

KNOWLEDGE, ATTITUDE AND PRACTICE OF PSYCHOLOGICAL FIRST AID AMONG HEALTH PROFESSIONALS WORKING IN ACCIDENT & EMERGENCY DEPARTMENT IN BRUNEI DARUSSALAM

Khairunnisa Zakaria, Montakarn Chuemchit*

College of Public Health Sciences, Chulalongkorn University, Bangkok, 10330, Thailand

ABSTRACT:

Background: Mental health is an essential and integral component of health. Psychological first aid (PFA) is seen as an asset in the long run in order to ensure that any individual who is going through acute distress due to an emergency, disaster or crisis is able to receive basic support. The objective of this study was to determine the proportion of PFA among emergency health professionals in Brunei Darussalam and assess their knowledge and attitude towards PFA practice.

Methods: A cross-sectional study was conducted among health professionals working in the accident & emergency department in Brunei Darussalam from end of May to early June 2017. Pilot testing was done prior to distributing interview-assisted, self-administered questionnaires to the studied population. Descriptive statistics was performed by SPSS version 19.

Results: A total sample of 123 emergency health professionals responded to the questionnaire. Among the sample, 39.0% had moderate level of knowledge, 42.3% had positive attitude towards PFA and 51.2% practiced PFA on a moderate level. Further, 48.3% claimed to have performed PFA at least once in their professional life.

Conclusion: This study found moderate level of knowledge and practice of PFA among health professionals. Further research will be required to measure the skills of staff and outcomes of PFA.

Keywords: Psychological first aid; Knowledge, attitude and practice; Health professionals; Brunei

DOI:

Received: June 2017; Accepted: July 2017

INTRODUCTION

Mental health is an essential and integral component of health as it has been repeatedly emphasized that there is no health without mental health. One in every four people will be affected by some forms of mental disorders [1]. In Brunei, the number of patients that attended mental health specialist outpatient departments increased to 15,509 patients [2]. Mental health is such an important public health issue that it was adopted the

promotion of mental health and wellbeing into the United Nations General Assembly's Sustainable Development Agenda [3].

"Psychological first aid (PFA)" was made the theme of 2016 World Mental Health Day. It is seen as an asset in the long run in order to ensure that any individual who is going through acute distress due to an emergency, disaster or crisis is able to receive basic support. It was also recommended that those individuals who need more than PFA will get further advanced support from health, mental health and social services [4]. The International Medical Corps helped develop the PFA guideline published by

* Correspondence to: Montakarn Chuemchit
E-mail: Montakarn.Ch@chula.ac.th

Cite this article as: Zakaria K, Chuemchit M. Knowledge, attitude and practice of psychological first aid among health professionals working in accident & emergency department in Brunei Darussalam. *J Health Res.* 2017; 31(Suppl.1): S99-105. DOI:

WHO in 2011 to help those undergoing stressful situation cope with their concerns and also raise a positive and supportive environment for the a better mental health and well-being [5, 6]. They also would like to bring forward this skill to emergency responders worldwide as it contributed to improved care provided during crisis [5].

According to Brunei's Ministry of Health (MoH) in their Health Information Booklet 2015 report, the outpatient attendance in emergency department in 2015, in all four public hospitals was 193,120 [2]. This shows a rise in outpatient attendee when compared to the 189,597 visits in 2013 [2]. Unfortunately, local statistics on mental health problem in emergency cases cannot be found. Although mental health services in Brunei had existed for a long time, they are still inadequate. The growth of mental health in Brunei can be considered slow as Brunei Darussalam's Mental Health Order is just over 2 years old, being launched on November 2014 in order to replace the 1929 Lunacy Act. Research on any field in Brunei is also very limited. After searching well, there is no study found on the knowledge, attitude and practice of psychological first aid among health professionals working in Brunei Darussalam.

In recent years, there had been many occurrences in natural disasters and accidents in the world [7]. Natural disasters and accidents can result in stressful situations. It is essential to remember that during stressful situations, more people are mentally affected by a crisis or disaster than the actual number of physically affected or injured people. Distressful events can occur at a large scale or at an individual level. Large scale events can mean natural disasters and wars. An event happening at an individual level would be at a small scale such as accidents, loss of loved ones and domestic violence. PFA should be done immediately after an event; however, it can range from immediately after the event up to a week. It is important to keep in mind that PFA is not a clinical or psychiatric intervention. However, it can be a part of a good clinical care. Like physical first aid, psychological first aid cannot treat a condition alone. The most effective way is to combine it with other health interventions.

Since one of PFA's aims is to give support and practical response to the people who just experienced any form of stressful events or emergency, it is appropriate for health professionals working in the emergency department to know some basic form of PFA as they are the ones who will be

the first responders in any emergency. Furthermore, PFA among health professionals can help the patient or attendee going through a crisis.

It is important for the researcher to conduct this study because the researcher believes a holistic approach to health care service and delivery is more efficient than focusing on one aspect of health. Health professionals working in emergency departments are admirable at treating various physical injuries or health conditions. However, the researcher would like to know more if psychological support such as PFA is also given with the physical treatments. Therefore, this study aims to find the proportion of PFA practice among health professionals working in emergency department in Brunei Darussalam. This study also assesses the socio-demographic characteristics, knowledge and attitude towards PFA practice and its associations.

METHODOLOGY

Study design

A cross-sectional study was conducted in four hospitals around Brunei. They were Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah (PMMPMHAMB) Hospital, Suri Seri Begawan (SSB) Hospital and Pengiran Isteri Hajjah Mariam (PIHM) Hospital. Convenient sampling was chosen for this study. Ethical approval was granted by Medical and Health Research & Ethics Committee, Ministry of Health, Brunei Darussalam (MHREC/MOH/2017/3/4). All health professionals working in the emergency department were invited to participate in the study.

Sample size and sampling technique

Finite sample formula was used to calculate the sample size [8].

$$\frac{\left(\frac{1.96^2 \times 0.5 \times (1 - 0.5)}{0.05^2}\right)}{\left(1 + \frac{1.96^2 \times 0.5 \times (1 - 0.5)}{0.05^2 \times 179}\right)} = n$$

The total sample size was 123 and the convenient sampling technique was done in this study.

Measurement tools

The interview-assisted, self-administered questionnaire was developed based on previous literatures and also with reference to a book by WHO called 'A guide to developing knowledge,

Table 1 Practice level of 123 emergency health professionals working in all four districts

Practice level	Score range	Number	Percentage
Low	0 – 1	22	17.9
Moderate	2 – 3	63	51.2
High	4 – 16	38	30.9
Total		123	100

Table 2 PFA practice description of 29 respondents who answered that they performed PFA at least once

	Number	Percentage
No. of times performing PFA		
Once	14	48.3
2 – 4 times	6	20.7
More than 4 times	9	31.0
Given priority to elderly		
Yes	15	51.7
No	14	48.3
Referred individual undergoing crisis to needed services		
Yes	14	48.3
No	15	51.7
Work branch		
RIPAS Hospital	14	48.3
PMMPMHAMB Hospital	8	27.6
SSB Hospital	3	10.3
PIHM Hospital	4	13.8

attitude and practice surveys' (9). It consists of 4 sections, (1) Socio-demographic characteristic, (2) knowledge, (3) attitude and (4) practice of PFA. The knowledge and practice section had a score of "1" to each correct answers and "0" score for incorrect answers. The total practice score of PFA practice varied from 0 (minimum) to 16 (maximum). The attitude section had a Likert scale responses with scores ranging from 1 to 5 assigned to each questions [10]. Responses range from "Strongly agree", "Agree", "Neutral", "Disagree", "Strongly disagree". A value of 5 is assigned for the most ideal response, while non-ideal response is assigned with a value of 1. The total attitude scores were classified into three levels with cut-off point of mean (SD). The total knowledge score was divided into three levels with Bloom's cut off point [11], while the total attitude and the total practice score were divided into three levels using a cut-off point of mean (SD). A panel of three experts were invited to validate the questionnaire and pilot testing was conducted on 20 people. The Cronbach alpha score was 0.70.

Data collection

Prior to data collection, one day training was provided by researcher to research assistants. The training included the definition of PFA, its basic objectives and core actions of PFA. The training

session also included explaining the objectives of the study, obtaining informed consent and methods of interviewing by demonstration through role-play. Interview is only performed when respondents requests assistance.

Data analysis

Descriptive statistics were used to determine frequency, percentage, mean and standard deviation.

RESULTS

The proportion of PFA practice

This study found that 51.2% of the emergency health professionals practiced PFA at moderate level (Table 1). Although none of the health professionals received training on PFA, 23.6% answered that they had practiced PFA at least once (Table 2). The majority of the emergency health professionals (48.3%) who answered that they had practiced at least once work at RIPAS hospital (Table 2). 51.7% responded that they had given priority to elderly and 48.3% referred individuals undergoing crisis to needed services (Table 2).

Socio-demographic characteristics of emergency health professionals

In this study (Table 3), 52.0% of the respondents were female. The mean age of the respondents was 37.9. Out of the 123 respondents,

Table 3 Socio-demographic characteristics of 123 emergency health professionals

Variables	Number	Percentage
Gender		
Male	58	47.2
Female	64	52.0
Not available	1	0.8
Age (years)		
30-39	60	48.8
40-49	37	30.1
50-59	7	5.7
>59	1	0.8
Highest education level		
Diploma	76	61.8
Bachelor	25	20.3
Master	6	4.9
Others	16	13
Occupation		
Doctor	15	12.2
Staff nurse	91	74
Assistant nurse	13	10.6
Nursing officer	4	3.3
Years working in current profession		
Less than 1 year	1	0.8
>1 year, less than 5 years	14	11.4
>5 years, less than 10 years	31	25.2
>10 years, less than 15 years	35	28.5
More than 15 years	42	34.1
Work branch		
RIPAS Hospital	74	60.2
PMMPMHAMB Hospital	21	17.1
SSB Hospital	16	13
PIHM Hospital	12	9.8

Table 4 Knowledge level of 123 emergency health professionals working in all four districts

Knowledge level	Frequency	Percentage
Low (0-6)	43	35.0
Moderate (7-8)	48	39.0
High (9-11)	32	26.0

only 15 (12.2%) were doctors. The rest of them were staff nurses, assistant nurses or nursing officers. In terms of education and working data, 61.8% of the respondents hold a diploma as their highest education level, and 60.2% worked at RIPAS hospital. Most of the emergency health professionals (62.6%) had more than 10 years-working experience in emergency department.

Level of knowledge, attitude and practice among emergency health professionals

Overall knowledge scores were classified into three levels with Bloom's cut off point [11]. This study found that the majority of the respondents (39.0%) had moderate knowledge level on PFA and only 26.0% of them had high knowledge on PFA

(Table 4). Out of the 123 respondents, 13 (10.6%) had previously heard of PFA and 33 (26.8%) thought that only health professionals are allowed to perform PFA. In addition, 99 respondents (80.5%) answered that they were able to recognize the signs and symptoms of acute stress.

This study found 42.3% of the emergency health professional had positive attitude towards the practice of PFA (Table 5).

DISCUSSION

Status of knowledge, attitude and practice

PFA is still quite new in Brunei Darussalam as it has only been started to promote in 2016 during the World Mental Health Day. However, this study

Table 5 Attitude of 123 emergency health professionals working in all four districts

Attitude score	Frequency	Percentage
Negative attitude (5-15)	39	31.7
Neutral attitude (16-17)	32	26
Positive attitude (18-25)	52	42.3
	119	100.0

Note: Negative $<-1SD$; Neutral $-1SD < x < 1SD$; Positive $1SD <$

found 51.2% of the respondents practices PFA moderately even though 89.4% of the 123 respondents had never heard of PFA. About 30.9% of the respondents had a high PFA practice level while 17.9% had a low practice level. The majority of the respondents that admitted to having performed PFA at least once in their professional life are from RIPAS hospital. This may be due to RIPAS hospital which is the main hospital located in the capital of the country and receives more emergency cases when compared to other hospitals. This is also found in a study done in Malaysia that work branch can also be a predictor for the adequacy of practice in health care delivery [12]. Out of 123 respondents, only 19 (15.4%) have encountered people who needed PFA at their department in the last 4 weeks. The majority of the encounters were at RIPAS hospital with 9 people (12.2%). While PMMPMHAMB, SSB and PIHM hospitals encountered 4 (19.0%), 4 (25%) and 2 (16.7%), respectively. Almost 80% of the respondents from who saw more than 5 cases a day were from RIPAS hospital.

Among all respondents, only 87.8% of the emergency health professionals are nurses, whereas 62.6% had more than 10 years working experience in emergency department. Position and work experience were a few leading factors affecting the health emergency response capacity [13]. Health staffs that have been working in emergency department for quite a number of years or more experience and were often involved in disaster response were more likely to report adequate practice in comparison to those who only attended training. However, health staff that attended trainings and workshops are more likely to have adequate knowledge and practice [13].

In terms of knowledge, the respondents' level of knowledge was moderate although most of them have not heard about PFA. A high percentage of the respondents (73%) knew that PFA can be performed by anyone, however, they didn't know to whom. About 39% managed to answer correctly that PFA is for distress people who have been exposed to

traumatic event in the last 4 weeks. Less than half (47.2%) of the respondents were able to recognize that children need to be given priority when performing PFA. Moreover, 60.2% answered that referring to needed services is part of PFA, but only 48.3% had ever referred someone undergoing crisis to the needed services. This could be due to scope of practice as one of the respondents mentioned that nurses aren't allowed to make a referral on their own.

About 42.3% of the respondents have a general positive attitude towards the practice of PFA. This study found that they are more positive towards learning PFA and on educating the public on PFA. On the other hand, they have a neutral attitude towards the statement "it is the responsibility of all health professionals to perform PFA", "I have adequate knowledge and skills to perform PFA to the people in need" and "I am confident in providing PFA to the people in need". This shows that respondents were keen towards learning PFA, but were impartial on dealing or performing the act of PFA. This is similar to a study which found that nurses showed positive attitude towards disaster or crisis management [12] but found that staff felt less prepared in dealing with individuals with some sort of mental health presentations [14]. In another study, older nurses, more than forty years of age, had a more positive attitude towards patients with a mental health complaint [15]. However, the majority of the health professionals 63.4% in this study are below 40 years of age. On the other hand, this depends on their skill level and their perceived efficacy to deliver health care service appropriately [15]. Years of experience of health professionals is related with regards to the more the health professionals have worked in the area, they are more likely to have a positive attitude towards patients with signs and symptoms of mental health problems [13]. Since 62% of this study's respondents had worked more than 10 years, there had more positive responses.

Regarding the availability of guidelines and policies on PFA in their department, 11.65% responded there is guideline in their department,

Table 6 Final model of multivariate analysis

Model	B	Std. Error	Beta	T	Sig.
(Constant)	-1.936	0.860		-2.250	0.026
Attitude	0.137	0.049	0.159	2.784	0.006
Basic mental health training	3.122	0.403	0.457	7.751	0.000
Perceived severity	2.271	0.403	0.332	5.639	0.000
Emergency cases in a day	1.086	0.140	0.443	7.727	0.000

$r=0.786$; $r^2=0.617$

whereas 21.2% of the respondents replied that there was the policy on PFA available in their department. However, PFA guidelines and policies specifically for the department were not yet available. Training on PFA was also not yet available for emergency health professionals during the study. Factors that might affect the practice of PFA are the training of the health professionals. Mental health trainings to emergency health professionals might enhance the overall service delivery to a more holistic approach [13] and this is similar to the findings of this study in which basic mental health training is one of the significant factors that improves practice of PFA. Mental health training can also improve the attitudes of the staff in dealing with suspected mental health related patients [12, 16]. The guidelines and protocols that are available in the workplace in the event of meeting people with traumatic stress can also be factors affecting practice of PFA. Health staffs with clearer job description or roles and work objectives are more likely to have a positive attitude towards delivering their service. Yet, the majority of Bruneian doctors and nurses working in the primary care setting was reported not receiving mental health training within the last five years [17]. This study found only 15.4% of the health professionals had received basic mental health trainings.

During data analysis, it was found that knowledge and attitude were significantly correlated to practice ($p=0.005$) and ($p=0.018$), respectively. Chi square test also revealed that there was association between basic mental health trainings, perceived severity and emergency cases in a day and the practice of PFA. However, when the variables are run on regression analysis, "knowledge" lost its significance and was excluded from the final model. The final regression model (Table 6) included attitude, basic mental health trainings, perceived severity and emergency cases in a day as the independent variable and the practice score of PFA as the dependent variable. The model indicated significant result that more positive attitude leads to a better practice score (0.006). The same went with

the other 3 variables. The more mental health training ($p=0.000$); the higher perceived severity ($p=0.000$); and higher emergency cases seen in a day ($p=0.000$), the higher the practice score.

CONCLUSION

Recognizing signs and symptoms of people under acute stress and recognizing that they need help is the first step to performing PFA. A high percentage of health professionals claimed that they were able to recognize acute stress. However, the overall knowledge score was still at a moderate level. It is important to improve the knowledge level of the health professionals by providing training and workshops on PFA and basic mental health. It is recommended that policymakers create a standard guideline and policy on the practice of PFA for health professionals. Another recommendation is to create a public health awareness program on PFA as it will be beneficial for the public. For future researchers, as this study only measures reported output, further research is needed to measure the outcome or impact of the health system from service user's point of view. At the meantime, this study can only measure the practice of emergency health professionals, and not their skills, an observation checklist will be needed to assess their skills and effectiveness to service users in future research.

REFERENCES

1. World Health Organization [WHO]. Mental disorders affect one in four people. [cited 2017]. Available from: http://www.who.int/whr/2001/media_centre/press_release/en/
2. Ministry of health. Health information booklet 2015. Bandar Seri Begawan: Ministry of Health; 2015.
3. World Health Organization [WHO]. Mental health included in the UN sustainable development goals. [cited 2017]. Available from: http://www.who.int/mental_health/SDGs/en/
4. World Health Organization [WHO]. Mental health in emergencies. [cited 2017]. Available from: <http://www.who.int/mediacentre/factsheets/fs383/en/>
5. International Medical Corps. Psychological first aid: improving mental health in emergencies. [cited 2017].

- Available from: <http://internationalmedicalcorps.org/page.aspx?pid=2135>
6. World Health Organization [WHO]. Psychological first aid: guide for field workers: Geneva: WHO; 2011.
 7. Centre for Research on the Epidemiology of Disasters. Disaster trends 2016. [cited 2017]. Available from: http://www.emdat.be/disaster_trends/index.html
 8. Select Statistical Services. Population proportion - sample size. [cited 2017]. Available from: <https://select-statistics.co.uk/calculators/sample-size-calculator-population-proportion/>
 9. World Health Organization [WHO]. Advocacy, communication and social mobilization for TB control: a guide to developing knowledge, attitude and practice surveys. WHO; 2008. [cited 2017]. Available from: http://apps.who.int/iris/bitstream/10665/43790/1/9789241596176_eng.pdf.
 10. Likert R. A technique for the measurement of attitudes. New York: Archives of Psychology; 1932. [cited 2017]. Available from: https://legacy.voteview.com/pdf/Likert_1932.pdf
 11. Bloom BS. Learning for mastery. instruction and curriculum. regional education laboratory for the Carolinas and Virginia. Evaluation comment. 1968 May; 1(2): 1-12.
 12. Ahayalimudin NA, Ismail A, Saiboon I. Disaster management: a study on knowledge, attitude and practice of emergency nurse and community health nurse. BMC Public Health. 2012; 12(Suppl 2). doi: 10.1186/1471-2458-12-s2-a3
 13. Zhiheng Z, Caixia W, Jiaji W, Huajie Y, Chao W, Wannian L. The knowledge, attitude and behavior about public health emergencies and the response capacity of primary care medical staffs of Guangdong Province, China. BMC Health Serv Res. 2012 Sep; 12: 338. doi: 10.1186/1472-6963-12-338
 14. Pich J, Hazelton M, Sundin D, Kable A. Patient-related violence at triage: A qualitative descriptive study. Int Emerg Nurs. 2011 Jan; 19(1): 12-9. doi: 10.1016/j.ienj.2009.11.007
 15. McCarthy L, Gijbels H. An examination of emergency department nurses' attitudes towards deliberate self-harm in an Irish teaching hospital. Int Emerg Nurs. 2010 Jan; 18(1): 29-35. doi: 10.1016/j.ienj.2009.05.005
 16. Commons Treloar AJ, Lewis AJ. Professional attitudes towards deliberate self-harm in patients with borderline personality disorder. Aust N Z J Psychiatry. 2008 Jul; 42(7): 578-84. doi: 10.1080/00048670802119796
 17. World Health Organization [WHO]. Mental health atlas. Brunei Darussalam: WHO; 2011.