**An Investigation of the Impact of Introduction of 24-Hours Expert Mental Health Service Impact on Discharge and Discharge Planning for the Mental Health Patients in Emergency Department**

# 1.0 Chapter One: Introduction

# 1.1 Background of the Study

Mental ill health impacts half of the Australian population at some point in their lives in a direct way. Despite the high prevalence of the mental ill health impact on the Australian population, there is a lot of misunderstanding and gaps in the provision of care. According to Oyane et al. (2013), mental illness involves a wide range of disorders and further varies in its severity. The impact of mental illness can have severe impacts on the individuals and their families and, further, has far-reaching impact on the society as a whole (Stimpfel et al., 2012). Rosenberg and Slavador-Carulla (2017) argue that social problems, which are commonly related and linked to mental illness, include poverty, unemployment, and reduction in productivity, homeliness, amongst others. Khamisa et al. (2013) agree and state that those individuals who suffer from mental illness often experience issues and problems such as discrimination, isolation as well as stigma. These statistics illustrates that mental health issues are prominent problems facing the Australian population and, as such, a need to develop a mental health framework, which ensures that there is ease of access of mental health services for all Australians at all times.

According to AIHW (2017), around 7.3 million or about 45% Australians of the age between 16 and 85 years’ experience common mental-health-related illnesses such as depression, substance use disorder or anxiety in their lifetime. Estimates of National Survey of Psychosis in 2010 suggested that 64,000 individuals have psychotic illnesses and have contact with public specialised mental health services annually, Further a report on a national household survey of mental health and well-being of children and adolescents released in 2015 made an estimate that 560,000 children and adolescents aged between 4-17 experienced mental health disorder between 2012 and 2013. According to AIHW (2017), approximately $8.5 billion is utilised annually on mental-health-related services in Australia.

One of the elements of mental health services, which play a role in delivery of care, is hospital emergency departments (Nolte et al., 2017). Hospital emergency department (ED) play a major role in the treatment of mental illness and have been utilised as the initial point of care for a number of reasons. Shafiei et al. (2011) argue that EDs are utilised as an initial point of care for those individuals seeking mental-health-related services for the first time, in addition to being an alternative point of care for individuals seeking after hour’s mental health care.

Broadbent et al. (2010) argue that there is a longstanding clinical concern on the management of individuals with mental health illness within the emergency of department. Nichollas et al. (2011) argue that the issues include the need to improve delivery, assessment, and transport to mental health facilities as well as management of individuals with severe mental health illness. Sharrock et al. (2008) argue that lack of privacy, care of provision by negative or staff, which is not well-educated, delays in assessment of mental health cases as well as service mobilisation are some of the challenges facing mental health within emergency departments.

When the researcher was under a placement in one of the EDs in Australia, some of the cases encountered included suicidal ideations, schizoaffective disorder, and violence, drug issues, intoxicated among others. Delays as identified by Nichollas et al. (2011) was one of the issues leading to inefficient delivery of care whereby due to delays patient changed their mind about receiving care. Hospital data collected during the placement for one month between 12th June and 8th July 2017 indicated that self-discharged patients were at 11, number of discharge a total of 76, number of admissions were at 63 while the total number of patients who presented to the ED was at 150 as indicated in Figure 1 below. The data illustrate that ED is sought by mental health illness and as such a need to ensure that there is efficient care provided when patient present their cases to the health professionals at the EDs.

**Figure 1: Hospital Data during the Placement**

Morphet et al. (2012) agree and state that there are inadequate risk-management protocols within the ED, which results in inadequacies in mental health care and increased risks of incidents. The current study proposes that mental-health-assessment impact on the smooth discharge for mental health patients in ED after the introduction of 24-hour expertise of mental health services, resulting in elimination of unnecessary delays and reduction of inappropriate acute admissions. The current study, as such, aims to focus on investigating the impact of introducing 24-hour expert mental health service on discharge and discharge planning for the mental health patients in ED.  
**1.2 Problem Statement**

Australian deinstitutionalised mental health care in the early 1980s, and, since then, the mental health staff has been required to provide assessment services and care within the general hospitals that have become critical in the provision of mental health (Sharrock et al., 2008). General hospitals in the Australian health care system became more involved in the triage and assessment of individuals with the mental health presentations. Morphet et al. (2012) agree and state that about 5-10% of the ED presentations are individuals with mental health presentations. Individuals with mental health illnesses come to the ED with various coping and mental issues such as psychosis and substances use. Rosenberg and Salvador-Carulla (2017) illustrate that the physical environment and layout of the ED can be a limiting factor in the manner in which a client is assessed as well as managed, resulting in delays and inefficiencies in delivery of mental health care. Broadbent et al. (2010) identified major concerns within the service delivery for individuals with mental illness in ED in Australian and identified delays as one of the major issues facing delivery of mental health care in EDs.

In the delivery of mental health, having staff who are adequately informed and have necessary expertise in dealing with mental health patients is of great importance. Rosenberg et al. (2017) argue that night shifts insist that the health professionals are able to have more learning opportunities and meet interesting clientele. Nicholls et al. (2010) argue and state that, as a result of less staff members during the night, they are able to double up their roles. In return, they meet new patients with different challenges, who allow the providers to learn new health-related skills. In that case, the more they become experienced and knowledgeable, the higher they are able to deal with patients on a personal level without seeking help, hence reducing time wastage. Shafiei et al. (2011) argue that making sure that the caregivers are more skilled gets more a challenging task, which, in the long run, improves the patients’ outcomes.

According to Sharrock et al. (2008), having mental health professionals in the ED who are able to deal with the cases as they arise results in improved assessment rates and thus reduced delays. However, Khamisa et al. (2013) illustrate that the professionals in ED are faced with inadequacies in dealing with patients who illustrate mental health presentations and often have to refer them to specialists in mental health care. Morphet et al. (2012) agree and state that this results in delays in the mental health assessment and delayed care for the individuals. As illustrated by Nolte et al. (2017), immediate care is critical in the delivery of care, particularly in the emergency department. It is argued that there is need to adequate resources such as time and staff in order to delivery optimal mental health care within the EDs in Australia (Khamisa et al., 2013). Many studies agree that there is need for increased response in the mental health services in EDs in order to eliminate unnecessary delays as well as reduce inappropriate acute admissions (Stimpfel et al., 2012; Oyane et al., 2013; Nolte et al., 2017). However, there is still a knowledge gap in how introduction of night shift -- allowing a 24-hour expertise on mental health service -- impacts delivery of mental health service for the EDs. The current study aims to focus on investigating the impact of introducing 24-hour expert mental health service on discharge and discharge planning for the mental health patients in ED.

# 1.3 Research Question

# The research will be guided by the following research question:

# How does the introduction of 24-hours expert mental health service impact on discharge and discharge planning for the mental health patients in ED?

# 2.0 Research Methodology 2.1 Research Design

As there is limited research and studies exploring the impact of introduction of 24-hour mental health services in EDs in Australia, a descriptive exploratory approach and a mixed-methods design will be employed for the current research in addressing the research question. There are a number of reasons for selecting a mixed-method approach in this study based on the research-question nature and the existing research on the subject matter. A mixed-method-design approach is argued to be advantageous when undertaking a research (Denscombe, 2008).

In order to acquire quantitative data for the study, the researcher will utilise a survey questionnaire whereby mental health patients will be the targeted population. Dillman (2007) argues that surveys are a traditional approach of conducting research and are common in acquiring quantitative data. Creswell and Clark (2007) argue that, despite the fact that questionnaires are often seen as sterile and unimaginative, they are appropriate and effective in non-experimental descriptive design as they seek to describe reality. Questionnaires provide a convenient approach of collecting useful data, which can be utilised for comparison from a large number of individuals. Denscombe (2008) agrees and states that they are appropriate for collecting factual and hard evidence. For example, questionnaires can be utilised in identification of broad trends of a population and collection of information with regard to prevalence and interrelationship of variables within a population. In addition, these questionnaires are optimal in collecting information about perceptions and behaviour. The use of a survey questionnaire as such will be effective in collecting trends and prevalence exhibited by mental-health patients. Further, the questionnaires will enable the researcher to collect factual data from a large sample of the target population.

However, attempting to measure, which is within a clinical practice through the use of quantitative approach, ignores the complexity and reality as well as the complexity of everyday practice. Creswell (2007) illustrates that questionnaires are disadvantaged in that they have a limited ability to understand multifaceted contexts. In order to delimit the disadvantages of acquiring quantitative data from the target population, qualitative data will be collected. The qualitative data will be collected through follow-up interviews on the mental-health patients. Bryman (2007) illustrates that follow-up interviews are effective in expanding upon and helping explain information obtained through the questionnaires. According to Denscombe (2008), when one approach to research is inadequate by itself in addressing the research question, a mixed-method approach is the preferred design. The researcher, as such, will utilise a mixed-method approach to collecting data from the mental-health patients.

The mixed method will be conducted into two major phases: the quantitative, which will be followed by the qualitative. Using the mixed-method approach, the researcher will first collect and analyse quantitative data. After analysis of quantitative data, the researcher will collect qualitative data to help explain and elaborate on the quantitative results acquired from the first phase. Creswell and Clark (2007) illustrate that, whilst each method is undertaken on its own, both methodologies have the potential for complementing each other and addressing the research question in a holistic manner.  
**2.2 Sampling and Participants**

A clustered random-sampling approach will be utilised to select 12 mental health services, and, within each mental health service, 40 participants will be randomly selected to participate in the study. Through the contact information that the mental-health patients leave at the EDs, the researcher will send an introduction letter, requesting for their participation in the study, which will be attached to the questionnaires. This will be the first phase of data collection. A 60%-response rate is expected, and, as such, a total of 288 questionnaires will be received for analysis.

In the second phase, a sub sample of 48 participants, who completed the questionnaire, will be invited to participate in a semi-structured interview focussed on expanding an understanding of the findings acquired from the first phase. Potential participants will express their interests in taking part of the follow-up interview by providing their contact details to the researcher through completing an information slip, which is included but separate from the questionnaire. The respondents of the information slip will be contacted for further interviews.   
**2.3 Data Collection**

The study will utilise a nested design whereby the survey of the individuals with some of the respondents included and selected for additional in-depth interviewing. Annechino et al., (2010) argues that undertaking a nested design allows the researcher to acquire complementary interpretation of the data collected using the survey. The participations will be surveyed and a sub sample will be selected in random for in depth interviews. The study involves two forms of data collection: the survey and the follow-up interviews. Following ethical approval, the surveys will be distributed through the post to individuals who have utilised ED-entailed health services in the past 6 months. The post will include an introduction letter, requesting the participation of an individual in the research study and a questionnaire attached, involving various elements. The data will involve participant characteristics, the mode of arrival to the ED, the journey and the process through the ED such as time spent awaiting review, amongst others, and, finally, on their perceptions with regard to the mental health services provided. Majority of the experience-related questions will involve a 5-point Likert scale anchored at agree/disagree options.

The data collected from the survey will be entered into Statistical Package for the Social Sciences (SPSS) and analysed appropriately. After analysis of the quantitative data collected, follow-up interviews will be conducted for a small group of the participants to help in elaborating and expanding understanding of the data collected. The interviews will be conducted at the homes of the participants and will take one hour for each interview. The researcher will take notes and utilise them for in-depth analysis of the study elements.

**2.4 Data Analysis**

In analysing the data collected, as recommended by Small (2011), the study will undertake an integrative analysis. The approach is focused on using analytical leverage acquired by different analytical perspectives in yielding a more comprehensive picture and understanding of the problem being investigated which cannot be possible when using one perspective alone (Felzer, 2010). Integrative analysis will be utilised in analysing the data acquired from the survey and the interviews conducted. In the first phase, descriptive as well as inferential methods of analysis will be employed, using the statistical package of social sciences (SPSS). The methods will be utilised to describe the sample characteristics and inform other aspects of the research study, using inferential methods. In the second phase, in order to facilitate the qualitative-data analysis, major themes will be identified and analysed to inform the research. The data collected from the interviews will be coded in a table identifying the major themes and their explanations.

According to Dillman (2007), integration of quantitative and qualitative findings is an important element of the mixed-method approach. As this study employs mixed-method design, the quantitative and qualitative findings will be connected and integrated. The integration of the results from the questionnaires and those from the interviews will enable the researcher to acquire a holistic view and answer to the research question. Despite the fact that the findings of each phase of the study will be represented separately in the findings section, the two findings will be integrated in the discussion section. The discussion will highlight points of agreements, differences between findings as well as other elements of the perception acquired from mental-health patients who have utilised the EDs.

**2.5 Reliability and Validity of Study**

In utilising the established instrument, the researcher needs to consider the validity and reliability. A pilot study and a panel of experts will be utilised in order to secure the reliability and validity of the study. The pilot study will include the analysis of both the questionnaires and the interviews. The researcher will select a panel of experts to analyse and go through the questionnaire developed. The experts selected will have expertise on mental health issues facing Australia and, further, have expertise in undertaking research and, as such, be able to help in developing an effective questionnaire, which will meet the needs of the questionnaire. Further, the panel experts will help in reviewing the interview questions. After a review of the questionnaire and the interview schedule, a pilot study will be conducted on selected mental-health patients who have attended ED mental health services in mental health facilities, which have not been selected for the study. The pilot-study results will be utilised to further and finalise the questionnaire and the interview schedule. Questions, which are not clear or too difficult to answer or those that do not answer the research question of the study, will be reviewed and changed appropriately.  
**2.6 Ethical Issues**

All researchers have and are expected to adhere to set ethical principles in their research as ethics is a central element in all the aspects of the research study, from its planning phases to its completion. Before the commencement of the study, ethical approval will be sought from relevant authorities. In addition to this, ethics will be followed on contacting the participants and in their involvement in the research study.

First, the introduction letter sent to them will include a request for their participation, assuring the participants of their anonymity as well as privacy of information allocated from the study. The introduction will inform the participants on the reason why the study is being carried out and will assure them that the information gathered will only be utilised for academic reasons. Although the interviews will be face to face and thus not anonymous, confidentiality of information gathered will be assured through non-disclosure of individual or organisational names when reporting the findings. Further, the data collected will be stored appropriately with adequate security measures undertaken. Written consent will also be obtained in the interview whereby the participants will complete and return an interview-volunteer form.  **2.7 Limitations of Study**

The mixed-method approach of undertaking the research will pose considerable challenges for the researcher. One of the challenges is that a mixed-method research requires flexibility in the operationalisation of the methods whilst, at the same time, requiring the researcher to know the different methods used as well as how to merge the two paradigms (Denscombe, 2008). The researcher does not have a lot of experience in using both quantitative and qualitative methods in completing the study. In order to delimit these limitations, the researcher will acquire the help of an experienced researcher in collecting the data. In addition to the inexperience of the researcher, the research will take time and resources in collecting both the quantitative and qualitative data.

**2.8 Conclusion**

The current study proposes that mental-health-assessment impact on the smooth discharge plan for the mental-health patients in ED after the introduction of 24-hour expertise mental health services, resulting in elimination of unnecessary delays and reduction of inappropriate acute admissions. It thus focuses on investigating the impact that 24-hour expertise mental health services on the delivery of ED mental health services. The study will utilise a mixed-method design whereby both quantitative and qualitative data will be collected to inform the research and answer the research question.

The researcher will undertake and administer a survey questionnaire to the mental-health patients who have visited sampled EDs and select participants who will be contacted through the post, requesting them to participate in the study and fill the questionnaire attached. An information slip will also be attached to the introduction letter and questionnaire whereby the participants willing to participate in the follow-up interview will be requested to fill their contact information. The follow-up interviews will be conducted on participants willing to participate in the second phase of the data collection, and the two sets of data will be analysed and integrated to answer the research question.

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