Mental health is a level of psychological well-being or an absence of mental illness. According to WHO (2014), it is the “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”, or “a focus on the absence of disease to the attainment of one’s potential”. Apart from the conventional medicine and treatment, the alternative treatment such as music therapy, diet, exercises and others are considered as complementary treatment for the clients nowadays. Since the benefits of complementary and alternative therapies have been proven and so it should not be excluded in caring the client with mental health problems. As the latest trend, Pet Facilitated Therapy (PFT) has been increasingly used as part of the therapy in treating the clients with various health problems. Thus, this study is aimed to explore the potential benefits of PFT in the client with mental health problems and issues. The findings indicated the benefits of PFT and suggested the use of PFT in care of clients with mental health setting after careful removal of the risks involved and considering the limitations. It is hoped that this study will help improves awareness among the public as well as the health care professions who are dealing with the mental health clients.

**Keywords:** Pet Facilitated Therapy (PFT), mental health disorders, complementary therapy.

### INTRODUCTION

Mental disorders include a broad range of problems, and different symptoms ranging from abnormal thoughts, emotions, behaviors, and relationships with others [1]. It includes chronic illnesses with symptoms related to thinking, feeling, or behavior. The five most common mental illnesses include bipolar disorder, schizophrenia, major depressive disorder, self-inflicted injuries, and alcohol abuse [2]. Mental health is viewed as playing a key role in determining the state of the public’s health. There are many mental health conditions left with unnecessary illness and disability due to lack of health services at the community level. Public awareness to prevent and treat the illness and disorders are important. Social discrimination and stigma are always associated with mental health disorders. Lack of information of public may lead them to treat mental health disorders clients differently without understanding their conditions. Moreover, the clients in low-income countries have faced more difficult situation due to other additional factors such as poverty and lesser opportunity to make a living for themselves and their families.

Nonetheless, the concepts of mental health and illness have changed drastically over the last few decades. Mental health is noticed as connecting mind, body, spirit, in mental and physical wholesomeness. It is further viewed as involving a process through a holistic balance between mind, body, and spirit which is pursued through meaningful life activities [3]. The family members of the clients with mental health disorders are facing the double challenges, the things associated with the physical and emotional conditions of their family member as well as the shame and social stigma brought against them. Thus, the family members and the clients with mental health conditions need additional support and encouragement from the society. At the same time, awareness among the society should be raised so that to reduce the stigma associated with mental health. The clients with mental health problems should have the rights to get the possible treatment options available, improve their maximum quality of life within their limitations.

**Background of the study**

In the developed countries of the West, many research studies have been conducted and identified the potential benefits of PFT in mental health. In Malaysia, very few studies were conducted regarding PFT in mental health setting. In addition to these, it is accepted that the benefits of pet therapy in mental health and
psychiatric disorders clients have been proven in western countries. But, the use of PFT in mental health setting were very limited and even the awareness of it was still a concern in South East Asian countries. Thus, this study is aimed to explore the benefits of pet therapy and the use of it in mental health care as well as its limitations so that to raise awareness among the health care workers which Pet therapy has not been started or used as part of therapy in their countries.

Pet Facilitated Therapy (PFT)

The Pet facilitated therapy known as PFT is increasingly well-known around the World. The purpose of this study is to explore systematically the use of PFT in mental health and nursing as a form of complementary in addition to conventional therapy. Since medical science is a continuously developing profession, nursing and medical professionals should be updated in whatever ways or therapy that might be beneficial in their clients and nursing care. In this article, the use and benefits of PFT are explored and presented based on the previous work of the scholars who are the experts and researchers in the related area.

Methodology

The literature search was used as a research methodology for this study. All possible literature sources such as articles, journals, and books which were related with the use of PFT and mental health setting are identified. The key words were typed and searched thoroughly through using online such as “pet/animal-facilitated-therapy”, “pet/animal-assisted-therapy”, “pet/animal-facilitated-therapy in mental health”, “benefits of pet therapy in mental health nursing”, “effects of pet therapy in mental health”. Moreover, library research gateway and EBSCO of International Islamic University Malaysia (IIUM) and other online data bases such as “PubMed, Ovid, Science-direct, ProQuest Health & Medical Complete, Scopus, SINAHL Plus, Medline”, as well as “Mendeley and google scholars” were used to explore the related articles. In addition, the offline data regarding the history of mental health, mental health nursing, and the pet therapy were also collected from the available text books from the IIUM library. The inclusion criteria of this study are the articles published within 5 years and those related with PFT and the mental health. The use of PFT in Alzheimer in elderly [5], and AAT studies conducted in children, PFT with Autism [4], review papers, articles related with other health benefits apart from mental health, as well as papers published more than 5 years were excluded. Out of 73 articles retrieved and only six were left to study after based on the inclusion criteria, and which are presented as the following.

Findings and Discussions

Grajfoner, Harte, Potter, & McGuigan, [6] conducted a study on “the effect of dog-assisted intervention on student well-being, mood, and anxiety among the university students (n=132)”. In this study, the participants were assigned into two; experimental and control group. Warwick–Edinburgh Mental Well-Being Scale (WEMBS), the State Trait Anxiety Scale (STAI), and the UWIST Mood Adjective Checklist (UMACL) were used to collect the data before, and after the intervention. For 20 minutes session of intervention, the students from the experimental group could interact with the dogs and their handlers while the participants with the dog handler alone were seen to dog only, or the handler only. The findings revealed a significant improvement in mood, mental well-being and reduction in anxiety in a group with a dog present (in dog only group or in group with dog and handler). The participants with the dog handler alone are seen to have negative effect of mood (p=0.026). Moreover, it was interested to note that participants who interacted with the dog only show the positive mood in compared to those with dog and handlers. It was noted that even a short session (20 mins) with a therapy dog was proven to be effective for improvement in well-being, anxiety, and mood of the participants.

A case study performed by [7] in Denmark explored the role of service dogs in adults with Post-Traumatic Stress Disorder (PTSD). The study aimed to examine the effects of incorporating service dogs in the rehabilitation process and the reaction of the health professionals toward the use of service dogs. A convenience sampling method was used to recruit the participants who were having the service dogs for the interview process. One-hour semi-structured interview was performed at the participant’s home after providing the guided questions. The thematic analysis was used, and the findings are presented based on the major categories identified. And, the major themes from the study included “a lack of communication between service dog providers and rehabilitation system”, “limited access for the dogs in public building, limited incorporating of service dogs in current rehabilitation procedures”, and “a perceived stigma from being with the dog wearing labeling vest “mentally ill”. Moreover, one of the themes emerged was “a strongly felt emotional support from the dog” by having a dog. Thus, it was needed that the awareness of PFT to be improved and the systems to be more organized in order to achieve the benefits of physical and emotional support felt by the participants from the service dogs.

Another study by Ko, Youn, Kim, & Kim, [8] examined “the Effect of Pet Insects (crickets) on the Psychological Health of the elderly”. The elderly people (≥65 years old) attending community health Centre of Daegy, Korea were recruited for randomized, controlled study. The participants were divided into two groups; with insect therapy and health advice (n = 46) and the control group (n = 48) with health advice only. The study was conducted for 8 weeks, and 5 crickets put in a cage was used as the pet insects. A variety of
psychometric tests were used in the study to collect the data: a direct interview [Beck Anxiety Inventory, Geriatric Depression Scale (GDS15), Mini-Mental State Examination (MMSE), 36-Item Short Form Health Survey, Insomnia Severity Index, Fatigue Severity Scale, and Brief Encounter Psychosocial Instrument] and laboratory analyses of inflammatory and oxidative stress markers. The results revealed the significant lower scores of GDS were seen in the insect-caring group at week 8 (p = 0.004) (though both groups reduce in GDS scores), after comparing in terms of changes from baseline values (p = 0.011). There was also changes in MMSE scores from baselines (p = 0.045) and no difference was seen in other psychometric and laboratory tests. And it was concluded that insect therapy as cost-effective and safe method, with a small to medium positive benefits on depression and cognitive function of the elderly participants.

Dell & Poole, [9] observed “the role of the therapy dog on trauma-informed approach in prisoners (n=6)” with intricate mental health issues. The participants who had a history of self-harm, childhood trauma, mental illness, addiction, and Post Traumatic Stress Disorder (PTSD) were identified. Six evidence-based-trauma principles identified by US substance abuse and mental health services administration were used as a guideline to examine the possible benefits of the therapy dog offer in these prisoners. The participants were given a time frame of 15 minutes to 1 hour (average 30 minutes per visit) for 2 weeks by a trained and experienced therapy dog handler. The findings displayed congruency with the above mentioned six principles namely: “safety; trustworthiness and transparency; peer support and mutual self-help; collaboration and mutuality; empowerment, voice, and choice; cultural, historical, and gender issues”.

Another study by Nurenberg et al. [10] examined “the effect of Equine-Assisted Psychotherapy (EAP) and aggressive behavior in chronic Psychiatric inpatients”. The randomized controlled study was conducted in 500-bed state psychiatric hospital in which the benefit of pet therapy was assessed after comparing with the standard treatment. Equine as well as canine forms of animals were used as the therapy animals, and 90 patients with violent behavior or highly regressed behavior with two months or longer period of hospitalization were involved as the study participants. In this study, 76% of participants had diagnoses of schizophrenia or schizoaffective disorder, and 56% had the history of committing civil or forensic reason and 63% have aggressive behaviors. EAP, canine-assisted psychotherapy (CAP), as well as the enhanced social skills psychotherapy, or regular hospital care were given as the ten weekly group therapy sessions. The incident reports among the participants due to violence are measured between pre-and post-interventions. And the analyses pointed out the significant effect of intervention group (p=.035); with specific benefits of EAP in post hoc tests (p<0.05), and the AAT from the clinical observation (p=.051). Post hoc tests also revealed the benefits of CAP (p=.058) and EAP (p=.082). Moreover, it pointed out the possibility that the staff able to predict the type of patients likely to benefit from EAP (p=.01) from the Covariance analyses test. Thus, the study concluded the possible effects of CAT, and especially EAP as an effective therapy for long-term psychiatric clients who are having the risk of violence.

In the study of Nepps, Stewart, & Bruckno [11] “Animal-Assisted Activity AAA): Effects of a Complementary Intervention Program on Psychological and Physiological Variables”, the hospitalized patients from the mental health unit of a community hospital, were involved as the participants (n=218). They were divided into two equal groups; intervention and control group in which the intervention group was given 1-hour animal assisted activity while control group receive 1-hour stress management program. It was found that AAA decreases the depression (P < .0001), anxiety (P < .0001), pain (P < .0001), and pulse (P < .04) based on their self-reported ratings. It also found that AAA improved the associated physiological measures of stress such as blood pressure, pulse, and salivary cortisol of the participants.

Limitations
As per previous studies examined, it seemed to reason that PFT have numerous potential benefits in mental health setting. However, it is not recommended to use as a sole treatment as the main conventional therapy. Rather it is suggested to use as a complementary and part of the main stream therapy. A variety of animals were used in the above studies mostly the dogs, as well as the equine, and the crickets. It is noted that not all types of animals are suitable to the clients especially with different mental health conditions and background. Thus, the types of animals should be chosen carefully based on the individual needs, seriousness of their conditions and physical tolerances as well as the religious and cultural background. The pets involved should be trained with well-skilled handlers and the risk of zoonosis or the danger involved with clients should be free. One of the limitations of this study includes using literature review method which is based on the previously available studies only and is not on based on the empirical evidence achieved by using intervention of control group study.

Conclusions
From the above discussions, it is noted that PFT have potential benefits in care of the clients with mental health disorders. The results indicated all the benefits of PFT as providing emotional support as well as improving mental well-being, positive mood, and mental state of the participants. It also helps reduce
their depression, anxiety, and the violence behavior. Moreover, it is noted that the physiological measures of stress such as pain, blood pressure, pulse, and salivary cortisol after intervention with PFT are reduced. And it also indicated the cost efficiency and effectiveness. It is hoped that the awareness of PFT will help to raise awareness of the public as well as the nurses and health care professions. However, the findings also suggested the limitations of the PFT usage and recommended to improve in areas of communication between the trainers and the organizations, and the public acceptance, and to consider the stigma involved in using PFT. Thus, it tends to reason that if appropriate implementation is applied, the usage of PFT is highly suggested as part of complementary therapy in clients with mental health conditions. And thus, further studies with different methodologies are recommended to be conducted in this related area.

Acknowledgements

Cho Cho Zaw thankfully acknowledge to International Islamic University, Malaysia regarding this manuscript since this study is supported by Research Medical Center, Kuantan, IIUM (RIGS 16-276-0440).

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