# Military Mental Health Care in East Malaysia – An Innovative Approach

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# ABSTRACT

INTRODUCTION. To describe the military psychiatry outreach program in East Malaysia and review the referrals to the psychiatric service over a 20 months' period by looking at the referral pattern from the primary care centres within East Malaysia and the attitudes toward mental illness among unit leaders. A comparison was made between the first 10 months and the subsequent 10 months after the outreach program was introduced. RESULTS. It showed that the outreach program has increased the numbers of referrals, enthused medical officers for early referrals and developed more positive attitudes toward mental health among unit leaders. Referrals from 4 visited primary care centres tremendously increase from 5 to 36 within 10 months whereas the referrals from other non-visited centers, however remained low in the same period. The program was also found to encourage early referrals reflected by shorter mean DUI (5 to 2.67 years) and less severe illness reflected by lower arbitration rate (60.0% to 10.7%). CONCLUSION. An outreach program provides access to specialist expertise, increases awareness among unit leaders and the primary medical officers. It has not only increased the number of referrals but has also increased early referral which reduces premature arbitration rate among military personnel. Similar outreach program in other areas may enhance the clinical care of patients who are currently not being referred to the psychiatric services.

**Keywords**: Military Psychiatry Outreach Program, East Malaysia, Primary Medical Officers

#### INTRODUCTION

Mental health is a critical component of overall health and well-being. Military duties require a high degree of physical and mental capacity among the service members. Inefficiencies imposed by work stress and mental health problems may lead to very serious consequences. Exposure to varying degree of traumatic events, tough physical and mental training, unforeseen demands of work, frequent geographic mobility, separation from family members makes them as "at risk group" who are vulnerable to suffering from psychological distress and mental health problems. Many studies have consistently found a strong association between combat duties experience and prevalence of psychiatric disorders <sup>1-7</sup>. Prevalence of mental health problem is predictably higher in military population as compared to general population <sup>8,9</sup>.

#### MILITARY PSYCHIATRY

The modern practices in military psychiatry began during the

World War II. However, the psychiatry services in Malaysian Armed Forces (MAF) only become available in 1970's with only one psychiatrist to take care the whole MAF until the year 2002 10. Military psychiatry deals with special aspects of psychiatry and mental disorders within the military context. The aim of military psychiatry is to keep as many serving personnel as fit as possible for duty and to treat those disabled by psychiatric conditions. Presently, there are 5 Armed Forces Hospitals with only 4 psychiatrists to take care of 130 000 military population (excluding the family members and veterans). Each psychiatrist has to cover very huge catchment areas (**Table 1**) with a limited number of trained nurses and the only one clinical psychologist serving the whole country. The traditional delivery of mental health care is hospital-based whereby all the personnel were referred to the HAT nearest to their unit.

Table 1. The MAF hospitals (HAT – Hospital Angkatan Tentera and HTD – Hospital Angkatan Tentera) and its catchment areas

Hospital	Catchment area
HAT Tuanku Mizan	Kuala Lumpur, Selangor, Pahang
94 HAT	Melaka, Negeri Sembilan, Johor
96 HAT	Perak, Pulau Pinang, Perlis, Kedah, Kelantan and Terengganu
HTD Gemas	No psychiatrist
HAT Wilayah Kota Kinabalu	Sabah, Labuan and Sarawak

# MILITARY MENTAL HEALTH SERVICE IN EAST MALAYSIA

Hospital Angkatan Tentera Wilayah Kota Kinabalu (HATW KK) is the first military hospital in East Malaysia, located in Navy Base Camp at Teluk Sepangar. Mental health services have become available in HATW KK since September 2013. Prior to this, all personnel from Sabah and Sarawak were referred to the nearest civilian/Ministry of Health (MOH) hospitals with psychiatry services for acute management and stabilization.

There are 12 primary care centers known as RSAT and PPAT located widespread in Sabah and Sarawak (East Malaysia) as shown in **Figure 1**. These RSAT (Rumah Sakit Angkatan Tentera) and PPAT (Pusat Perubatan Angkatan Tentera) are primary health care centers under the Ministry of Defence that provide health services for the military population and their immediate family members. RSAT offers a broader range of services than PPAT by being equipped with basic laboratory and radiology facilities and a small number of in-patient beds (up to 10 beds). The medical staff at RSAT and PPAT include a military medical officer and 4 to 8 military and civilian health care staff, all of whom do not have formal training in psychiatry.



Figure 1. Location of primary care centers throughout East Malaysia.

Initially, personnel with known or suspected psychiatric disorders from all areas of East Malaysia were referred and seen at the Psychiatrist Clinic or warded in HATW KK. Despite adequate promotion on this newly available psychiatry service over East Malaysia, most of the cases seen were from the local units within the base. As a means to provide adequate access, it was decided in July 2014 that the psychiatric services have to be expanded through an outreach program. The first outreach program was at 801 RSAT Lok Kawi, Kota Kinabalu, which was followed by RSAT Penrissen Kuching and RSAT TUDM Labuan.

### STRATEGY OF OUTREACH PROGRAM

The traditional hospital-based delivery of service is almost impossible in East Malaysia due to the huge geographical distance as well as the pronounced shortage of psychiatrist. This Outreach Program is seen as an innovative way to improve the mental health care service in this area. Being a solitary military psychiatrist to cater this broad area, the author has developed a specialized outreach program. This program is composed of 3 components namely clinical session, personnel training and psycho-education activities.

The main objectives of the outreach program are:

(a) To provide psychiatric clinical care in the most practical way by being close to those personnel with mental health problems;

(b) To provide psycho-education among unit commanders in order to combat stigma toward mental illness among unit leaders(c) To provide basic military psychiatry training to the medical officers, paramedics and nurses in order to recognise mental problems and make early referrals.

The program took place every 3 months at the respective RSAT and PPAT. Cases who require earlier session will be assessed by the medical officer and discussed with the visiting psychiatrist. Admission to HATW KK is sometimes required to allow more comprehensive assessment. Unit representatives and family members were encouraged to be involved in the management of the ill personnel. The psycho-education activities, targeting on unit commanders and supervisors, were carried out in collaboration with RSAT and PPAT of respective areas via lectures and dialogue sessions and handing out of reading materials.

#### THE STUDY

All referrals from primary centres (RSAT/PPAT) were reviewed for the 10 months' period from July 2014 to April 2015. The total number of referrals from all centres was determined and each case was reviewed to ascertain the diagnosis, the duration of untreated illness (DUI) and severity of illness. The total of referrals for the 10 months' period prior to the outreach program (September to June 2014) was also determined. The numbers of referrals from visited and non-visited centres prior and after the outreached program were also compared.

The attitude towards mental illness among the unit commanders and supervisors was measured using a Likert Scale, brief self-rated questionnaire. This tool measures 3 aspects of common attitude towards mental illness, namely; fear and exclusion of a person with mental illness, understanding and tolerance of mental illness and causes of mental illness and the need for treatment. A total of 60 unit commanders and supervisors consented to participate in the study. All subjects were given the same questionnaire twice, before and after the psycho-education program and the scores were compared.

## RESULTS

#### Number of referrals

The total referrals from primary health services centers (RSAT and PPAT) all over the East Malaysia increased from 5 to 34 (680.0%) in the period of 10 months after the outreach program. In addition, there were tremendous increase in the number of referrals from the visited centers namely 802 RSAT Lok Kawi (3 to 9), 710 PPAT Pangkalan TUDM Kuching, Sarawak (0 to 8), 801 RSAT Kem Penrissen, Kuching Sarawak (1 to 11) and 818 RSAT Pangkalan TUDM, Labuan (1 to 6) over the period of outreach program (**Table 2**). The number of referrals from non-visited centers remained low and there was no referral at all from 6 non-visited centers (**Table 3**).

Table 2. The number of referrals from the 4 visited centers prior to and after the outreach program

D-:	Number of	of referrals
Primary Centers —	Pre	Post
710 PPAT Pangka- an TUDM Kuch- ing, Sarawak	0	8
801 RSAT Kem Penrissen, Kuch- ng Sarawak	1	11
02 RSAT Kem .ok Kawi Kota Kinabalu Sabah	3	9
18 RSAT Pang- alan TUDM, abuan	1	6
Total	5	34

Table 3. The number of referrals from 8 non-visited centers prior to and after the outreach program

Duimaur Contous	Number of	Number of referrals	
Primary Centers	Pre	Post	
803 RSAT, Kem RASCOM, Sibu, Sarawak	0	0	
PPAT 7 RAMD, Kem Kabota, Tawau, Sabah	0	0	
PPAT 13 RAMD Kem Pakit, Sri Aman, Sarawak	0	1	
PPAT 20 RAMD, Kem Sri Miri, Sarawak	0	0	
PPAT 3 RRD Kem Oya, Sibu, Sarawak	0	0	
PPAT MK ATB 2 (POH), Kem Kukusan, Tawau Sabah	0	1	
PPAT KD Sri Semporna, Pangkalan TLDM, Sabah	1	0	
PPAT 22 RAMD, Kem Sri Kinabatangan, Sandakan, Sabah	0	1	
Total	1	3	

#### Reason for referral

All the referrals prior to outreach program consisted of major psychiatric illness. Conversely, after the outreach program, there was an increased trend of referral cases with minor psychiatric diagnosis such as anxiety disorders and adjustment disorders. The results are summarized in **Table 4**.

# Arbitration rate due to mental illness and duration of untreated illness (DUI)

Comparatively the referrals prior to outreach program were severe psychiatric illness with longer duration of untreated illness (5 years vs 2.67 years).

Table 4. The comparison between the reason of referrals prior to and after the outreach program.

Daggar for referreds	Number of referrals	
Reason for referrals	Pre	Post
Schizophrenia	3	7
BMD	1	4
MDD	1	3
Anxiety disorders	0	9
Adjustment disorders	0	8
Others *	0	5
Total	5	36

Three out of 5 referrals (60.0%) were severe enough to warrant medical discharge as compared to only 10.7% after the outreach program. The result was summarized in **Table 5**.

Table 5. Comparison of rate of medical discharge due to severe mental illness and DUI among referrals prior to and after the outreach program

	Pre	Post
Rate of medical discharge due to severe mental illness among referrals.	3 out of 5 (60.0%)	3 out of 28 (10.7%)
Mean DUI (years)	5	2.67

#### Attitude of the commanders toward mental health

Three aspects of common attitude towards mental illness which were (1) fear and exclusion of a person with mental illness, (2) understanding and tolerance of mental illness and causes of mental illness and (3) the need for treatment were measured.

# a. Attitude of fear and exclusion of person with mental illness

These are the negative statements about mental illness – "I am not comfortable to have a friend with mental illness; I am not comfortable to have a neighbour with mental illness; A husband/ wife should leave his/her spouse if she/he is suffering from mental illness; Anyone with mental illness should not be working in the community". The results show a tremendous reduction of the percentage of agreeing after the psycho-education sessions. This reflects more positive attitudes. The findings are summarized in **Figure 2**.

## b. Understanding and tolerance of mental illness.

This aspect measured the understanding and tolerance of mental illness among the commanders. The statements were – "Seeking treatment for mental health problem would jeopardise personnel's career; Mental health problems should be kept as secret; Anyone with any mental health problem should be admitted at a mental institution; Treating someone with mental illness is a waste of government money".

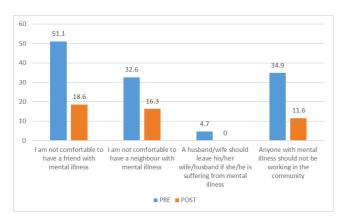


Figure 2. Changes in negative attitude toward a person with mental illness among unit commanders and supervisors

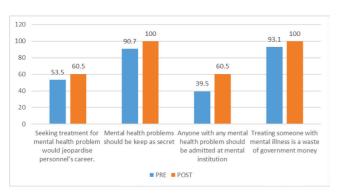


Figure 3. Changes in understanding and tolerance pre and post outreach program

It has been shown that there was a better understanding and tolerance of mental illnesses after the outreach program which tallied to a higher proportion of disagreeing as shown in **Figure 3**.

 Understanding the causes of mental illness and the need for treatment.

The statements were — "A commander should encourage his personnel to see Bomoh for mental health problem; Almost all people with mental illness are drug abusers; People with mental illness are violent". The results showed that there was a better perception on the causes of mental illness and the need for treatment, reflected by the lower percentage of agreeing as shown in **Figure 4**.

# DISCUSSION

Of total MAF population, only 1.4% of personnel sought help 11 which is far-off from the actual prevalence. Only those with severe mental illness with long duration of untreated illness were recognised up and referred to the psychiatrist.

The main pitfalls of the current service are the stigma toward mental health, lack of awareness and limited accessibility to the mental health care service. The stigma of mental health issues not only prevents the report of such symptoms but also defers people from seeking treatment.

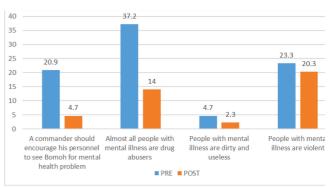


Figure 4. Changes in perception about mental illness pre and post outreach program

Instead, some may use self-medicated approaches such as nicotine, alcohol and drug use which further mitigate military deployment performance.

The attitude of high-ranking military leaders has been shown to significantly influence the stigma and treatment-seeking behaviours of other military personnel. Therefore, the efforts at reducing stigma in the military should begin with such high-ranking officers. Most of the common mental health problems remained undiagnosed due to lack of awareness and training among the primary health care providers. Hence psychiatric cases were not identified. A robust data has established the association between long DUI and poorer outcome of mental illness <sup>12,13,14</sup>.

There are significant numbers of discharge from military service due to below standard work performance and various disciplinary issues among those whom might have underlying mental health issues. Early addressing of this mental health issues may prevent this premature arbitration.

Finally, the traditional way of hospital-based delivery of mental health care service is almost impracticable in a military setting. Geographical distance, frequent mobility, and high work commitment may cause a delay in seeking professional help.

There were 34 referrals in total from all the visited centers in the recent 10 months' period studied. In a similar period prior to the outreach program, there were only 5 referrals. The increment in referrals to the service has coincided with the existence of outreach program. All the referrals prior to the outreach program were major psychiatric illness with mean DUI of 5 years. About 60.0 % were found to be severe enough to warrant medical discharge. The referrals after the outreach program were relatively less severe with shorter mean of DUI (2.67 years) and only 10.7% discharge rate.

These findings indicate that the outreach program does improve the mental health care system. As compared to the traditional service delivery, it allows the personnel to access mental health services closer to their units and homes, thus keeping families together, allowing them to maintain a close contact between the servicemen and his/her command and allowing them to maintain daily activities. Current evidence support that personnel respond to psychiatric treatment better if they have the support from families and friends <sup>15</sup>. Psychoeducation on mental health issues among unit commanders is found to be effective in improving the attitudes toward mental health. As shown by other researches, attitudes of high-ranking military leaders have significantly influenced the stigma and treatment-seeking behaviours of other military personnel <sup>16</sup>.

The outreach program has not only provided access to specialist expertise but has also increased awareness among medical officers and unit commanders on the importance of providing access to psychiatric services for military personnel. Additionally, this outreach program has not only increased the number of referrals but increased early referral which reduces premature arbitration rate among military personnel.

#### **CONCLUSION**

The outreach program has improved access to the mental health care system for the military in East Malaysia as compared to the traditional service delivery. It provides access to specialist expertise and increases awareness among unit leaders as well as the primary medical officers and results in an increase of the number of total and early referrals which reduce premature arbitration rate among military personnel. Easier access closer to their units and homes, ensure that families are kept together, and allowed close contact between servicemen and their command to maintain daily activities. Changes in the delivery of service practice, perception, knowledge, and attitude towards mental health care as described above would make significant differences in the mental health and overall well-being of our military personnel.

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