัพบกที่ปฏิบัติหน้าที่อยู่ในจังหวัดชายแดนภาคใต้มีปัญหาในช่องปากค่อนข้างมากและยอมรับว่าปัญหาเหล่านั้น มีผลกระทบต่อคุณภาพชีวิตและงานส่วนใหญ่ไม่ได้ไปรับการรักษา กองทัพบกควรมีพัฒนาการให้บริการทันตกรรมในเชิงรุกให้ครอบคลุมเพื่อทำให้กำลังพลพร้อมเพื่อการรบ
