Journal of **Health, Medicine and Nursing**

(JHMN)

NURSES' PERCEPTION OF THEIR COMPETENCIES IN THE PROVISION OF PSYCHIATRIC CARE: A CASE OF LOITOKITOK SUB-COUNTY HOSPITAL

> Muchene Keddy Wanjiru, Dr. Kailemia Peter Ntoiti and Prof Gatere Ruth Gathigia





NURSES' PERCEPTION OF THEIR COMPETENCIES IN THE PROVISION OF PSYCHIATRIC CARE: A CASE OF LOITOKITOK SUB-COUNTY HOSPITAL

¹Muchene Keddy Wanjiru Post graduate student: School of Medicine & Health Sciences, Kenya Methodist University. Correspondence Author email: keddymuchene@gmail.com

²Dr. Kailemia Peter Ntoiti, Lecturer: School of Medicine & Health Sciences, Kenya Methodist University. kailemiahh@gmail.com

³Prof Gatere Ruth Gathigia Lecturer: School of Medicine & Health Sciences, Kenya Methodist University. ruth.gatere@kemu.ac.ke

Abstract

Purpose: The main purpose of this study was to assess nurses' self-evaluation of their competencies in the care of psychiatric patients at Loitoktok Sub-County Referral Hospital.

Methodology: A cross-sectional study, employing census survey of all the 41 eligible nurses working in the hospital was done. A structured questionnaire was used to collect data. Informed voluntary consent and all other ethical clearances were obtained. The data obtained was analyzed using SPPS version 20.

Findings: Majority of nurses were from maternity department. On gender aspect, female nurses were more than male nurses. Most nurses had strong perceived competency in provision of psychiatric care especially in the area of therapeutic communication. The perceived competency did not significantly differ across the nurses' qualification, neither did it significantly vary from one department to another. However, the study revealed significant variation in perceived competency in conducting psychiatric assessment had a significant influence on the ability to provide psychiatric care. Likewise, the perceived intervention competency had an influence on the ability to provide competency and ability to provide psychiatric care.

Unique contribution to theory, practice and policy: There is need for regular assessment of nurses' competencies to form need based capacity building, especially for nurses with more than four years' experience; and exploring opportunities of encouraging nurses to seek assistance with competencies they have deficiencies in.

Keywords: Mental health, Psychiatric care competencies, clinical competence evaluation.



1.0 INTRODUCTION

Psychiatric health nursing is an area that entails promotion and maintenance of mental health through psychiatric assessment, diagnosing and provision of necessary interventions for human responses to mental disorders (Reed & Fitzgerald, 2005). The psychiatric health nurse is trained on diagnosing mental disorders, using mental health screening tools, managing mental disorders and providing psycho education, cognitive behavioral therapy, and psychotropic drug therapy (Hanrahan, 2009). Ideally, psychiatric services are offered by nurses specialized in this area. However, due to the current acute shortage of these experts (Appelbaum, 2007; Kabir & Herlitz, 2000; Patzel et al., 2007) deployment of general nurses in caring for clients with mental ailments has become inevitable (Arnold & Mitchell, 2008).

To deliver quality care to patients with psychiatric disorders, health workers ought to feel and demonstrate that they are competent in their trade. Competency comprises the perceptions of ability to perform psychiatric assessment, use therapeutic communication and provide appropriate intervention to psychiatric patients. The perceived competence is subject to a number of issues. First, is the relevant training. Evidence has shown that nurses with no psychiatric training perceive themselves as not being confident with their knowledge and skills in the assessment and intervention in psychiatric care (Sharrock & Happell, 2006). They have perceptions of inadequacy and fear especially when dealing with patients with self-inflicted harm (Sharrock & Happell, 2006; Appelbaum, 2007; Arvidsson, 2011). The general nurses perceive they are inadequately trained and are not prepared to deal with patients with mental health disorders (Clark et al., 2005). The perception of lack of competencies by general nurses may result to inability to provide appropriate psychiatric care (Sharrock & Happell, 2006).

Second is the experience and exposure. A study on the construction of competence in mental health nursing observed that during practice, nurse prescribers construct competence through an interactive process of owning and demonstrating competence(Snowden, 2012). Similarly, Sullivan (2012) maintain that experience, adequate practice and training shape the nurses' self-confidence to provide care.

To ensure quality and patients safety, some countries have developed the national competencies for various cadres of nurses who could not be trained on mental health but are assigned to patients with mental illnesses. Australia, for example, has developed national competencies for various cadres of nurses which guides training and evaluation of nurses working in different professional areas (Halcomb et al., 2018; The Australian College of Mental Health Nurses [ACMHN], 2020). Unlike these countries, Kenya does not have national competencies for general nurses providing care to mentally ill patients (Nursing Council of Kenya [NCK], 2012). Despite this lack of nationally prescribed competencies for general nurses, efforts have been made to equip these workers with the skills they need to fill the gap created by shortage of specialized psychiatric nurses (Jenkins et al., 2010). Jenkins et al have identified the necessary skills and proposed that short courses and Continuous professional development sessions be conducted to build the capacity of general nurses providing care to mentally challenged patients in Kenyan context.



Statement of the problem

Competency in service delivery is either real or perceived. Nurses' self-perceptions on their know-how to offer services influences their confidence; and ultimately the quality of patient care (Lim et al., 2020). However, there is shortage of literature on nurses' perceived competencies in psychiatric care in Kenya; and particularly in Loitoktok Sub-County Referral Hospital. This is a concern especially since shortage of specialized psychiatric nurses has made it inevitable to deploy general nurses to care for patients with mental illnesses (Jenkins et al., 2010). For example, anecdotal evidence from the records in the patient's files of seventy (70) psychiatric patients admitted at Loitokitok hospital between December 2018 and May 2019 revealed that; none of the patient had their full history and specifically psychiatric history taken on admission and neither baseline nor subsequent mental status assessment was done. Lack of adequate psychiatric assessment may lead to misdiagnosis and may result to frequent cases of relapses which may crudely imply suboptimal interventions. In the light of above evidence, there is a need to prepare the general nurses on psychiatric care which should be informed by the level of their competencies of which is currently not known. Therefore, the aim of this study was to assess nurses' self-evaluation of their competencies in the care of psychiatric patients at Loitokitok Sub County Hospital.

Study Purpose

To assess nurses' perception of their competencies in the provision of psychiatric care at Loitokitok Sub County Hospital

Study Objectives

- 1. To assess Loitokitok Sub-County Hospital nurses' perception of their competency in performing psychiatric assessment.
- 2. To evaluate Loitokitok Sub-County Hospital nurses' perception of their competency in therapeutic Communication in the provision of psychiatric care
- 3. To determine Loitokitok Sub-County Hospital nurses' perception of their competency to intervene in psychiatric care.
- 4. To determine whether there is an association between nurses' length of professional experience and perception of their competencies to provide psychiatric nursing care at Loitokitok Sub-County Hospital

2.0 LITERATURE REVIEW

2.1 Concept of competency: Meaning and measurement

The capacity of a nurse to work efficiently with a display of knowledge, skills, judgment and attitude necessary in a definite area of practice is deemed as competence (Eales et al., 2014; Garside & Nhemachena, 2013; Honeycutt et al., 2014; Jenkins et al., 2010; Levett-Jones et al., 2011). Therefore, psychiatric care competencies encompasses ability to perform psychiatric



assessment, use therapeutic communication and provide appropriate intervention to psychiatric patients (Hanrahan, 2009; Jenkins et al., 2010)

Competency in service delivery is either real or perceived. This study focused on the know-how as professed by nurses themselves. The self-evaluation is dynamic. Nurses can perceive themselves as inexperienced practitioners in one area and being expert in another aspect of a competency (Eales et al., 2014). Eales et al. contend that any instrument developed should be cognizant that performance may vary depending on conditions the nurse find themselves in. Attempts at developing tools measuring nurses' competencies have been made. Examples of these instruments are; Competency Inventory for Registered Nurse (CIRN) by (Liu et al, 2007) and Behavioral Health Care Competency (BHCC) suggested by (Rutledge et al, 2012).

2.2 Issues that influence self-competency evaluation

The perceived competence is subject to a number of issues.

Training

Evidence has shown that nurses with no psychiatric training perceive themselves as not being confident with their knowledge and skills in the assessment and intervention in psychiatric care (Sharrock & Happell, 2006). They have perceptions of inadequacy and fear especially when dealing with patients with self-inflicted harm (Appelbaum, 2007; Arvidsson, 2011; Sharrock & Happell, 2006;). The general nurses perceive they are inadequately trained and are not prepared to deal with patients with mental health disorders (Clark et al., 2005). The perception of lack of competencies by general nurses may result to inability to provide appropriate psychiatric care (Sharrock & Happell, 2006).

Nurses' experience and perceived competencies

Peplau (1988) argued that nurses develop skills and understanding of patient care over time through experience and proper educational background. Reed and Fitzgerald (2005) assert that over time, nurses gain adequate knowledge and skills; making them feel more competent in caring for clients with behavioral health needs. A different study by Casey et al (2004) echoes the above findings. In their study of graduate nurses' experiences, Casey et al. noted that nurses with less than a year of working experience felt incompetent, uncomfortable and anxious to offer care to patients. As a result, the research recommended an elaborate orientation program to enable graduate nurses transition to the work place. Pfaff et al. (2014) made similar observations and went further to suggest that if nurses are not helped to feel competent enough to provide care, patient safety may be compromised.

2.2 Empirical Literature on Psychiatric care competencies

Psychiatric assessment competencies in the provision of psychiatric care

Nurses are the health professionals in first line contact with people encountering mental illness and therefore have a key role in the identification of psychiatric health problems and subsequent care (Sharrock & Happell, 2006). They require doing psychiatric assessment to patients with medical diagnoses, evaluate any associated risk through the medical records and attend to family



members concerns (Nadler-Moodie, 2012). Mental status assessment (MSA), conducting a systematic assessment of the patients' mental functioning, is important in this regard. This is well within the duty of the nurse; which is to perform detailed and organized evaluation; and together with the healthcare team, patients and families create a plan of care and enforce documentation efficiently (Kelly, 2007).

Despite the benefits of MSA, nurses in most hospitals and clinics are yet to comprehend and implement the approach to solving patient's problems (Townsend, 2015). In as much as inadequate staff could be the issue, increased workload and inappropriate material for documentation could also be contributing to the general nurses' perception of lack of competency. It is also argued that most issues related to psychiatric care by nurses are mainly attributed to inappropriate interpersonal communication, feeling of inadequacy and professional dissatisfaction caused by skill deficits and knowledge gaps (Arnold & Mitchell, 2008). Additionally, the literature review reveals that general nurses feel that psychiatric evaluation and intervention of patients experiencing a mental illness is not within the area of their practice and is not part of a general nurse competencies (Appelbaum, 2007; Arvidsson et al., 2001; Sharrock & Happell, 2006). Moreover, self-confidence in ability to assess psychiatric clients is dependent on training and experience (Casey et al., 2004; Pfaff et al., 2014; Reed & Fitzgerald, 2005). And so, nurses providing psychiatric care should be well prepared in terms of appropriate education, competency and expertise to care for people with mental health disorders (Sadock et al., 2017; Sharrock & Happell, 2006).

Therapeutic communication competencies in the provision of psychiatric care

Central to psychiatric assessment, diagnosis, treatment and ultimately recovery are effective communication. Communication competency is having the capacity to choose a communication behavior that is both adequate and relevant for a given situation (Spitzberg & Cupach, 2012). Therapeutic communication competency allows both parties to achieve the intended communication goals while maintaining their self-image . It is the ability to interact well with others.

An investigation on the therapeutic skills of a mental health nurse by Fisher (2013) revealed that physical and psychiatric evaluation skills were the most effective skills for psychiatric care. He continues to say that nurses communicate to patients using various channels to ensure that appropriate information get to all those involved in the patient's care. Effective communication and counseling skills is a competency that empowers therapeutic relationship with clients and thus a recovery oriented approach. According to Bartlett et al (2008), hospitalized patients with psychiatric disorders were more than twice as probable as those without psychiatric disorders to have a preventable unfavorable incident originating from a communication problem.

A number of issues affect therapeutic communication. It is argued that attitude towards psychiatric patients hamper communication which has a negative impact on care (Gebbie & Qureshi, 2002). Reed and Fitzgerald (2005) in a study in a general hospital to assess the feeling of nurses toward caring for patients with both physical and mental illnesses recommended that



continuous education and supportive environment towards nurses offering mental care is necessary in improving care for psychiatric patients. Likewise it has been concluded that where there is a positive therapeutic communication between a healthcare provider and a patient, the patient is able to handle a long standing medical illness effectively and be able to prevent complications (Jeffreys, 2010). In particular, patients are often contented with services where health providers share information promptly, and are empathetic to patients (Spitzberg & Cupach, 2012). Effective communication skills like any other health care procedure can be learned and improved but it requires commitment and practice (Gilje et al., 2007).

Interventions in psychiatric care

Interventions competency entails all those actions that aim at restoring, promoting and enhancing a sense of well-being in a psychiatric patient (Binder & Wechsler, 2010). Nurses' interventions should try to avoid upsetting patients. They should ensure that they reduce the likelihood of environmental stimuli that lead to patient agitation and violent behaviors (Palmu et al., 2010). In that regard, maintaining a calm activity level, using a nonjudgmental voice to talk to the patient, as well as verbal de-escalation are some of the skills used to abate behavioral upsets to the patients (Knox & Holloman, 2012; Nordstrom et al., 2012; Strout, 2010).

However, a study by Clarke et al (2005) revealed that psychiatric patients had a feeling that staff working in the emergency department did not have appropriate knowledge regarding mental health. In addition, the patients felt that their complaints were not regarded as valid but were just labeled and assessed as psychiatric patients. On the side of the service provider a study by Spence et al. (2008) revealed that Staff caring for psychiatric patients felt frustrated and perceived caring for them as stressful. Similar findings were established by Rutledge et al. (2013) in a study that focused on nurses' self-evaluation of their competency to care for psychiatric clients. The study reported that most nurses felt more confident in assessment of patient rather than managing patients requiring de-escalation techniques or crisis communication.

2.3 Theoretical Foundations: Peplau's Theory of Interpersonal relation

This research is anchored on Theory of Interpersonal relation by Peplau (1988). In her 1952 theory, Hildegard Peplau made four assumptions regarding patient nurse-relationships: 1) patients and nurses must interact; 2) the therapeutic interaction provides an opportunity for such a relationship to mature; 3) nurses must exploit communication skills in nurturing this relationship; and 4) nurses ought to be self-aware so that their values do not limit the clients' choices and behaviors (Peplau, 1988).

Peplau posited that successful therapeutic relationships grow through three overlapping phases: Orientation, working, and termination stages. During the orientation phase, the patient demonstrates help-seeking behavior, and attempts to seek assistance from qualified persons (Senn, 2013). The patient and nurses cultivate trusting relationships. The nurse gathers information about the patient, creates an initial impression of clients' needs, interests, experiences and fears. In the course of the working phase, the nurses characteristically deploy their knowledge, skills and time to solve patients' problems. The nurses should be consistent and



provide unconditional positive regard throughout the interaction. The patient should progressively become independent with personal care. The interaction ends at the termination phase. According to Peplau, the parties disengage from the nurse patient relationship. In particular, nurses appraise patients with the discharge plan. In addition, nurses help patients draw a plan towards self-reliance.

Nurses actions are guided by interpersonal principles envisaged by Peplau's theory. In this study, therapeutic communication was key. The study explored how this skill was deployed during patient care. The emphasis was how the nurse chose to communicate during various activities of patient care; namely psychiatric assessment, diagnosis and treatment. Communication competency is having the capacity to choose a communication behavior that is both adequate and relevant for a given situation (Spitzberg & Cupach, 2012). According to Peplau, as nurses mature in their profession and interactions, communication improves.

Gaps identified

From the foregoing literature review there are a limited number of researches carried out on competency of non-specialized nurses especially in providing direct psychiatric care; that is Psychiatric assessment, communication and intervention. Additionally, there is no documented research on the nurses' competence and psychiatric care in Kenya. This is the gap this study intends to fill.



2.4 Conceptual framework

Figure 1: Conceptual Framework



3.0 METHODS

Research Design

This study adapted quantitative cross-sectional survey. The data was collected to describe the nurses' perceptions of their competencies at the said time of data collection. The data was self-reported since individuals were asked to respond to questions posed to them. The choice of quantitative design was informed by the desire to describe and quantify the perceived psychiatric competencies among nurses.



Target population

This is the population with the basic attributes of interest in a study, and to which the findings may be generalized. In this study, target population was general nurses at Loitokitok Sub County Hospital currently totaling to 51 nurses.

Sample size and sample sampling procedures.

This was a census survey of all the study participants. Census entails studying all the individuals in the target population (Polit & Beck, 2012). Study population was all the 41 nurses in five (5) selected departments where nurses provide direct care to psychiatric patients. Out Patient Emergency Department had 6 nurses, Maternity department had 14 nurses, Female ward 7 nurses, Male ward 7 nurses and Pediatric ward 7 nurses totaling to 41 nurses. O'Leary, (2017) suggests that for a minimum statistical analysis, a sample of 30 may be sufficient. Thirty (30) is a boundary between small and large samples. All the 41 nurses were accessed during their various shifts within the duration of data collection. This is because all nurses had been recalled from annual leave due to the Covid-19 pandemic.

Data collection instrument

A previously validated Behavioral Health Care Competency (BHCC) assessment tool (Rutledge et al., 2012) with slight modification was adopted because of its ability to answer the research questions. Permission to use the tool was requested in writing although no response was obtained. Besides the demographics data, the final tool had (3) subscales: assessment, therapeutic communication, and interventions. The subscales had a total of 23 items that used a five point Likert-type scale requiring responses from 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree and 1 = strongly disagree which was designed to be easy and quick for respondents to complete (Kothari & Garg, 2014; Rutledge et al., 2012; Saunders et al., 2011).

Data collection procedure

A self-administered structured questionnaire was used to collect data. It was delivered directly to the respondents by the researcher together with an introduction letter (Appendix 1). The study was explained and consent acquired from the respondents (Appendix II). The filled questionnaires were then collected and checked for completeness at the point of collection to increase the response rate. For easy entry of data, the questionnaires were affixed serial numbers. The questionnaire items were coded appropriately which enabled the collected data to be entered into the SPSS spreadsheets.

Data Analysis and Management

The raw data was cleaned and edited to enable analysis. The coded data was entered into the computer and analyzed using IBM package for Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics that were derived from the demographic data as well as the competencies of interest were the mean, frequency and percentages. The data was further subjected to chi-square test and Fisher's exact test, which are inferential statistics, to establish the association between the dependent variable 'psychiatric care' and demographic factors



particularly personal experience in years worked in nursing. All statistical tests of significance were set at 95% Confidence level, which is widely acknowledged as conventional (Polit & Beck, 2012). The quantitative results were presented using tables and figures

An average score of 3 or less in each subscale denoted 'low ability' and if greater than 3 denoted 'high ability'. This in essence dichotomized each perceived competency 'low ability' or 'high ability'. In the same way, at individual item level, a score of \leq 3 denoted 'low' and if more than 3 denoted 'high'. The average score in the three competencies provided the overall ability to provide psychiatric care. The criteria were also used to dichotomize perceived ability to provide psychiatric care into high and low.

4.0 RESULTS

4.1 Demographic characteristics of the respondents

Table 1 summarizes the demographic features of the nurses who participated in this study. Majority of nurses 34.1% (n=14) were from maternity department. Outpatient was least represented with 14.6% (n=6). Regarding working experience, 68.3% (n=28) had been working for more than 5 years while 31.7% (n=13) had worked for 5 years and below. On gender aspect, female nurses were the majority (63.4%, n=26). Concerning qualification, the greatest number of nurses, 75.6% (n=31) had attained diploma in nursing.

Characteristics	Demographics	Frequency	Percentage
Department/ward	Maternity	14	34.1
	Female	7	17.1
	Male	7	17.1
	Pediatrics	7	17.1
	Outpatient	6	14.6
	Total	41	100.0
Working experience (years)	0-4	13	31.7
	5-10	6	14.6
	11-20	11	26.8
	21-30	10	24.4
	30 and above	1	2.4
	Total	41	100.0
Gender	Male	15	36.6
	Female	26	63.4
	Total	41	100.0
Professional training level	Registered nurse	31	75.6
_	Enrolled nurse	9	22.0
	BScN nurse	1	2.4
	Total	41	100.0

Table 1: Demographic characteristics of the respondents



4.2 Nurses' perception of their psychiatric assessment competence

Figure 2 shows the overall Self-evaluation on Psychiatric Assessment Competency. In summary, 90.2% (n=37) strongly perceived they could conduct psychiatric assessment, compared to 9.8% (n=4) who thought otherwise.



Figure 2 : Self-perception on ability for psychiatric assessment

Table 2 shows the responses for each item in the Psychiatric Assessment Competency subscale. As shown in the table, most nurses had strong perceptions that they could comfortably assess the patient in the various areas that were presented to them. However, at individual item level most nurses 63.4% (n=26) had weak perception of their ability to distinguish between dementia and delirium.



Table 2: Self-evaluation on psychiatric assessment competency

Self-evaluation on Psychiatric Assessment Competency Items	score	Frequency	Percentage
B1 I can assess patients for potential psychiatric problems.	Low	4	9.8
	High	37	90.2
	Total	41	100.0
B2 I identify signs and symptoms of common psychiatric	Low	9	22.0
conditions (e.g., depression, schizophrenia, bipolar disorder).	High	32	78.0
	Total	41	100.0
B3 I can identify common neuroleptic, tranquilizers, and	Low	14	34.1
antidepressant medications used with psychiatric patients.	High	27	65.9
	Total	41	100.0
B4 I am able to assess patients for risk of suicide (suicidality).	Low	11	26.8
	High	30	73.2
	Total	41	100.0
B5 I recognize behaviors that indicate a patient may have	Low	6	14.6
alcohol or drug abuse problems.	High	35	85.4
	Total	41	100.0
B6 I can recognize signs and symptoms of alcohol	Low	10	24.4
withdrawal.	High	31	75.6
	Total	41	100.0
B7 I can recognize signs and symptoms of drug withdrawal.	Low	17	41.5
	High	24	58.5
	Total	41	100.0
B8 I can distinguish between dementia and delirium.	Low	26	63.4
	High	15	36.6
	Total	41	100.0
B9 I can recognize the warning signs in patients whose	Low	13	31.7
behavior may escalate to aggression or dangerous behaviors.	High	28	68.3
	Total	41	100.0
	Low	4	9.8
Overall self-evaluation	High	37	90.2
	Total	41	100.0

4.3 Self-evaluation on ability to communicate

As shown in figure 3, overall, most nurses 95.1% (n=39) strongly perceived themselves having the ability to communicate effectively in all aspects of psychiatric care. Only 4.9% (n=7) felt incapable of communicating effectively.



■ High ■ Low 95.10% 17.10% High Low

On the individual items level (Table 3), most nurses had strong perception of ability to communicate in the care of psychiatric patients. However, 51.2% (n=21) had weak perception on the ability to use crisis communication and de-escalation techniques to distract aggressive behaviors, most of them 97.6% (n=40) called for outside resources when they perceived that the

patients' behavior was beyond their ability to handle. Most 90.2% (n=37) had strong positive

feelings that they knew when and where to ask for outside help when they needed it.

Table 3: Self-evaluation on communication competence
--

Self-evaluation on communication competency Items	Score	Frequency	Percentage
C1 I am able to maintain a therapeutic relationship with most patients on my unit who have psychiatric issues.		15	36.6
		26	63.4
	Total	41	100.0
C2 I can recognize and accurately interpret the patient's implicit communication by listening to verbal cues and observing non-		12	29.3
		29	70.7
verbal behaviors.	Total	41	100.0
C3 I am able to use de-escalation techniques and crisis		21	51.2
communication to avert aggressive behaviors.	High	20	48.8
		41	100.0
C4 I know when to ask for outside help (e.g., physician,	Low	4	9.8
psychiatric nurse, other) for a patient with psychiatric issues or	High	37	90.2
dangerous behaviors.		41	100.0
C5 I call for outside resources (e.g., physician, psychiatric nurse, other) when I recognize a patient's behaviors are escalating beyond my capabilities.		1	2.4
		40	97.6
		41	100.0
C6 I can effectively manage conflicts caused by patients who have mental problems	Low	20	48.8
	High	21	51.2
	Total	41	100.0
Overall self-evaluation	Low	2	4.9
		39	95.1
	Total	41	100.0

Figure 3: Overall self-evaluation on communication competency



4.4 Self-evaluation on intervention competency

The performance at individual items level is shown in Table 4. The table shows that overall, 58.5% (n=24) of nurses were confident of their ability to initiate appropriate intervention in patient for instance having hallucinations. Most 65.9% (n=27) nurses felt they had no confidence to recommend psychotropic drugs to physician for use in psychiatric patient. Many nurses 56.1% (n=23) claimed that they spent equal amount of time caring for psychiatric patients as they did for other patients. However, nurses scored highly (73.2%) in the area of maintaining safe environment for aggressive patients in the department. About one half of the nurses were positive concerning availability of hospital resources and help when needed to deal with patients with mental issues.

Self-evaluation on interventions competency items Frequency(n) Percentage Score 19 D1 I can initiate appropriate nursing interventions for common Low 46.3 22 psychiatric issues such as depression, bipolar disorder, and High 53.7 41 100.0 psychosis. Total D2 I can effectively intervene with a patient having Low 18 43.9 hallucinations. High 23 56.1 Total 100.0 41 D3 I am confident that I can recommend use of psychotropic 27 65.9 Low drugs to physicians for appropriate patients. High 14 34.1 Total 41 100.0 D4 I recommend psychotropic drugs to physicians for Low 26 63.4 psychiatric patients. High 15 36.6 100.0 Total 41 D5 I am able to maintain a safe environment for patients in the Low 11 26.8 30 ward who are aggressive High 73.2 100.0 Total 41 D6 I plan for more time to take care of patients with psychiatric Low 23 56.1 issues compared with my other patients. High 18 43.9 Total 100.0 41 D7 I am confident that help is available to me when I need Low 18 43.9 assistance with patients who have comorbid behavioral or High 23 56.1 psychiatric issues. Total 41 100.0 D8 Hospital resources are available to me when I need assistance Low 20 48.8 with behavioral health, psychiatric issues, or substance abuse High 21 51.2 issues. Total 41 100.0 **Overall self-evaluation** Low 41.5 17 High 24 58.5 Total 41 100.0

Table 4: Self-evaluation on interventions competency

4.5 The association between the independent variables and provision of psychiatric care

According to Table 5, most nurses 87.8% (n=36) had strong perceived competency in provision of psychiatric care especially in the area of therapeutic communication. Among the nurses who



had perceived competency in psychiatric care, 63.2% (n=12) were female, and 36.8% (n=7) were male. This variation was not significant ($\chi 2$ =0.114 df=1 p=0.735). Among the nurses who felt competent to provide psychiatric care, 73.7% (n=14) were diploma holders in nursing, while those with other qualifications accounted for 26.3% (n=10). The perceived competency did not significantly differ across the nurses' qualifications, LR (2, N=41) = 4.116, P=0.114) neither did it significantly vary from one department to another, LR (4, N=41) = 4.079, P=0.395). However, the study revealed significant variation in perceived competency across the various years of experience LR (4, N=41) =15.985, **P=0.003**). Moreover, the perceived competency in conducting psychiatric assessment had a significant influence on the ability to provide psychiatric care, Fisher's Exact=**0.000**. Likewise, the perceived intervention competency had an influence on the ability to provide care, Fisher's Exact=0.008. However, there was no relationship between perceived communication competency and ability to provide psychiatric care, Fisher's Exact=0.232.

		Self-perception on ability to provide psychiatric care						
Variable		Low		High		_	Significant	at
		n	%	n	%	Ν	<i>p</i> ≤0.05	
Gender	Male	2	40	13	36.1	15	Fisher's	
	Female	3	60	23	63.9	26	Exact=1.000	
	n	5	100	36	100	41		
Qualifications of nurses	RNs	2	40	29	80.6	31	LR=4.116	
	EN	3	60	6	16.7	9	df=2	
	BScN	0	0	1	2.8	1	p=0.114	
	n	5	100	36	100	41		
	Mat	1	20	13	36.1	14	LR=4.079	
	Fem	0	0	7	19.4	7	df=4	
Department	Male	1	20	6	16.7	7	p=0.395	
	Peds	1	20	6	16.7	7		
	OPD	2	40	4	11.1	6		
	Total	5	100	36	100	41		
	0-4	0	0	13	36.1	13	LR=15.985	
	5-10	0	0	6	16.7	6	df=4	
Years of Experience	11-20	4	80	7	19.4	11	p=0.003	
	21-30	0	0	10	27.8	10		
	>30	1	20	0	2.4	1		
	Total	5	100	36	100	41		
Perceived Psychiatric	Low	4	80	0	0	36	Fisher's Exact	
assessment Competency	High	1	20	36	100	41	p=0.000	
	n	5	100	36	100	41		
Perceived	Low	1	20	1	2.8	2	Fisher's Exact	
Communication	High	4	80	35	97.2	39	p=0.232	
competency	n	5	100	36	100	41		
Perceived intervention	Low	5	100	12	33.3	17	Fisher's Exact	
competency	High	0	0	24	66.7	24	p=0.008	
	n	5	100	36	100	41		

Table 5: Cross tabulation independent	t variables v Perceived	l ability to provid	le psychiatric care
\mathbf{r}		· · · · · · · · · · · · · · · · · · ·	I V V V V V V V V V V



4.6 Discussion

When demographic variables (namely gender, years of experience, and the nurses' qualification) were cross-tabulated with self-perception on ability to provide psychiatric care, only the nurses' years of experience were significant. In particular, nurses with less than 4 years' experience in nursing practice were more confident of their psychiatric competencies than their senior counterparts. These findings contradict Reed and Fitzgerald (2005)'s assertion that experienced nurses have gained knowledge and skills over time that make them feel more competent in caring for clients with behavioral health need, as compared to their less experienced counterparts. Perhaps younger nurses have the benefit of learning mental health content in the latest revisions of nursing curricula, which may have not been there when their senior colleagues were in training.

The overall score which was achieved by combining the scores from all the perceived competencies studied revealed that nurses were highly confident of their competencies in providing psychiatric care. These findings are in tandem with another study of self-evaluation where nurses rated their overall nursing competencies as good and very good (Heydari et al., 2016). The study revealed varying perceptions across the competencies. For instance, most nurses scored highly in communication subscale but low in the intervention subscale. This concurs with the findings of Eales et al. (2014) which revealed that nurses may perceive themselves as inexperienced practitioner in one area and an expert another dimension of practice.

The study revealed that nurses were highly confident of their psychiatric assessment competencies. The confidence may have accrued over time as they routinely assess, diagnose, intervene and communicate to relevant stakeholders on matters touching on the patients (Nadler-Moodie, 2012). Snowden (2012) in the study on the construction of competence in mental health nursing holds that during practice, nurse prescribers construct competence through an interactive process of owning and demonstrating competence. Similarly, experience, adequate practice and training has been shown to shape the nurses' self-confidence to provide care (Sullivan, 2012). However, lack of knowledge on some dimensions of the assessment was evident. This concurs with findings in a qualitative study in another setting (Agar et al., 2012) which revealed nurses' lack knowledge and ability to assess and manage patients with delirium effectively. Other studies have also reported that nurses have difficulties in identifying psychiatric illnesses from medical conditions, because some disorders have unclear symptoms (Kelley et al., 2008; Zieschang, 2005).

Nurses scored highly on perceived ability to communicate effectively in the provision of psychiatric care. One of the reasons for the high levels of the perceived competency in therapeutic communication could be explained by the nature of nursing work and training. Therapeutic communication is among the professional skills frequently highlighted in nursing educational courses and at the work place (Cherry & Jacob, 2016; Miles et al., 2014). However, despite the fact that majority could interpret the patient's implicit communication by listening to verbal cues and observing non-verbal behaviors, they felt inadequate when required to use de-escalation techniques and crisis communication to avert aggressive behaviors. These findings are



in conformity with those of Rutledge (2013), which showed that hospital nurses were more confident in their ability to assess patients than in initiating interventions or acting in situations that may require de-escalation techniques or crisis communication. This study also observed a tendency among most nurses to seek outside help when they encounter psychiatric issues or when patient's behaviors escalate beyond their capabilities. The high score of seeking outside help could be interpreted as avoidance by nurses to attend to psychiatric patients. These findings concur with the report by Reed and Fitzgerald (2005) that says avoidance of psychiatric patient is the greatest influence on nurses' attitudes.

The findings on the intervention competence were mixed. Most respondents stated that they were able to initiate interventions for common psychiatric issues or provide safe environment for clients. On the contrary, the study showed that nurses were not confident in recommending use of psychotropic drugs to physicians for appropriate patients. This is consistent with the findings of a study by Arvidsson (2011) which revealed that general nurses had a feeling of inadequacy in terms of knowledge and skills in assessment and management of mental health problems. This was contrary to the findings of Schleifer (2011) which stated that nurses need to provide care in collaboration with physicians to identify and recommend needed medication. This could only mean that although most nurses perceived that they could identify signs and symptoms of common psychiatric conditions and identify common medications used with psychiatric patients, they were not confident enough to recommend psychotropic medication to physician to use on the patients. In addition, most nurses claimed that they didn't take much time caring for psychiatric patients as they did for other patients. This contradicts past findings in which nurses were more inclined to spend more time when caring for a patient with mental illnesses, relative to those with other conditions (Kluit et al., 2013).

The study also investigated the influence of various variables on the perceived ability to provide psychiatric care. The nurses' perceived ability to provide psychiatric care did not significantly vary across departments. This contradicts the study by Rutledge, et al, (2012) which revealed that general nurses who worked at the emergency care units and were trained in psychiatric assessment, had strong perceived intervention competency and felt prepared to provide psychiatric care. The study observed significant variation in ability to provide care across the years of experience. Nurses who had worked for less than 11 years were more likely to feel confident of their competency in the provision of psychiatric care. These findings could probably be explained by the fact that, newly graduated nurses could recall the basic psychiatric education which was acquired during their training. This contradict the findings earlier which reported that newly graduated nurses were less confident of their clinical competency (Hengstberger-Sims et al., 2008; Morolong & Chabeli, 2005).

Further, nurses' perceived competency in conducting psychiatric assessment and the perceived intervention competency had an influence on the ability to provide care. However, there was no relationship between perceived communication competency and ability to provide psychiatric care. This contradicts the established practice that emphasizes on effective communication in all aspects of patient care (Cherry & Jacob, 2016; Miles et al., 2014).



5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

The study revealed varying perceptions across the competencies. Most nurses had a strong perceived competency in provision of psychiatric care especially in the area of therapeutic communication. In particular, most nurses were uncomfortable in recognizing withdrawal symptoms, and were unable to properly de-escalate when clients are aggressive. Additionally, the perceived psychiatric care competency did not significantly differ across the nurses' qualifications. However, the study revealed significant variation in perceived competency across the various years of experience. Specifically, the study revealed that nurses who have less than 5 years' working experience had higher confidence levels in providing psychiatric care as compared to their older counterparts. Moreover, the perceived competency in conducting psychiatric assessment had a significant influence on the ability to provide psychiatric care negatively. Likewise, the perceived intervention competency had an influence on the ability to provide care.

5.2 Recommendation

The Loitokitok Sub-County Hospital nursing administration should have regular assessment of nurses' competencies; forming basis for need based capacity building through such strategies as short-courses and Continuous Development programs (CPDs). Specifically, the hospital should ensure that priority is given to nurses with more than four years, in order to build their confidence levels in psychiatric care.

There should be deliberate efforts by individual nurses and the hospital to address challenges that make it difficult to seek assistance, for example when they are not able to de-escalate a patient with aggressive behaviors. Perhaps there needs to channels within the hospital that allow seeking peer-to-peer assistance from colleagues who could be anonymous, online or those who do not have supervisory control over the staff seeking help.

5.3 Areas for further research

This study should be treated as an exploratory enquiry as a result of which the following recommendations on future studies are offered: 1) Investigate actual competencies of nurses' working in a mental hospital; 2) Scrutinize nurses' competencies across all the counties so that there can be a national perspective; 3) Explore reasons why nurses who may be feeling inadequate on certain competencies are unwilling to seek assistance; and 4) A broad based survey on this topic, comprising of larger sample size, should be deployed in collecting quantitative and qualitative data before policy interventions are undertaken.

REFERENCES

Agar, M., Draper, B., Phillips, P. A., Phillips, J., Collier, A., Harlum, J., & Currow, D. (2012). Making decisions about delirium: A qualitative comparison of decision making between



nurses working in palliative care, aged care, aged care psychiatry, and oncology. *Palliative Medicine*, 26(7), 887–896. sagepub.co.uk/journalsPermissions.nav http://doi: 10.1177/0269216311419884 pmj.sagepub.com

- Appelbaum, P. S. (2007). Assessment of Patients' Competence to Consent to Treatment. N Engl J Med, 357, 1834–1840. *American journal of Bioethics* .http://www.columbiapsychiatry.org
- Arnold, M., & Mitchell, T. (2008). Nurses' Perceptions of Care Received by Older People with Mental Health Issues in an Acute Hospital Environment. *Nursing Older People*, 20(10), 28–34http://www.journals.rcni.com.
- Arvidsson, B., Löfgren, H., & Fridlund, B. (2001). Psychiatric nurses' conceptions of how a group supervision programme in nursing care influences their professional competence: A 4-year follow-up study. *Journal of Nursing Management*, 9(3), 161–171. http://doi.org.1046/j.1365-2834.2001.00220.x
- Bartlett, G., Blais, R., Tamblyn, R., Clermont, R. J., & MacGibbon, B. (2008). Impact of patient communication problems on the risk of preventable adverse events in acute care settings. 3:178(12):1555-62.http://doi 10.1503/Cmaj.070690.PMID: 18519903;PMCID; PMC2396356.
- Binder, J. L., & Wechsler, F. S. (2010). The intervention competency. In Competency-based education for professional psychology. In M.B.Kenkei & R.L Peterson (Eds) (pp. 105– 123). American Psychological Association. https://doi.org/10.1037/12068-006
- Casey, K., Fink, R. R., Krugman, A. M., & Propst, F. J. (2004). The Graduate Nurse Experience. JONA: *The Journal of Nursing Administration*, 34(6), 303–311. http://doi:10. 10997/00005110-200406000.00010
- Cherry, B., & Jacob, S. R. (2016). Contemporary Nursing: Issues, Trends, & Management. Elsevier Health Sciences.
- Clark, C., Parker, E., & Gould, T. (2005). Rural generalist nurses' perceptions of the effectiveness of their therapeutic interventions for patients with mental illness. *Australian Journal of Rural Health*, 13(4), 205–213.http://www.onlinelibrary.wiley.com
- Clarke, D. E., Hughes, L., Brown, A.-M., & Motluk, L. (2005). Psychiatric Emergency Nurses in the Emergency Department: The Success of the Winnipeg, Canada Experience. *Journal* of Emergency Nursing, 31(4), 351–356. https://doi.org/10.1016/j.jen.2005.03.008
- Eales, S., Wilson, N., & Waghorn, J. (2014). A competence framework for liaison mental health nursing.(Unpublished)http://www.eprints.bournemouth.ac.uk
- Fisher, J. E. (2013). The use of psychological therapies by mental health nurses in Australia. *Journals of Psychiatric and mental Health Nursing/volume21,issue 3* /p.264/270.https://doi.org/10.1111/jpm.12079.
- Garside, J. R., & Nhemachena, J. Z. (2013). A concept analysis of competence and its transition in nursing. *Nurse Education Today*, 33(5), 541–545. http://DOI: 10.1016/j.nedt.2011.12.007



- Gebbie, K. M., & Qureshi, K. (2002). Emergency and Disaster Preparedness: Core Competencies for Nurses: What every nurse should but may not know. *American Journal of Nursing*, 102(1), 46–51. https://doi.org/10.1097/00000446-200201000-00023
- Gilje, F. L., Klose, P. M. E., & Birger, J. (2007). Critical Clinical Competencies in Undergraduate Psychiatric-Mental Health Nursing. *Journal of Nursing Education*, 46(11), 522–526. https://doi.org/10.3928/01484834-20071101-08
- Halcomb, E. J., McInnes, S., Moxham, L., & Patterson, C. (2018). Mental Health Practice Standards for Nurses in Australian General Practice. http://www.ro.uow.edu.au >uowbooks.
- Hanrahan, N. P. (2009). Analysis of the Psychiatric-Mental Health Nurse Workforce in the United States. *Journal of Psychosocial Nursing and Mental Health Services*, 47(5), 34– 42. https://doi.org/10.3928/02793695-20090331-01
- Hengstberger-Sims, C., Cowin, L. S., Eagar, S. C., Gregory, L., Andrew, S., & Rolley, J. (2008). Relating new graduate nurse competence to frequency of use. *Collegian (Royal College of Nursing, Australia)*, 15(2), 69–76. https://doi.org/10.1016/j.colegn.2008.02.003
- Heydari, A., Kareshki, H., & Armat, M. R. (2016). Is Nurses' Professional Competence Related to Their Personality and Emotional Intelligence? A Cross-Sectional Study. *Journal of Caring Sciences*, 5(2), 121–132. https://doi.org/10.15171/jcs.2016.013
- Honeycutt, J. M., Sawyer, C. R., & Keaton, S. (Eds.). (2014). The Influence of Communication on Physiology and Health. Peter Lang US. https://doi.org/10.3726/978-1-4539-1316-1
- Jeffreys, M. R. (2010). Teaching cultural competence in nursing and health care: Inquiry, action, and innovation. *Springer Pub. Co.* http://site.ebrary.com/id/10555895
- Jenkins, R., Kiima, D., Njenga, F., Okonji, M., Kingora, J., Kathuku, D., & Lock, S. (2010). Integration of mental health into primary care in Kenya. World Psychiatry, 9(2), 118– 120. http://doi:10.1002/j.2051-5545.2010.tb00289.x. PMID:20671901;PMCID:PMC2911092
- Kabir, Z. N., & Herlitz, A. (2000). The Bangla Adaptation of Mini-mental State Examination (BAMSE): An instrument to assess cognitive function in illiterate and literate individuals. *International Journal of Geriatric Psychiatry*, 15(5), 441–450. https://doi.org/10.1002/(SICI)1099-1166(200005)15:5<441::AID-GPS142>3.0.CO;2-O
- Kelley, A. S., Siegler, E. L., & Reid, M. C. (2008). Pitfalls and Recommendations Regarding the Management of Acute Pain Among Hospitalized Patients with Dementia: Table 1. *Pain Medicine*, 9(5), 581–586. https://doi.org/10.1111/j.1526-4637.2008.00472.x
- Kelly, C. (2007). Student's perceptions of effective clinical teaching revisited. Nurse Education Today, 27(8), 885–892. https://doi.org/10.1016/j.nedt.2006.12.005
- Kluit, M. J. van der, Goossens, P. J. J., & Leeuw, J. R. J. de. (2013). Attitude Disentangled: A Cross-Sectional Study into the Factors Underlying Attitudes of Nurses in Dutch Rehabilitation Centers toward Patients with Comorbid Mental Illness. *Issues in Mental Health Nursing*, 34(2), 124–132. https://doi.org/10.3109/01612840.2012.733906
- Knox, D., & Holloman, G. (2012). Use and Avoidance of Seclusion and Restraint: Consensus Statement of the American Association for Emergency Psychiatry Project BETA



Seclusion and Restraint Workgroup. Western Journal of Emergency Medicine, 13(1), 35–40. https://doi.org/10.5811/westjem.2011.9.6867

- Levett-Jones, T., Gersbach, J., Arthur, C., & Roche, J. (2011). Implementing a clinical competency assessment model that promotes critical reflection and ensures nursing graduates' readiness for professional practice. *Nurse Education in Practice*, 11(1), 64–69. https://doi.org/10.1016/j.nepr.2010.07.004
- Lim, M. A., Huang, I., Yonas, E., Vania, R., & Pranata, R. (2020). A wave of non-communicable diseases following the COVID-19 pandemic. Diabetes & Metabolic Syndrome, 14(5), 979–980. https://doi.org/10.1016/j.dsx.2020.06.050
- Miles, L. W., Mabey, L., Leggett, S., & Stansfield, K. (2014). Teaching communication and therapeutic relationship skills to baccalaureate nursing students: A peer mentorship simulation approach. *Journal of Psychosocial Nursing and Mental Health Services*, 52(10), 34–41. http://doi: 10.3928/02793695/20140829/01. PMID25207556.
- Morolong, B. G., & Chabeli, M. M. (2005). Competence of newly qualified registered nurses from a nursing college. *Curationis*, 28(2), 38–50. https://doi.org/10.4102/curationis.v28i2.944
- Nadler-Moodie, m. (2012). Psychiatric emergencies in med-surg patients: Are you prepared? *American Nurse*. https://www.myamericannurse.com/psychiatric-emergencies-in-medsurg-patients-are-you-prepared-3/
- Nordstrom, K., Zun, L., Wilson, M., Stiebel, V., Ng, A., Bregman, B., & Anderson, E. (2012). Medical Evaluation and Triage of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Project BETA Medical Evaluation Workgroup. Western Journal of Emergency Medicine, 13(1), 3–10. https://doi.org/10.5811/westjem.2011.9.6863
- Nursing Council of Kenya [NCK]. (2012). Scope of Nursing Practice for Nurses in Kenya. Author.
- Palmu, R., Suominen, K., Vuola, J., & Isometsä, E. (2010). Mental disorders among acute burn patients. Burns, 36(7), 1072–1079. https://doi.org/10.1016/j.burns.2010.04.004
- Patzel, B., Ellinger, P., & Hamera, E. (2007). Tomorrow's Psychiatric Nurses: Where Are We Today in Providing Students' Clinical Experiences? *Journal of the American Psychiatric Nurses Association*, 13(1), 53–60. https://doi.org/10.1177/1078390307301737
- Peplau, H. E. (1988). Interpersonal Relations in Nursing. Macmillan Education UK. https://doi.org/10.1007/978-1-349-10109-2
- Pfaff, K. A., Baxter, P. E., Jack, S. M., & Ploeg, J. (2014). Exploring new graduate nurse confidence in interprofessional collaboration: A mixed methods study. *International Journal of Nursing Studies*, 51(8), 1142–1152. https://doi.org/10.1016/j.ijnurstu.2014.01.001
- Reed, & Fitzgerald, L. (2005). The mixed attitudes of nurse's to caring for people with mental illness in a rural general hospital. *International Journal of Mental Health Nursing*, 14(4), 249–257.doi 10.1111/j.1440-0979.2005.00389.x.PMID:16296992



- Rutledge, D. N., Wickman, M., Drake, D., Winokur, E., & Loucks, J. (2012). Instrument validation: Hospital nurse perceptions of their Behavioral Health Care Competency: Hospital nurse Behavioral Health Care Competency. *Journal of Advanced Nursing*, 68(12), 2756–2765. https://doi.org/10.1111/j.1365-2648.2012.06025.x
- Rutledge, D. N., Wickman, M. E., Cacciata, M., Winokur, E. J., Loucks, J., & Drake, D. (2013). Hospital staff nurse perceptions of competency to care for patients with psychiatric or behavioral health concerns. *Journal for Nurses in Professional Development*, 29(5), 255– 262.doi 10.1097/01.NND.0000433150.18384.1c. PMID: 24060662
- Sadock, B. J., Sadock, V. A., & Ruiz, P. (Eds.). (2017). Kaplan & Sadock's comprehensive textbook of psychiatry (10th edition). Wolters Kluwer.
- Schleifer, J. J. (2011). Management of acute agitation in psychosis: An evidence-based approach in the USA. Advances in Psychiatric Treatment, 17(2), 91–100. https://doi.org/10.1192/apt.bp.109.007310
- Senn, J. F. (2013). Peplau's Theory of Interpersonal Relations: Application in Emergency and Rural Nursing. *Nursing Science Quarterly*, 26(1), 31–35. https://doi.org/10.1177/0894318412466744
- Sharrock, J., & Happell, B. (2006). Competence in providing mental health care: A grounded theory analysis of nurses' experiences. *The Australian Journal of Advanced Nursing:* a quarterly publication of the Royal Australian Nursing Federation 24(2), 9.https://www.researhgate.net/publisher
- Snowden, A. W. A. (2012). The construction of competence in mental health nurse prescribing [PhD Thesis]. University of the West of Scotland. UK. https://ethos.bl.uk/OrderDetails.do?uin =uk.bl.ethos.544373.
- Spence, J. M., Bergmans, Y., Strike, C., Links, P. S., Ball, J. S., Rhodes, A. E., Watson, W. J., Eynan, R., & Rufo, C. (2008). Experiences of substance-using suicidal males who present frequently to the emergency department. *Canadian Journal of Emergency Medicine*, 10(4), 339–346. onlinelibrary.wiley.com>pmh.2
- Spitzberg, B. H., & Cupach, W. R. (2012). Handbook of interpersonal competence research. Springer Science & Business Media.
- Strout, T. D. (2010). Perspectives on the experience of being physically restrained: An integrative review of the qualitative literature. *International Journal of Mental Health Nursing*, 19(6), 416–427. https://doi.org/10.1111/j.1447-0349.2010.00694.x
- Sullivan, E. J. (2012). Effective leadership and management in nursing (8th ed). Pearson.
- The Australian College of Mental Health Nurses [ACMHN]. (2020). *Standards of Practice*. http://members.acmhn.org/publications/standards-of-practice
- Townsend, M. C. (2015). Psychiatric mental health nursing: Concepts of care in evidence-based practice (8th edition). *F.A. Davis Company*.
- Zieschang, P.-H. (2005). Theory of Association Schemes. Springer-Verlag Berlin Heidelberg. http://dx.doi.org/10.1007/3-540-30593-9