A study to assess the effect of reflection on clinical performance in selected procedures by nursing students

A thesis submitted to

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In Sociology Subject

Under the Board of Moral and Social Sciences Studies

Submitted by

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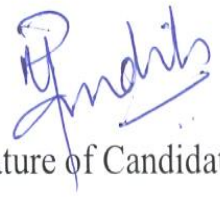
Under the Guidance of

Dr.Vishal Jadhav

May 2016

DECLARATION BY STUDENT

I declare that the thesis titled 'a study to assess the effect of reflection on clinical performance in selected procedures by nursing students' submitted for the degree of Doctor of Philosophy (Ph.D.) is the record of research work carried out by me during the period from 2011 to 2016 under the guidance of Dr. Vishal Jadhav and has not formed the basis for the award of any degree of this or any other University or institution of higher learning.



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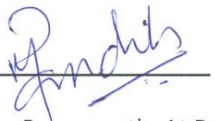
Signature : 

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INTRODUCTION

INTRODUCTION

Nursing is one of the most secure jobs in the world today. Nursing as a profession is known for having excellent wages and greater benefits all around the world. However,

one of the prevailing notions is that of nurses being a supplementary asset for helping doctors or is an easier alternative for becoming a doctor. Although inescapable, this irrational assumption has proved to be a motivation for nurses to show the world their worth and how nursing makes a difference in people's lives.

Not many professions can claim to do what nurses can do, and even fewer have opportunities or the temperament of doing it with the charisma and passion displayed by nurses. Nurses have the power to promote comfort and relieve distress among people – whether they be sick or well, in grief or happiness. Many times, nurses are privileged to see rapid results of their caring actions due to their ceaseless working hours. The trained nurse has become one of the greatest blessings of humanity, taking a place beside the physician and the priest, not inferior to either in their mission (Osler, 1889). Nursing education has recently adopted the holistic health model via a holistic curriculum of nursing education. Holistic approach focuses on the person as a whole with his or her body, mind and spirit within their contextual environment. This expands the sphere of care a nurse influences in the betterment of their patients.

Nurses prepare a situational care plan depending on the needs of the person based on various disciplines such as sociology and psychology. Two important aspects of knowledge and skill formation in nursing are self-awareness and reflexivity. Nursing inevitably derives its essence of knowledge for the application of theory and practice from sociology. Sociology offers a source of reflexivity to nursing with its integrity (Mulholland, 2008). Though the nature of nursing education is impartial, the social background of a nurse has an unique influence on shaping the thinking process used in practice. As a human being, nurses are a part of society, and their ways of thinking is influenced by society and its strong forces.

Nurses and nursing play a vital role in healthcare provision in hospitals as well as in community. During hospital care, a nurse always tries to understand the cause and meaning of a person's distressed behaviour to make them comfortable and treat them for improvement along with medical treatment. Nurses also need to assume the responsibility for the provision of first level promotive care in the community, thus acting as a changing agent in bringing about a good

quality of life to the people at large. For this, nurses need to be sensitive to the health needs of the people in the context of broader social changes.

The modern age is the age of science, technology, and information. All these are interrelated and different aspects of the same thing. Nursing science is also influenced by scientific knowledge, technological advances and information technology. Since the complexity of health has increased, the demand of nursing as well as demands from nurses are ever increasing, and indicate that the role of a nurse is increasingly becoming more important. With increase in importance, the roles of nurses in healthcare have also changed. Major milestones in the past decades indicate nurses being more visible and demonstrating leadership abilities with enhanced education and career models (Klainberg&Dirschel, 2010). This has provided the necessary motivation and inclination to develop nursing as a profession with interest in researching professional nursing knowledge through development of nursing theories and evidence based practices (Wilson-Thomas, 1995). The autonomous and responsible nursing professionals are anticipated to provide complex and professional health care. One of the important qualities needed for a nursing professional's autonomy is reflective thinking.

Reflective thinking is achieved through reflection, which is demonstrated by practising healthcare professionals in understanding complex situations and learning from experience. Reflection appears to be stimulated most often by complex clinical problems. As the perceptions of these problems vary according to individual experiences, the process also varies along with the tendency and ability to reflect across individuals and the contexts in which they practice.

There is a strong influence of class, culture & social dimensions on an individual's' reflective thinking (Reis et al., 2000). Students in most of the health professions have demonstrated reflective thinking (burgess et al. (2013); Hill et al. (2012); Schussler et al. (2012)). Reflective thinking uses human and social consciousness in relation to health values. It is possible that different dimensions of reflection and different levels or depth of reflection may be influenced by underlying social values possessed by nursing students. The next section provides an overview of the three important aspects of the study: nursing, reflective practice and social theories.

1.1 NURSING

Nursing is a dynamic field that offers career opportunities at various levels of education such as diploma, degree, master's and doctoral. Nurses are one of the most essential occupations of health care delivery (Stone et al. 2008). A nurse is a healthcare professional who is focused on the caring for individuals, families, and communities, in ensuring that they attain, maintain or recover optimal health and functioning. Nurses are capable of assessing, planning, implementing and evaluating care independently of physician. Nurses also provide support from basic triage to emergency surgery.

Nursing education consists of theoretical and practical knowledge and skill acquisition provided to eligible individuals that are selected through protocoled processes with the purpose of preparing them for their duties as nursing care professionals. Nursing education is provided by nursing, medical, other social sciences experts and educators. Most countries offer 'general nursing' as a basic level of nursing education for 3 or 4 years, thereafter Individual nurse can take further education in specialized areas after completion. At the graduation ceremony, every nurse takes a pledge to perform their duties as nursing care professionals (TNAI, 2002). Successful graduate nurses are registered with the respective national nursing councils, which provide them with a certificate and an unique registration number that allows them to practice. The nursing practice registration needs to be renewed by individual nurses according to the time periods specified by the council.

Each country has a National Nursing Association or Council for regulation of Nursing Education and Clinical Practice that is affiliated to the International Council of Nurses (ICN, 2015). ICN is a federation of more than 130 national nursing associations from all across the globe. Their main aim is to regulate the National & International Nursing Councils in a unified and standardised manner. The national nursing council for India is the Indian Nursing Council (INC, 2015), which recognises and endorses the interdependence of nursing to allied professions and occupations in prevention of diseases, health promotion, maintenance and restoration of health and human wellbeing.

ICN defines nurse as 'a person who has completed a program of basic, generalized nursing education and is authorized by the appropriate regulatory authority to practice nursing in his/her country. Basic nursing education is a formally recognised program of study that provides a

broad and sound foundation in the behavioural, life, and nursing sciences for the general practice of nursing, for a leadership role, and for post-basic education for specialty or advanced nursing practice.

A Nurse is prepared and authorized (ICN, 1987) to:

(1) To engage in the general scope of nursing practice, including the promotion of health, prevention of illness, and care of physically ill, mentally ill, and disabled people of all ages and in all health care and other community settings;

(2) To carry out health care teaching;

(3) To participate fully as a member of the health care team;

(4) To supervise and train nursing and health care auxiliaries; and

(5) To be involved in research.

1.1.1 HISTORY OF NURSING

Nursing as a profession is mentioned in various scriptures. Basavanthappa (2007) discussed nursing from Vedic period (3000 BC - 1400 BC) Ayurveda mentions the four components of health services – *vaidya* or physician, *upcharika* or nurse, *aushadhi* or therapeutics and *adhyaya* or *rugn* as a patient. Ayurveda also elaborates the a nurse as being *shuchi* – pure and clean with physical appearance and mental hygiene, *daksha* – competent and vigil, *anuraktha* – willing to care and *buddhiman* – intelligent and co-ordinating with the physician, patients and their relatives. The Vedic period nurses were known as *vaidya's* ardent comrades and regarded as an important factor in the healing process. They were present before, during and after *upchar* or treatment. In the post-Vedic period *Vagbhatta* and *Ashoka*are said to had built specialised houses dedicated for treatment with designated staff. During the *Mughal* period, *hakims* and *vaidyas* were practising with their staff which included nurses as well. In ancient India, nursing was a profession practiced by young apprentice men. Women were called midwives as they assisted during childbirth (Basavanthappa, 2007). In the early middle ages, women therapists of all social classes were using the knowledge of medicinal properties of herbs and traditional drug preparation (Theofanidis et al, 2015). Even though superstitions and mysticism were practiced and preached in society, nursing as a caring process was preserved in the families and religious places (Miller, 1997).

The industrial revolution spread throughout the world in the 18th century and influenced technological advancement and emergence of factories for mass production of goods. The relationship of hygiene and health with scientific innovations in vaccines and drugs acted as the catalysts that brought about change in the methods of health care. This influenced nursing education to be formalised and accepted as a broader profession (Klainberg, 2010). One of the most prominent nurses and leaders of the 19th century was Florence Nightingale, who brought a broad change in the practice of nursing as a profession and is widely regarded as the founder of modern nursing. She organised nursing forces to care for the wounded and invalid soldiers in the Crimean war, through which she set examples of compassion, commitment to patient care and the diligent and thoughtful manner of care administration. Her work and contributions have been widely recognised throughout the world. The day of 12 May, which is her birthday, is celebrated as the International Nurses Day. On this day, the president of India honours nursing professionals with the National Florence Nightingale Award in recognition of their meritorious services.

The World war period exhibited acute patriotism where the society was ready to participate in any work related to the war or the wounded. During this period, soldiers were fighting away from their homes and countries, and the wounded were kept in the battlefield quarters with no hospital facilities. Florence Nightingale and Mary Jane Seacole were first to initiate nursing care for wounded soldiers in two distinct facilities during the Crimean war. It is interesting to know that while Nightingale travelled with the full support of the British government; Mary Jane Seacole set up her own establishment at Crimean war battlefield as she was refused support by the government (McDonald, 2012). Nightingale was an English social reformer who belonged to a respected upper class British family. Mary Seacole was a Jamaican born with Scottish and Creole lineage. The effect of social background has been seen since beginning of the nursing profession.

The influx of women into the health care sector through nursing profession was enabled and constrained by gender as well as class. Bourdieu (1990) had suggested that certain classes gave opportunity to cross gender positioning. Florence Nightingale entered into the nursing profession due to her prominent social, cultural and economic capitals. Symbolic capital followed later as various awards and recognitions were bestowed upon for her services to soldiers. In contrast, Mary Jane Seacole was a woman who made her respectable position by sheer determination. She did what few other women of her era did for the nation - to help and shoulder responsibilities of

war and war related jobs. Her work was overshadowed by Nightingale's for many years and her achievements were acknowledged only in the recent years. Seacole has thus become a symbol of the social influence on the Victorian era of nursing.

Prior to Florence Nightingale, nursing was seen as apprenticeship, often undertaken by religious institutes such as convents. Nightingale established first formal nursing school in 1860 at St. Thomas Hospital, London (Klainberg, 2010). The school formalised secular nursing education by making nursing a viable and respectable option for women who desired work outside their homes. This model was adopted by various matrons of the hospital and it spread to most of the colonised countries like India.

Military nursing was the earliest type of nursing in India, which started in Fort St. George at Madras. The acceptance of nursing as a profession in India was influenced and hindered by caste system, illiteracy and political volatility. The first nurses were those that arrived from London and were from Florence Nightingale's school. Florence Nightingale was influential and a pioneer in the hygiene conditions of the soldiers and nursing education in India. St. Stephen's hospital in Delhi was the first school to begin nursing education in 1867. Many nursing schools were established thereafter with the help of British nurses (Basavanthappa, 2007). Today, transformation of the nursing profession is a vision of Florence Nightingale's vision in the design of hospitals, hygiene, evidence-based medical care, and holistic patient centred care.

The field of nursing can be very rewarding, but it may not be suitable for everyone. Nursing care focuses wholly on the patient, thereby setting itself apart from other disciplines through a positive caring approach. The nursing profession advocates education, prevention, collaboration, coordination of care, and adheres to a high standard of caring. It has the ability to acquire knowledge from all areas of science and is grounded in scientific nursing theories, sciences, mathematics, psychology, sociology, biology, anatomy and physiology.

1.1.2 CONTEMPORARY NURSING

Contemporary nursing has been established into university education and is a practiced discipline. Nursing education requires effective preparation of nurses who will be able to care competently for clients and continue to develop skills and knowledge over their professional lifetime. A traditional way of doing professional practice as Schon (1987) described is through

technical rationality, where theory is first learned and then applied in practice to emphasis the separation of concepts in theory to those in practice.

Nursing as a discipline has evolved through history, from initial biomedical-positivist vision to a situation where it complements the aspects named with those constructivist aspects contributed by the social sciences. Nurses as professionals need to use intelligence to discover opportunities and solve day to day work related issues and problems in fast paced, dynamic, knowledge-based world. An analytical study (Jensen 2007) on knowledge seeking practices among professionals namely nurses, accountants, teachers and computer engineers, had found that these groups were vulnerable in accessing knowledge and developing a sense of mastery, and thus should engage in lifelong learning. Lifelong learning in nursing comprises an essential conceptual shift from the notion of registered nurses (RN) being merely a competent health service incumbent to one who engages in professional learning continuously throughout their career in order to keep their knowledge and skills up to date (Gopee, 2005).

Nursing education is imparted predominantly in the English language due to traditions and origin. Nursing students whose language of schooling was not English use translated books for understanding theory and concepts. This difficulty is prevalent in all non-English speaking countries. All graduate nursing programs are offered only in the English language, which requires that nursing students know the language for learning. Some nursing colleges provide additional help to their students in order to overcome barrier of differences of language.

Nursing history shows that it was highly influenced by religion as it was practiced dominantly by the European nuns. Predominant teachings of helping and caring for the poor has shaped nursing and influenced it in major way. Caring was mostly done by families and most of the time by the female members. Today men and women nurses are from various religions, creeds practice nursing. The dress code of nurses has taken a contemporary inclination after being historically influenced by European culture. This transformation has made the profession of nursing contemporary in alignment with other professions of today.

Traditionally, nurses work in several settings, and have the knowledge and skills acquired during nursing training. Clinical nursing practice is a skilled practice with emphasis on knowledge transmission. This cognitive competence mainly depends on gathering practical elements and retaining information that can be applied during the next opportunity. This starts when the

nursing student transits from studentship to newly qualified nurse and gains experience in the real professional health care field. It is well understood that this transition is challenging and stressful for the nursing student and that nurses usually develop their competence with repeated exposures to clinical environment.

A study was done in Finland on nursing students by Kajander-Unkuri etal (2013) where a total of 67 nursing competencies in eight categories were identified. This Study described that the level of competence of graduating nursing students was on a good level in the helping roles and diagnostic functions, but was slightly lower in therapeutic interventions and work roles (Kajander-Unkuri et al 2013). Initially, these competencies were achieved by nursing students during knowledge and skill based learning and gradually by experience of working as professional nurse.

The integral part of basic nursing education is demonstrations, drills and simulations, as well as clinical placements which develop the ability to adapt to clinical settings during undergraduate years. Sakayo et al. (2007) examined the composition of reality shock experienced by new undergraduate nurses and the structure of education programs and found that reality shock experience was composed by elements which were not experienced by students in the past during clinical placements and skill demonstrations as under trainee. Though this study recommended that these issues should be validated and simulations to be included as part of nursing clinical training, it had also stated that new graduate nurses may have to deal with similar issues as a part of their own experience. As a matter of fact, professional nurses educate themselves through experiences with their individual logical and clinical reasoning under tacit knowledge.

Tacit knowledge is neither acknowledged by the person themselves nor transferred to a professional body of knowledge. Effective clinical reasoning in nursing practice depends on the development of both cognitive and metacognitive skills. Self-regulated learning theory suggests that this development requires concurrent attention to both the cognitive and metacognitive dimensions of reasoning in nursing care contexts (Kuiper &Pesut 2004). Polanyi (1967) suggested a need to appreciate tacit knowledge embodied through practical knowing and appreciation by providing ways and means to express, and that reflective practice has the required potential to do so. Polanyi (1967) pointed out that ‘we know more than we can say’. Reflective practice provides credentials to this unsaid knowledge. In reflective practice, the

intent is to enable to develop individual competence and to incorporate the individual as a person. Individuals are assumed to have cognitive, emotional, and social dimensions. Learning to behave in different ways involves all of these. The concept of cognition also expands from an emphasis on information gathering or recall to the development of analytic and conceptual skills that enable the individual to create knowledge needed to respond to the diverse demands of practice. Nursing is a profession where clinical practice is grown and developed critically and reflectively with the individual's' experiences in the profession.

Critical reflective thinking is a higher form and a process stimulated by integrating the essential knowledge, experiences, and clinical reasoning that supports professional practice. Sumner (1906), a 20th century pioneer of critical thinking said that critical thinking is a mental habit and a power that is the product of education and training. Potter and Perry (2008) stated that the ability to think critically through the application of knowledge and experience, problem solving and decision making is essential in professional nursing.

If we will accumulate facts of reflective practice together and apply them to professional learning in nursing, they can be summarised as follows.

- To learn effectively from one's experience is critical in developing and maintaining competence across lifetime in the nursing practice (Schon (1983), Boud etal (1985)).
- As one's professional identity as a nurse is developed, there are aspects of learning that require understanding of one's personal beliefs, attitudes and values, in the context of professional as well as social culture; reflection offers an explicit approach towards their integration (Epstein 1999).
- Building integrated knowledge base during nursing professional practice requires an active approach towards learning that leads to understanding and linking new knowledge acquired with existing knowledge.
- Taken together, these capabilities may help in the development of a professional who is self-aware, and therefore able to engage in self-monitoring and self-regulation (Bandura 1986).

Professional seniority or maturity achieved through experience is due to great deal of reflective practice. The backbone of nursing the ability to take knowledge and information (nursing education or theory) into a clinical setting (nursing practice) and use the nuances of intuition, compassion, empathy, ethic, and spirituality to impact an individual, family or communities

experience in health, wellness and illness. Nursing is more than "caring for" a sick or well person, it is the challenge and transformation of giving yourself to another person to assist them until they (or their caregivers) can care for themselves. Nurses need to be and are lifelong learners, striving to affect positive outcomes for people by providing care based on scientific principles. Nurses are keenly aware of the uniqueness of individuals, families and communities and their social background, that need to individualize their assessment and plan of care for them. Next section reflective practice is discussed.

1.2 REFLECTIVE PRACTICE

Reflection in learning is represented by number of synonymic terms such as reflection, reflective learning, reflective practice, reflective thinking and reflective judgement. The word 'reflection' (2009) is the act of reflecting or careful or long consideration of thought. The American Heritage Stedman's Medical dictionary (2002) defines reflection as 'careful consideration or thought or an opinion resulting from such consideration'. Oxford dictionary gives the origin of the word as late Middle English, coming from old French '*reflexion'* or Latin '*reflexio'* meaning 'bending back'.

Reflection is the process of analysing and reframing an experience to make an assessment of it for learning (reflective learning) and/or to improve practice. During learning, reflective practice is helpful to understand the learning needs required to adopt deep approaches towards learning, to understand one's personal beliefs, attitudes and values to integrate them into learning and to build integrated knowledge base which involves linking new to existing knowledge. In students, reflective thinking at deeper levels is associated with deep approaches towards learning and meaning-making.

Dewey (1910) in the book 'How we think' elaborates double looped movement of reflective thinking to draw systematic inference. He explained that inductive and deductive thinking is in all reflection processes. He suggested that a complete thought involves both inductive as well as deductive thinking. According to Dewey (1910) 'to think' is binding facts together as well as isolated facts or details from connected deeds. Relative illustration of reflection and critical thinking as given by Dewey (1910) in the book 'How we think' is that the inductive movement is to identify binding principle of fragmented facts; the deductive movement is to confirm, to interpret isolated details into unified experience. As we conduct each of these processes in light of each other, we get a valid discovery or verified critical thinking.

Argyris& Schon (1978) developed the idea and theory of single and double loop learning. Schon (1983) introduced the concept of reflection-in-action and reflection-on-action. He valued reflective practice as artistry. Schon (1987) stated in the book 'Educating Reflective Practitioner' that professional practitioners frequently face complex and unclear situations where there are rarely right answers. He further elaborated this by stating that skilful professionals depend on the ability to reflect before taking actions in situations where established theories are not applicable completely but the factual knowledge and decision making ability does. Schools and educational institutes often prepare students by teaching standard theories and how to apply them in usual expected problems or situations which creates a failure in equipping professionals with the necessary skills required facing and dealing with difficult problems for future professional practice.

Schon (1987) detailed the reflective practicum in his book which opened an avenue for new epistemology of reflective practice. Reflective practice is a term coined from the work of Donald Schon (1987). In simple terms, reflective practice is use of reflection in thinking about professional actions or other complex activities such as coping. Schon (1987) proposed that professional education should be designed with the combination of teaching applied science with coaching in artistry of reflection-in-action. Johns (2009) stated in the book 'Becoming a reflective practitioner' that the true teaching of reflection is like meditation, through reflecting on what you have done. Mentor, one who guides it, will point you in the right direction. This concept was further taken by theorists Kolb (1984) and Gibbs (1988).

Kolb's (1984) experiential cycle draws attention to cyclic action as moving forward with new understanding of an event or experience as a person reflects. Gibb's (1988) in his book on experiential learning called a reflective cycle model as 'Learning by Doing', emphasizing on the description of event, analysis, and evaluation of it as well as thoughts and feelings associated with it. The model is cyclic ends with an action plan made for the similar future event. Gibbs reflective cycle features completion of the loop that connects one experience to next.

There are some classified terms related to reflective practice coined by reflective practice researchers. Schon (1987) distinguished reflection-in-action and reflection-on-action. Reflection-in-action is reflecting within a situation or experience in order to make sense of it and to then proceed towards its outcome. Reflection-on-action is reflecting on a situation or experience after

the event with careful thinking to derive new knowledge. Casement (1985) suggested that the reflective practice is ‘an ability to dialogue with oneself in order to make sense’ is like an ‘internal supervisor’. Johns (2009) suggested that reflection-within-the-moment is an exquisite ability which is developed through constant reflecting on experience, however there is no empirical evidence to prove this. Goldstein (2002) suggested that reflective practice is ‘mindfulness’, that is a quality of mind that ‘notices what is present with no judgment or interference’, and is the quality that ‘sees things without distortion’. Moon (2004) discussed four ways reflection that are involved in learning. First, reflection is a process of meaningful learning. This can be implied as making meaning or working with meaning. Second, meaningful learning through reflection is represented by meaningful forms such as writing a journal or a verbal report, where ideas are often better understood through visual and verbal representations. Third, the way of reflection is involved in learning by doing that is upgrading the knowledge in light of previous experience. Final and fourth way of reflection is related to learning as the generation of new ideas by reflective practice after action or doing.

The concept of reflective practice refers to the capacity of individuals in societies to be conscious and able to give accounts of their actions. Giddens (Tsekeris&Katrivesis, 2008) suggested that an important characteristic of modernity is heightened reflective practice by reformers through constant revision in the light of new knowledge. Sociology itself is source of reflexivity at the level of society. Many social theorists have proposed reflexivity in their social theories.

1.3 SOCIAL THEORIES

Social background is unique for each individual. It differs even for two individuals from the same family. Social and family components influence a person’s thinking, attitude and behaviour. It also influences the way a person learns, develops skills, utilises knowledge and evaluates self. Family and parent background have a strong influence on the individual’s behaviour, attitude and thinking. Nursing students too are affected by this influence on their thinking and behaviour. Thus it can be assumed that reflective practice of a nursing student may have been influenced by social background. The effect of social background on an individual thinking has not yet been explored in the context of nursing students.

Social theories are the framework of empirical evidence used to study and interpret social phenomena. A tool used by researchers, social theories are related to historical debates over the

most valid and reliable social phenomenon of reflexivity. Social thoughts therefore provide general theories to explain the actions and behaviour of society and its members by encompassing sociological ideas. In this section selected social theories are discussed in the perspective of reflexivity.

In sociology, reflexivity is an act of self-reference where examination of an action affects the entity instigating the action or examination. Reflective practice or reflexivity is an individual phenomenon, and refers to circular relationships between cause and effect. A reflexive relationship is two directional where 'cause' and 'effect' can swap places. Social theory suggests that reflexivity is more impressive and critical when the capacity of an agent to recognize forces of social characteristics and alter or modify their places exists as a professional practice. This school of postmodern thought emerged from the German theorists collectively is known as 'The Frankfurt School'. Critical theory is at the core of the Frankfurt school thoughts. Postmodern thoughts of critical theory are extended in many disciplines. Critical social scientists believe that the 'lived' experience in the context is important. Critical and reflexive approaches examine social cultures and conditions in order to uncover invisible structures of an experience or an action.

Historically, individuals have organized into social cultures and within said cultures have developed understanding amongst their members through language; the language befitting each member of that particular culture. Nursing students that belong to various distinct social backgrounds and cultures have a unique social language prior to nursing education. The influence of their social background and their language of communication is subjective to each nursing student individually even though they all use the same medical and nursing terminology during their nursing education. This is known as the way of inter-subjective understanding, which guides the survival of individuals within a social context.

Habermas suggests that critical and reflective enquiry is 'Guiding Interests of Knowledge'. Habermas holds that although we are open to critique, we cannot always avoid or stop the thoughts and formulations derived from actions or experiences. Any knowledge which occurs during such phenomenon cannot be completely dismissed. For example, during clinical nursing practice, nursing students absorb everything that may or may not be useful like a sponge and add it to their clinical knowledge. This means nursing student does not necessarily discard the 'bad'

parts; they remain as a piece of knowledge in the mind. What is good and bad about an action or an experience is acknowledged by reflexivity. The emancipating interest of the critical social sciences suggests that reflexivity is the critical and individual capacity of a human being. Habermas postulates that a critical theory is based on critical reflection and self-reflection, which permits increasing knowledge of individuals and that this knowledge provides the tools to confront powers of domination and thus achieve emancipation. Clinical practice in nursing is a unique combination of praxis (Reed, 2006) where skill development is both mentored and learned. Problem solving, critical thinking and reflective practice are tools of nursing emancipation and maturity as a professional.

Literature gives us a diverse sense of social theories applicable to reflective practice. It enlightens us to look into the phenomenon of reflective practice as being whole and being dynamic.

1.3.1 Bourdieu's Theory of Practice

Pierre Bourdieu was a French sociologist and philosopher. His work in sociology is widespread. Bourdieu (Ritzer, 2005) suggested that objectivism often uses subjective observations that are not clear and easy tounderstand. Similarly, subjectivism often neglects to take into account the objective structures and social conditions that contribute to subjective decision making. This divide between objectivism and subjectivism is challenged in his theory of practice that incorporates subjectivity as well as objectivity to define practices. The theory of practice (Bourdieu, Wacquant, 1992) explores and explains individual and group actions in the social world. Bourdieu recognizes that the action of an individual is influenced by social structures and background. These influences are described by Bourdieu as field, capital and habitus.

Bourdieu (Rhynas, 2005) described habitus as a set of acquired patterns of thoughts, behaviour and taste of an individual. Bourdieu's habitus is as a system of general generative devices that are strong and transposable from one field to another. Habitus is objective and subjective at the same time. Bourdieu suggested that individuals in their actions incorporate social structure. An individual shares habitus with the people who have been exposed to same conditions of living. However, each individual passes through a unique internalisation process which makes his or her own personality and social habitus. Bourdieu formulated a reflexive approach of an individual to social life. This formulation is based on three concepts, habitus, capital and field. He connects

three concepts for meaning of social action. Bourdieu's assumption of social action is praxis. It implies two intentions. First, it suggests action as opposed to thought. Second, it implies that social characteristics of a human being are responsible for their action. An action occurs in the natural and social world, and there is the reflexivity in the transformative nature of action and the priority of action over thought (Bourdieu 1990).

Bourdieu (1986) suggested that the importance of a reflexive sociology is in understanding that a human being at all times conducts inquiry with inner conscious attention to his or her own work. Bourdieu defines fields as being antecedent to habitus which include environmental forces contributing and transforming the structure of habitus. Bourdieu defines habitus as a structuring human structure which organises practice and perception of practices. Habitus appears to be cognitive system of a structure embedded within an individual which is an internal expression of the external system. Habitus consists of our thoughts, beliefs, interests and thus understanding of the world around us. Habitus is created through our interaction with the world first through family and cultural practice and later from educational environment which is dominated by power. Bourdieu suggests that habitus influences our actions, reactions and consist elements from our social world. Habitus has fluidity from the ever changing nature of an individual due to age, travel, education and various other life events. Therefore, we can say that an individual's habitus is not constant at any given point. If the person is aware of their own habitus and has reflexivity, he or she develops the ability to observe social or environmental fields with relative objectivity. Bourdieu proposed that there are four forms of capitals (connections with social energy) linked with person's habitus namely - social, cultural, economic and symbolic. Social capital is the circle of friends, group relations and social relations. Cultural capital is knowledge, credentials, work & life experiences, academic background. Property, income, earning, finance are economic capitals, and symbolic capitals are a honour, prestige, status, recognition, achievements and awards. According to Bourdieu, an individual with their own habitus and reflexivity are present in the centre with different capitals forming several layers surrounding the centre, where social capital is outermost layer. Bourdieu's concept of habitus places an individual as a reflexive and intrinsic part of a whole rather than as a separate entity.

Three prominent social scholars have noted reflexivity as a powerful factor in human life. Giddens (2013), for example, noted that constitutive reflexivity is possible in any social system; Giddens accentuated this theme as a notion of "reflexive modernity" – the argument that, over

time, society increasingly becomes self-aware, reflective and hence reflexive. Michel Foucault (Hook, 2001) posited that a man (human being) is both - the knowing subject and the object of his reflective practice; thus, the social sciences, far from being objective, produce truth in their own mutually exclusive discourses. Bourdieu (Bourdieu & Wacquant, 1992; Rhynas, 2004) argued that a human being is inherently laden with biases bestowed upon by his or her social characteristics, and only by becoming reflexively aware of those biases can a human being become free from them and aspire for professional practice. Therefore for Bourdieu, reflexivity is part of the solution, not the problem. Bourdieu proposed the three concepts of habitus, capital and fields to explain the theory of society and suggested that several social and environmental elements determine the way reflexivity occurs.

1.3.2 Critical social theory

Significance of critical thinking in nursing is to understand it as an extension of the rational problem solving approach. Learning to promote the development of critical thinking and reflective practice skills include exploring personal and professional values and systematic reasoning processes that incorporate assessment and intervention skills for complex clinical situations (Crowe and O'Malley, 2005).

Bourdieu's theory is concerned with critically analysing perceptions, thoughts and feelings associated with the action. In this sense critical theory can be used in nursing inquiry to address social conditions influencing health and health care. The Critical theory permits nursing to consider the aspects of the sociocultural context which offers care and also permits identification of the social inequalities related to health and transform these situations through the innovative application of knowledge to face current health challenges by reflecting in greater equity. Many times, the work experience of Nursing professionals places them as witnesses of an alienated and dehumanized society; in this regard, the Critical theory offers a conceptual structure through which it seeks to establish a clear distinction between the false assumptions (of social origin) and the real disadvantages. Through the critical theory nursing can work on the effective solution to modify disparities, enabling the dialogue of science in day-to-day activities and managing greater participation from individuals in their healthcare.

Nursing education is not only a learning process, but it also helps to create and legitimize forms of conscience that reinforce the predominant structure of nursing practice. Thus, the teaching and

learning process can be an opportunity to construct and reconstruct new abilities and skills, enabling broader understanding of the praxis of the Nursing discipline, generating greater analytical and intervention capacity in different healthcare environments, against diverse situations that occur day to day. Through the learning process, we can demolish prevailing structures and create new forms of healthcare relationships.

The theory establishes that its application in the Nursing discipline is based on reflecting on what is occurring within the context and in the practice of being carried out, and providing a framework to inquire on the possible practices of inequality within the healthcare system.

Participative action-research is one of the research methods used to apply the Critical theory. It corresponds to a situation's analysis process, identification of problems, and elaboration of action strategies, that are subjected to observation, reflection and change. This type of research focuses its interest on the transformation of the structure of social relationships, guiding knowledge to emancipate and liberate human beings, through self-reflection and questioning of the relationships of power in their different forms.

Bourdieu stated that individual identity is not natural but involves dominant social norms arbitrary upon the body. These norms are not prescriptive, but potentialities. Thus an individual's habitus is generative structure which expresses and determines behavioural norms (Huppatz, 2005).

1.3.3 Feminist theories

Reflective practice means self-examination, where individuals can improve and make professional growth with the help of previous experiences. It is an imaginative, creative, nonlinear, human act in which educators and students recapture their experience, think about it, and evaluate it. Boud et al. (1985) stated that experiences occur as we reflect, and reflection occurs as we experience. Dewey (1933) also believed that reflection is not only a rational, intellectual act but also an act that involves the whole person, including his or her emotions. Dewey identified the following three attributes of reflective individuals: open minded, responsible, and wholehearted. While Dewey was most interested in a social and a gender reflective process, but Habermas (1970, 1971) argued that reflective practice has a social, as well as psychological, basis that does not stop at the individual, but may be dialogic or sharing.

Early feminist theories of reflexivity by contrast, were critical of professional expertise. For example, exposing medical knowledge as a form of power exercised over human bodies and lives (Clegg, 1999). Clegg (1999) presented critical perspectives of reflective practice and feminist themes to explain that reflexivity is a human capacity and should not be seen as consciousness rising in a women-dominant workforce professions like nursing, teaching and social work. Although, these professions have undergone radical changes and gender inequality is not at its prominence or rather declined, gender is seen as more as an attribute and not a bias.

In reflective practice this view was seen as inferior to consciousness rising as a means of generating critical knowledge of its own conditions of existence. Still, reflective practice has been at its most influential in teachers, nurses, and social workers in the context of education. These professions are all characterized by employment status in the public sector rather than independent private practice (Crompton 1990, Dominelli 1996). The 1960s and 1970s were a period of change in the women's social lives and of women's aspirations. Increasing numbers of women were in paid employment, more were participating in higher education and their political self-consciousness and empowerment was increasing (Clegg, 1996). In this situation, women involved in change practices with radical ways, challenging unequal opportunities and empowering professional status. In UK, the reflective practice implemented in these conditions became a system of self-surveillance. Seed (1996) has drawn parallels between the structure of the confessional and reflective practice in nursing based on a broadly Foucauldian analysis. In particular she draws on Foucault's characterization of the self-technologies and self-surveillance as a self-training mode. The reflective practice understood in this way is a normalizing practice of the discourse of empowerment with experience because the process of reflecting, of speaking and sharing. It gives the impression of slowing time and allowing the individual practitioner to explore the feelings associated with their practice. The need of the professional autonomy is more to do with the large numbers of women employees with relatively low pay compared to their professional counterparts and increasingly humble conditions of working, rather than any particular educational regime nurses experience. There are difficulties in sustaining their taught knowledge claims not because of the nature of their competencies, but of their social position. Reflective practice as a strategy for enhancing women's professional status is unlikely to be successful despite the contribution to understand it, if it is not implemented formally in nursing education, nursing practice, nursing administration and nursing research; thus collectively

generating empowerment of nursing profession. Osterman and kottkamp (1993) suggested that reflective practice is an empowering and motivational process because it responds to basic human needs for competence, autonomy, and relatedness.

Historically the field of philosophy has positioned care as a moral duty, an obligation or as a trait of justice. This standpoint has primarily featured a masculine perspective. One perspective of care is concerned with feminist ethics. This concept challenges the philosophic foundations of the masculine justice theory and suggests that the notion of care is best understood from a perspective that focuses on the associations between people and on the contextual experiences of individuals involved in care.

Both Marxist and feminist traditions suggest that the capacity to reflect is a characteristic of all humans, while some social scientists have suggested that reflexivity is a particular characteristic of modernity. Nursing practices involve knowledge of and relationships with diverse culture and societies. As a result, caring involves the gendered, cultural and socially diverse patterns of understanding and behaving in the world. Therefore, the implications for care are embedded in the personal and social values and experiences associated with culture, gender, power, and politics. A feminine ethic of care argues that responsibility develops from an individual's feeling and is interconnected with others and reflects the role of these connections with others in ethical decision-making. Care ethics are not uniquely feminine, as men may also exhibit strong tendencies to care. Other factors of social identity, such as ethnicity, class and sociality influence the relation of gender with care (Green, 2012). None the less, care has pervasively been assumed to be a symbolically feminine trait and perspective.

A person's social environment and personal relationships maintained within these environments have an impact on their autonomy. Human beings do not exist in complete isolation from others. Feminism stresses social embeddedness which includes the identity-forming influence of others, the significance of intimate relationships, deep attachments, and the important role that social systems (e.g. language and culture) play in an individual nurse's world. Finally, a challenge for nurse educators is not to require students to list or talk about their reflective journeys in a linear, modernist way. Instead, it is recommended that nurse educators take a more postmodernist perspective in which students are free to express their reflective journeys creatively in ways that makes sense to them.

In conclusion it can be said that the reflexivity is an important aspect of nursing practice. The use of Bourdieu's theory of practice in nursing would allow a more detailed understanding of nursing students learning, incorporating theory into practices and concept of care that they understood while developing as professional nurses. Bourdieu's theories suggest that a person's own position in terms of education, employment, status, background is vital to the way in which they see the world. According to Bourdieu, people must recognize their own positions and power within the field in order to interpret and report accurately.

Horkhimer's concept of metacognition (Josephson, 2014) is an ability to think about one's thoughts and emotions, which links the present to the past, to provide a view for the future and to construct meaning of events. Metacognitive ability is needed for reflective practice in nursing, as every active clinical event is a learning opportunity which links the past (prior knowledge), the present (current context), and the future (building upon new knowledge). Thus, it would appear that metacognitive ability is the foundation for participation in reflective practice development as well as development of nursing students in the professional training. Undoubtedly, the theory of practice calls on the nursing discipline to use its postulates and apply them in its daily work to bring about progressive improvement in the praxis through reflective practice. The sequential process proposed in using this type of methodology implies Knowing-Acting-Transforming.

Reflexive sociology requires us to examine what we are doing, what and how we are thinking and feeling, what are our attitudes, beliefs, feelings and prejudices in social reality as well as deepening our understanding and our position in the world to better understand the reality of others. The critical theory through participatory action research method implies identification of visible problems in daily practice, carrying out actions to improve, transforming stereotypes and establishing new form of conscience.

Professionals participate in lifelong learning which is internally motivated and is an outcome of the application of metacognition in reflective practice. In the student nurse's professional development, reflective practice needs to develop as a somewhat self-regulated activity. The foundation of self-regulation is metacognitive capacity, reflective strategies, and an understanding of the social, personal and historical influences upon learning.

In the presence of a comprehensive nursing curriculum that meets the need for development of competency and reflective practice, the discipline of nursing can continue to expand in

professional function and propagation. Nursing students are required to participate in reflective practice for their individual development and patient care outcomes where the faculty too are obliged to examine the traditional nursing educational curricula and reflect whether it is adequately preparing the nursing students for the contemporary and future of nursing.

Activities to promote reflection are now being incorporated across a variety of health professions. The evidence to support and inform these interventions and innovations of reflective practice remains largely theoretical. Further, the literature is dispersed and various reflective practice models are available. The reflective models present how learners can link theory and practice. Gibb's reflective cycle encourages systematic thinking about the situation through engaging in a cyclical sequence of activities: describing, feeling, evaluating, analysing, concluding and action planning. Gibbs reflective cycle is taking an account of reflective practitioners' emotions.

SUMMARY

Recently, use of holistic health model in health services has resulted in the adoption of a holistic curriculum of nursing education. Holistic approach focuses on the whole person with his or her body, mind and spirit within their contextual environment. Nurses are differentiated from other healthcare professionals by their overarching and holistic approach towards patients care, their education and scope of practice. An educated nurse has become one of the great blessings of humanity, taking a place beside the physician and the priest, not inferior to either in her mission (Osler, 1889). International council of nursing defines nurse as: 'The nurse is a person who has completed a program of basic, generalized nursing education and is authorized by the appropriate regulatory authority to practice nursing in his/her country'. All around the world, basic nursing education is imparted as a formally recognized program of study providing a broad and sound foundation in the behavioural, life, and nursing sciences for the general practice of nursing, for a leadership role, and for post-basic education for specialty or advanced nursing practice. The nurse is prepared and authorized (1) to engage in the general scope of nursing practice, including the promotion of health, prevention of illness, and care of physically ill, mentally ill, and disabled people of all ages and in all health care and other community settings; (2) to carry out health care teaching; (3) to participate fully as a member of the health care team; (4) to supervise and train nursing and health care auxiliaries; and (5) to be involved in research (ICN, 1987).

Nurses are lifelong learners, striving to affect positive outcomes for people by providing care based on scientific principles. Nurses are keenly aware of the uniqueness of individuals, families and communities and their need to individualize their assessment and plan of care due to their consistent association with patients. This develops nurse's ability and acumen in professional practice.

Potter and Perry (2008) stated that the ability to think critically through the application of knowledge and experience, problem solving and decision making is essential in professional nursing. Sumner (1906), a 20th century pioneer of critical thinking said that critical thinking is a mental habit and a power that is the product of education and training. This means that critical reflective thinking is a process stimulated by integrating the essential knowledge, experiences, and clinical reasoning that supports professional practice.

Reflective thinking is also termed as reflective practice and is a term coined by Schon (1987). Reflective practice is the use of reflection in professional or other complex activities such as coping. Schon (1987) proposed that professional education should be designed with combination of teaching applied science with coaching in artistry of reflection-in-action. Johns (2009) stated in the book 'Becoming a reflective practitioner' that the true teaching of reflection is like meditation where by doing it and reflecting on what you have done with one who guides you, it points you towards the right direction. He further added that what you learn from this is brain food for reflection.

Sociology enlightens us to look into the phenomenon of reflective practice as a whole and as being dynamic. Exploring various social theories, it is understood that reflective practice is a phenomenon occurring within the relative social impact of an individual with his or her environment. A number of social theories have been put forth for explaining the nature and process of reflexivity in an individual. Both Marxist and feminist traditions suggest that the capacity to reflect is a characteristic of all humans, while some social scientists have suggested that reflexivity is a particular characteristic of modernity. Reflexive sociology requires us to examine what we are doing, what and how we are thinking and feeling, what are our attitudes, beliefs, feelings and prejudices in social reality as well as deepening our understanding of self and our position in the world to better understand the reality of others.

Lifelong learning in nursing comprises an essential conceptual shift from the notion of the registered nurse being merely incumbent towards one who engages in professional learning continuously throughout their career in order to keep their knowledge and skills updated. Activities to promote reflection are now being incorporated across a variety of health professions. The evidence to support and inform these interventions and innovations of reflective practice remains largely theoretical. Exploring various social theories, it is understood that reflective practice is a phenomenon occurring with the relative social impact of an individual with his or her environment. A number of social theories have been put forth that explain the nature and process of reflexivity in an individual.

The next chapter discusses theoretical and empirical perspectives about reflective practice and which is also aimed to search, assess and understand existing evidence related to nursing students reflective practice.

THESIS OUTLINE

This introductory chapter has laid the foundation for the concepts of interest by discussing nursing, reflective practice and social theories. Reflexive sociology requires us to examine what we are doing, what and how we are thinking and feeling, what are our attitudes, beliefs, feelings and prejudices in social reality as well as deepening our understanding of self and our position in the world to better understand the reality of others. Lifelong learning in nursing comprises an essential conceptual shift from the notion of the registered nurse being merely incumbent to one who engages in professional learning continuously throughout their career in order to keep their knowledge and skills updated. This study was undertaken to address and explore this issue.

The thesis is divided into chapters as outlined herewith:

Chapter one is ‘Introduction’ and discusses the background of nursing and reflective practice and provides an overview of social theories. It discusses the need for a study-based research by undertaking a comprehensive literature review.

Chapter two is ‘Literature Review’ and discusses theoretical and empirical perspectives about reflective practice. This chapter is divided into four sections. Section I discusses concept of reflective practice with its antecedents, attributes and consequences as described in literature. Section II provides an overview of theoretical perspectives of reflective practice with a focus on

pioneering work on reflective practice as informed by literature. Various reflective practice models are also discussed in detail along with their development and ideologies. Section III comprises research studies done on and related to reflective practice in various health professional disciplines. Together three sections provide an overview of the concept of 'reflective practice'. Section IV comprises literature related to social theory and nursing.

Chapter three is 'Research Methodology' and provides an overview on research approach, design, sampling, data collection tools and procedures.

Chapter four is 'Analysis' and provides results along with data analysis that includes descriptive analysis, knowledge and clinical procedure scores of instruments used. The nursing student's responses on the use of reflective practice also discussed and presented with analysis. Responses of all items on the data collection tool are presented in charts and tables for better visual understanding. The chapter also presents results of association tests.

Chapter five is 'Conclusion' provides a conclusion to the thesis with an interpretation of the analysed results, its implications, limitations in context of the study, and recommendations in the field of nursing education, nursing practice, nursing research and nursing administration in encompassing the knowledge of this thesis.

CHAPTER TWO

REVIEW OF LITERATURE

INTRODUCTION

A literature review is an objective, thorough summary and critical analysis of the relevant research and non-research literature on the topic being studied (Hart, 1998). It provides an evaluative report of information found in the literature related to selected area of study. The review should describe, summarise, evaluate and clarify the selected literature in order to establish foundation for the research study. It gives a theoretical base for the research and help to determine the nature of the proposed research.

The importance of reflection and reflective practice are frequently noted in the literature; indeed, reflective capacity is regarded by many as an essential characteristic for professional competence. Educators assert that the emergence of reflective practice is part of a change that acknowledges the need for students to act and to think professionally as an integral part of learning throughout their courses of study, thus integrating theory and practice from the outset. Activities to promote reflection are now being incorporated into undergraduate, postgraduate and continuing health care professional education.

Further, the reflective practice literature is dispersed across several fields, and it is unclear which approaches may have efficacy or impact on health care profession. This literature review is done to evaluate the existing evidence about reflection and reflective practice and their utility in health professional education.

The aim is to understand the theoretical perspectives of the concept under study that is ‘reflective practice’, key variables influencing reflective practice in health care professionals’ educational process, identify gaps in the evidence, and to explore any implications seen in literature on research, practice, education and management.

Literature review related to reflective practice undertaken by the researcher is apportioned here in four sections. First section discusses concept analysis of reflective practice with its attributes and characteristics, and explored its application to nursing. Second section discusses theoretical perspectives of reflective practiceand selected models of reflective practice as well as its application to nursing profession. Third section comprises research studies done on and related to reflective practice. Fourth section comprises literature related to social theory reflexivity and nursing.

SECTION I:CONCEPT ANALYSIS OF REFLECTIVE PRACTICE

Nurses work in a healthcare context characterized by change, the pace and the persistence of which is a feature of 21st century society. Philosophies that frame health strategies, care delivery, the roles and expectations of healthcare professionals, and consumers' expectations are not only continuously changing but are often competing.

Such paradoxes are the characteristics of the postmodern healthcare context in which mental health nurses practice and are accountable for care. No longer is the possession of certain knowledge and skills sufficient to practice effectively in this environment. Advanced mental health nursing practice requires the ability to assess and respond to a proliferation of simultaneously novel and redundant knowledge and technologies.

As noted by Simpson and Courtney (2002) if nurses are to deal effectively with complex change, increased demands and greater accountability, they must become skilled in higher level thinking and reasoning abilities. The ability to negotiate the ambiguities and complexities of the field in advanced mental health nursing practice requires critical reflection skills.

2.1 CONCEPT

Concepts are the basic building blocks of any theory (Morse et al, 1996). McKenna (1997) suggests that concepts are the foundation of theory and good concepts come from already established theory. McKenna further argues that concepts may be perceived and experienced differently by various individuals; hence there is no clear definition of what concepts actually are.

There must be clear criteria for the application of concepts in order to apply meaning or to explain their empirical relevance to science.As the nursing environment is in a constant state of change, Rodgers' (1989) practice-based approach appeared to be a significantly more appropriate analysis tool for nursing studies.

TABLE 1: ROGER'S EVOLUTIONARY CONCEPT ANALYSIS

Stages	Method
1	Identify and name the concept
2	Identify surrogate terms
3	Identify and select relevant material from literature
4	Identify the attributes of the concept
5	Identify references, antecedents and consequences of the concept
6	Identify related sub concepts
7	Identify model case.

As literature has used several related terms for reflection, for the purpose of present study the term 'reflective practice' is used for identifying concept of reflection done by nurses. Related terms identified in literature are reflection, reflective processes, reflective cycle, reflective thinking, and reflective judgement. Concept analysis of the term reflective practice is undertaken here to clarify concept boundaries, operationalization and measurability in the study.

2.1.1 SURROGATE TERMS

Surrogate terms are terms used to express similar phenomenon or concept in alternative way. Sure theorists used terms different than that of reflective practice to express phenomenon in initial literature.

Critical thinking (Taylor, 2006), problem solving (Dewey, 1933), self-assessment, enquiry (Schon, 1987; Johns, 1998), experiential learning (Kolb, 1984; Boud, 1985) are such terms associated with reflective practice.

Literature search was conducted for the search of terms of concepts under study. A computerized databases, books and journals searched using search terms as 'reflective practice', 'reflective practice and health professions', 'reflective practice and nursing' and 'reflective practice and

clinical practice'. Relevant articles were chosen manually after reading abstracts. Published books on reflective practice were included.

Reflective practice is amalgamation of two words respectively, reflective and practice. The word reflective and practice with their meaning and thesaurus are as noun, verb and adjectives is as follows (Rodger's 21st century thesaurus, 2013).

TABLE 2: REFLECTIVE PRACTICE MEANING AND THESAURUS

WORD	MEANING	THESAURUS
REFLECTIVE		
Noun	As reflection: Thought, Thinking	Consideration, Contemplation, Impression, Idea, Observation, Opinion, Rumination
Verb	As reflecting, -to reflect: To give back	Echo, Follow, Mirror, Reverse, Contemplation, Introspection
Adjective	Deep thinking, Thoughtful, Intentional, Thinking rationally	Contemplative, Deliberate, Meditative, Studious
PRACTICE		
Noun	Routine, Usual procedure	Form Habit, Method, System, Use, Process
Verb	Repeat action to improve	Exercise, Hone, Prepare, Rehearse, Train, Work,
Adjective	Trained	Adept, Skilled, Proficient, Exercised

It is important to know that reflective practice is used in nursing all over the world including Asian countries such as China, Singapore, Malaysia, Thailand and Japan. It is also interesting to

know that medical and other health professions have looked towards reflective practice in India. It is yet to know for the researcher that nursing has ever used and utilized in Indian context, as no direct study has done in India related to reflective practice by or on nursing is found so far.

2.1.2 CRITICAL ATTRIBUTES

On examining concept, different characteristics appear over and again. These are critical or defining attributes of that concept. Clustering these attributes allow the broadest insight into the concept. The defining attributes discussed in the concept analysis done by Duffy (2007) and modified here for the present study. They are examination of practice, reflexivity, Deliberate and active thinking and process of transformation.

Examination of practice

The reflective practice thoughtfully examines ones experience during situation or event and learns new avenues of it. In nursing, a student performs task in clinical area as part of learning and practicing skills. Every opportunity during clinical practice gives new insight and skill keeps developing with each exposure.

There is subtle, known or unknown, inner dialogue revolves in the mind of the student or the staff nurse and supervision, guidance and peer consultation happening in the periphery. This cumulatively performs an examination of the practice by a student. Reflective practice facilitates deliberate and thoughtful examination of one's practice and leads to reliable understanding of the experience which can be shared with colleagues. This ultimately adds to nursing knowledge.

Reflexivity

Reflexivity is unique capacity of humans to engage in self-conscious inquiry into own experience (Flanagan, 1981). It is positively proportionate to the accuracy of explanation, prediction and control. If reflexivity is groomed, then the explanation, prediction and control are conscious and closer to accuracy. Systematic reflective practice uses reflexivity to reach to the core element of an experience.

Deliberate and active thinking

Thoughts are a fundamental human activity and can be referred to the ideas resulting from thinking. Deliberate and active thinking is imperative in professional practice. Critical thinking

(2014) is the process of active and skilful conceptualization, analysis, evaluation and application of information to reach towards conclusion. This thinking is utilized in the reflective practice to understand, analyse and learn from clinical practice.

Process of transformation

Wades (1998) personal transformation definition is a dynamic, uniquely individualized process of expanding consciousness whereby individuals become critically aware of old and new self-views and choose to integrate these views into a new self-definition. Reflective practitioner gradually appraises past and new experience more deeply and consciously. Transformation is highest achievement of reflective practice.

2.1.3 ANTECEDENTS

TABLE 3: ANTECEDENTS OF REFLECTIVE PRACTICE (Driscoll, 2004)

Willing to learn
Ability to describe
Aware of own thoughts
Aware of own emotions and feelings
Ability to analyse own actions
Ability to make sense of situation and analysis
Belief in thoughts and changes
Recognizing new learning
Being honest to own thoughts
Being motivated

Antecedents are events which should occur before the concept (reflective practice) taking place. Driscoll (2004) discussed antecedents of reflective practice and they are modified for this study (Table 4: Antecedents of Reflective Practice).

2.1.4 CONSEQUENCES

Reflective practice is inclusive process and complex, it is imperative that the implications and consequences of reflective practice are on all four pillars of nursing, namely research, practice, education as well as administration and management. Detailed discussion on the studies is presented in the third section of this chapter.

On Nursing Research:reflective practice in research guides to see what is done and what needs to be done. Researchers can identify actions and can analyse strengths and weaknesses of research methods and approaches.

On Nursing practice: Reflective practice can be used as case study, incidence reporting, risk management and evaluation of practices in clinical areas of health care.

On Education: Professional education is knowledge and skill based lifelong adult learning. Consequences of reflective practice on teaching can be beneficial to teachers and on learning can be beneficial for students. Nursing colleges can also use reflective practice for evaluating various types of evaluation and assignment methods for judging better quality.

On Administration and Management: Reflective practice studies on nursing management and administration are scarce. However corporate and business professionals use reflective practice for SWOT analysis.

All above consequences of reflective can be applied to nursing profession.

Discussion on reflective practice concept is undertaken in this chapter to provide understanding phenomenon of reflective practice for undertaking literature review which included theoretical and empirical aspects of reflective practice in various contexts of health professions. Following section on theoretical perspectives has elaboration of reflective practice as evolved by prominent theorists from various disciplines and their models of reflection. Dewey (1933) is done pioneer of work on reflective practice. Kolb (1984), Rolfe (2001), Johns (1994), King and Kitchener (1994) and Gibbs (1988) have worked extensively and developed models of reflective practice and its use in their respective fields and disciplines.

SECTION II:THEORETICAL PERSPECTIVES OF REFLECTIVE PRACTICE

Practical wisdom makes a qualified and learned professional as an expert in the given field. Aristotle insisted that there is one virtue of the thought, which he called as 'phronesis' translated as practical wisdom (Kraut, 2012). Aristotle said that phronesis is not simply a skill, as it involves the ability to decide how to achieve a certain end, and also the ability to reflect upon and determine good ends consistent with the aim of living well overall. Birmingham (2004) argues in the article titled 'Phronesis - a model for pedagogical reflection', that the virtue of phronesis is embodied in the perspectives and elements of reflection.

As we have seen in previous chapter, reflection involves taking the unprocessed material of experience and engaging with reflective practice as a way to make sense of what has occurred, focusing on the thoughts and emotions involved. In order to discuss theoretical perspectives of reflective practice, the work of several prominent reflective practice theorists is examined. The conclusion is that a diverse areas of literature related to reflective practice have been developed according to context of profession and discipline on which theorist is working.

2.2 EVOLUTION OF REFLECTIVE PRACTICE

Seminal work about reflective practice is done by John Dewey (1933), an American philosopher and educational reformer, who first introduced the idea of reflective practice as an aspect of learning and education, defining it as 'active, persistent and careful consideration of any belief or form of knowledge in the light of its ground that support it and further conclusion it brings'. Dewey identified the three attributes of reflective individuals: open minded, responsible, and wholehearted.

There are various definitions and descriptions of reflection are available in literature. Boud et al. (1985) defined reflection as 'a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation'. Boud (1999) as a professor of adult education at University of Sydney, Australia, has asserted that the emergence of reflective practice is part of a change that acknowledges the need for students to act and to think professionally as an integral part of learning throughout courses of study, rather than insisting that students must learn the theory before they can engage in practice.

Jennifer Moon has national teaching fellowship from the higher education academy, of United Kingdom. She conducts workshops on reflective learning in UK and abroad. Moon (1999)

described reflection as ‘a form of mental processing with a purpose and/or anticipated outcome that is applied to relatively complex or unstructured ideas for which there is not an obvious solution’ in her book called ‘ A handbook of reflective and experiential learning’, written for guiding teacher and learner of reflective practice.

Mann, Gordan& MacLeod (2009) conducted a systematic review of reflection and reflective practice in health professions and their education in order to understand key elements of reflection. Brigid Reid (1993), tutor and facilitator in clinical education and practice team at John Radcliffe hospital UK formulated reflective practice definition as follows, Reflection is a process of reviewing an experience of practice in order to describe, analyse, evaluate and so inform learning about practice.

It is discussed in the review of literature as follows and is evident from careful inquiry of the models, that most of the models of reflective practice such as (Kolb (1984), King and Kitchener (1994), Johns (1994), Rolfe (2001), Gibbs (1988)) described reflection as activated by the awareness of a need or disruption in usual practice. These models are based in both theory and empirical data presented by theorists as result of their dedicated work in various contexts. Their common premise is that of returning to an experience / situation / event, to examine it deliberately and intending what is learned may be a guide in future situations, as well as incorporating it into one’s existing knowledge. Following section gives overview of some reflective practice models in order to support the selection of reflective practice model by the researcher for the present study.

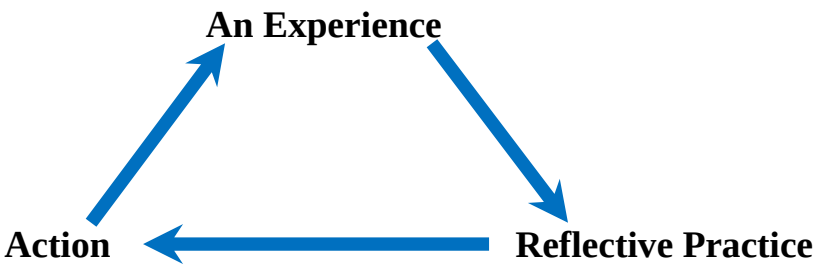
2.3 MODELS OF REFLECTIVE PRACTICE

Reflective practice requires efforts to utilise determination and sense of meaning in order to recall, analyse and learn from the experience or event or situation. In order to arrive at conclusion or resolution one must choose model that best suits for reflection. Several models are derived from thoughtful working of prominent scholars and offer variety of perspectives to reflective practitioners. It is imperative to understand that reflection is dynamic and models can only guide reflective practitioners to reflect and are not end in it.

EXPERIENCE, REFLECTIVE PRACTICE AND ACTION ERA

Dr. Melanie Jasper was an editor in chief of the Journal of Nursing Management and Head of the College of Human and Health Sciences at Swansea University, United Kingdom. Her interest in reflective practice brought about various books on reflective practice in nursing. She discussed three major components of reflective practice are cyclic and they are, An Experience, Reflective practice and Action, which she called as ERA cycle. The cyclic nature of reflective practice is the key to moving forward as practitioners. In this process we do not stop after first cycle. Next time when we face similar experience we will encounter it in different way. Thus the experience has been transformed due to learning occurred at previous cycle. This goes on and on, again and again.

FIGURE 1: ERA CYCLE



All models and theoretical perspectives discussed earlier, suggest that reflective practice occur knowingly or unknowingly, formal or informal. It can be developed and used in professional learning. It can also utilise in professional practice for personal growth and development. Reflective practice can be taught and thus need to be included in the course curriculum.

Mentors and or peer reviews are valuable as reflective practitioner needs feedback to assert analysis and new learning. In order to propel further the review of literature, the concept of reflective practice analysis is proposed in next section to understand its core elements, along with its attributes and characteristics. According to Walker and Avant (2005) the formal concept analysis aims at the clarity of concepts. The conceptual framework is built on concepts, its antecedents and applies them into study.

CYCLIC EXPERIENTIAL LEARNING MODEL OF REFLECTION

David Kolb is an American educational theorist who focused on experiential learning. Kolb (1984) developed cyclic experiential learning model of reflection composed of four elements in spiral learning (learning can be started from any of four elements and follow the sequence). Typically it begins with concrete experience. Four elements of experiential learning model of reflection are concrete experience (Do), observation of and reflection on that experience (Observe), formation of abstract concepts based upon the reflection (Think) and testing new concepts (behaviour).

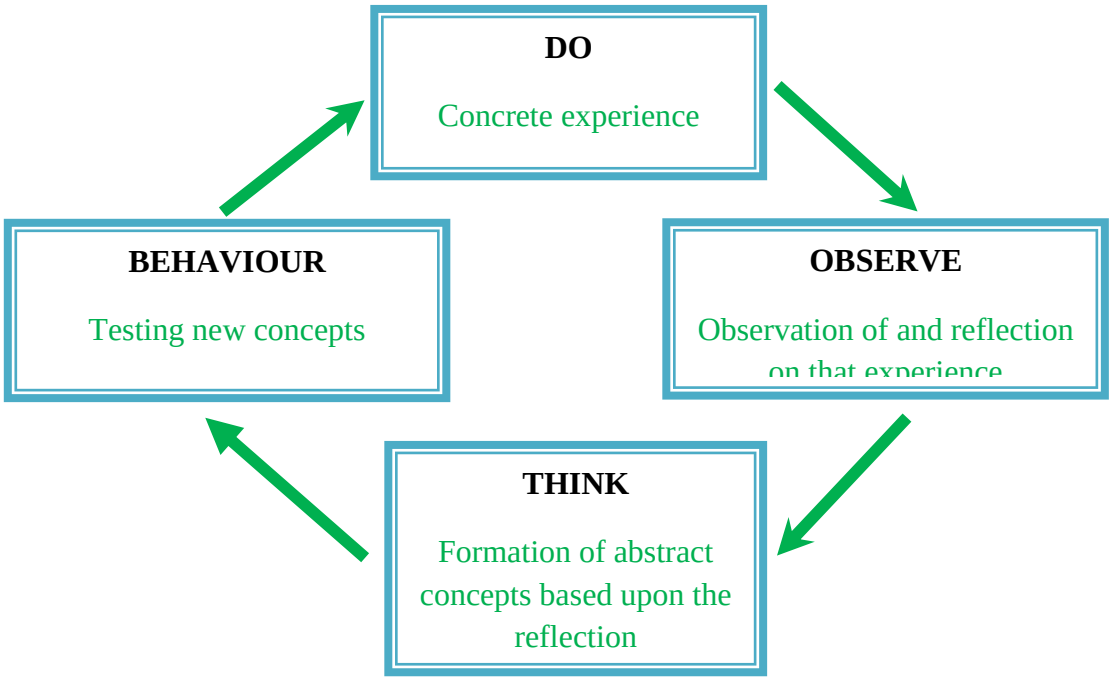


FIGURE 2: KOLB'S EXPERIENCIAL LEARNING OF REFLECTION MODEL (KOLB, 1984)

This is called experiential for two reasons. First this learning has intellectual origins and second is that the experience has central role. According to Kolb (1984) learning is the process whereby knowledge is created through the transformation of experience. Kolbs' experiential learning of reflection model (Figure2) is useful for nurses to build knowledge as a practitioner.

THE REFLECTIVE JUDGMENT MODEL

King and Kitchener (1994) spent many years for analysing students' beliefs about knowledge. Drawing from this observation, King and Kitchener chose the term

TABLE 4: KING AND KITCHENER'S REFLECTIVE JUDGEMENT MODEL (KING & KITCHENER, 1994)

		View of Knowledge	Concept of Justification	e.g. Hyperemesis
PRE-REFLECTIVE THINKING: Stages 1, 2, 3	Stage 1	Assumption: Existed knowledge is absolute & concrete	Beliefs need no justification.	I know what I have experienced.
	Stage 2	Knowledge is absolutely certain, but not available always. It can be obtained.	Beliefs are generally unexamined or examined by their correspondence with authority figure	If it is printed it has to be true.
	Stage 3	Knowledge is absolutely certain, but in some cases it is uncertain.	Beliefs are justified by reference to authorities' view. Beliefs are defended as personal opinion.	If it is convinced by authority it must be authentic.
QUASI-REFLECTIVE THINKING: Stage 4 & 5	Stage 4	Knowledge is uncertain. There is element of ambiguity in evidence.	Beliefs are justified by giving reasons, with choice of evidence that fits an established belief.	I am inclined to believe causes of hyperemesis, but need proof. How will I know?
	Stage 5	Knowledge is contextual and subjective.	Beliefs are justified within a particular context by means of the rules of inquiry for that context and by context-specific interpretations of evidence.	People think and act differently, sometimes it works.
REFLECTIVE THINKING: Stages 6 & 7	Stage 6	Knowledge about ill structured problems is constructed through evaluating evidence and opinions of others	Beliefs are justified by comparing evidence and opinion form different perspectives	There is degree of sureness in some remedies.

	Stage 7	Knowledge about ill structured problems is constructed through inquiry which leads to reasonable solutions based upon evidence currently available.	Beliefs are justified probabilistically on the basis of a variety of interpretive considerations. Conclusions are defended as representing the most complete, plausible, or compelling understanding of an issue not the basis of the available evidence.	Studies have shown effect of B12 and ginger in some forms of hyperemesis

"reflective judgment" to describe the kind of epistemic cognition that includes the recognition of reality as uncertainty or unexpected problems or issues.

King and Kitchener (1994) applied Fischer's skill theory to describe the acquisition of reflective judgment skills. Kurt Fischer's (1980) skill theory provides a cognitive model for how we learn new skills in any domain. Fischer's model hypothesizes that we learn skills first through expressing them as representations, then relating these to form abstractions and finally creating overarching principles.

King and Kitchener's the Reflective Judgment Model (Table 3) is comprised of 7 stages which fit within 3 clusters: pre-reflective, quasi-reflective and reflective. The stages are linear in nature but it is possible to be in more than one stage at a time. King and Kitchener (1994) stressed that we do not learn from experience we learn from reflecting on the experience.

THE LOGICAL MODEL OF REFLECTION

Christopher Johns, UK's advanced nurse practitioner and nursing reader, is an internationally recognised pioneer of reflective practice in nursing and health care. Johns' (1994) model is a logical model of reflection with a guide to gain greater understanding for reflectioner. It is constructed to be carried out through the act of sharing or mentoring. Johns' model focused on the experienced knowledge and this model has the ability to access, understand and put practice information that has been acquired by experience through empirical means. In order for this to be achieved reflection occurs though 'looking in' on ones thoughts and emotions and 'looking out' at the situation experienced. Five fundamental patterns of knowing by Carper (1978) are incorporated into the Johns guided reflection model, having a reflectional to analyse the aesthetic, personal, ethical, empirical and the reflexive elements experienced through the selected situation for reflection.

Johns' model of reflective practice (Figure 2) identifies particular areas of reflective practice in nursing. Describing a situation significant to the nurse, identifying personal issues arising from the situation, focusing on personal intentions, empathising with others in the experience, recognising one's own values and beliefs, linking this experience with previous experiences, creating new options for future behaviour and looking at ways to improve working with patients, families, and staff in order to meet patients' needs. Johns' model (Figure 2) is comprehensive and allows for reflection that touches on many important elements. This model is apt for experienced nurses in clinical, educational and administrative fields.

1. LOOKING IN

- Focus on self
- Focus on your thoughts & emotions
- Write down those thoughts & emotions

2. LOOKING OUT

- Write a description of the situation related to your thoughts & feelings
- Describe the situation as 'here and now' experience
- What essential factors and key points of this situation?
- What are the significant background factors to this situation

3. WHAT ELEMENTS SEEM SIGNIFICANT?

Aesthetics

- What was I trying to achieve?
- Why did I respond and acted the way I did?
- What were the consequences of my action for me/the patient/family/colleagues I work with?
- How did the others felt about it?
- How did I know how others felt that way?

Personal

- Why did I feel the way I did within this situation?

Ethics

- Did I act for the best of my capacity?
- What internal and external factors were influencing me?

Empirics

- What knowledge did or could have informed me?

4. REFLEXIVITY

- Does this situation relate to other experiences?
- How could I handle this situation differently?
- What would be the consequences of alternative actions for the patient/others/myself?
- How do I feel about this experience now?
- Has this experience change my way of knowing? (empirics, aesthetics, ethics or personal)

FIGURE 3: JOHN'S MODEL OF REFLECTIVE PRACTICE 1994

THE DEVELOPMENTAL MODEL OF REFLECTION

Gary Rolfe is Professor of Nursing in the College of Human and Health Science of Swansea University. Rolfe et al (2001) adapted concept from Borton's (1970) framework and developed a model with analytic problem solving approach to the reflective practice with three cue questions – What?, So what? Now what? These three elements aim at an analysis of the situation

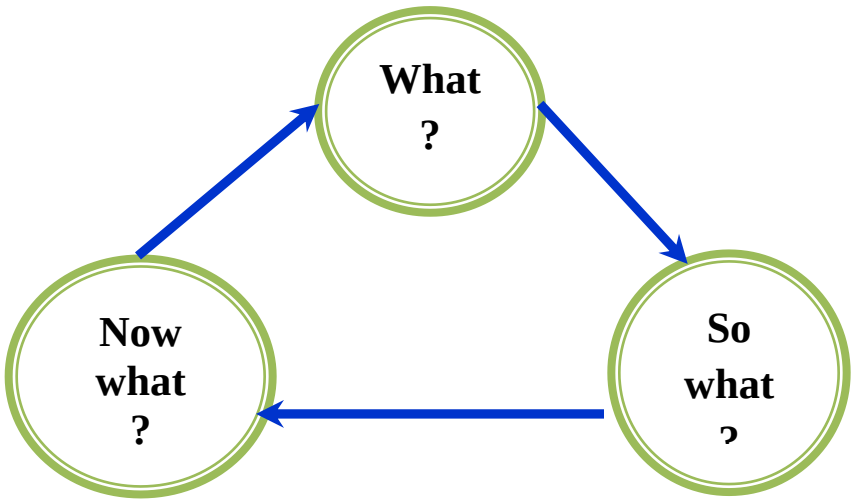


FIGURE 4: ROLFE'S MODEL FOR REFLECTIVE PRACTICE (ROLFE, 2001)

Depending on situation under scrutiny reflective practitioner may choose to ask various sub questions. 'What' element can have sub questions such as what is the problem? What is the reason? What was my role? What actions did I take? What was response of others? What are the consequences? What is good and bad about experience? Similarly, 'so what' element can have sub questions as, so what does this tell? So what were my thoughts? So what should I have done? So what other way I can do this better? Third element 'now what' can have sub questions as, now what I need to do? Now what might be effects? Now what issues need to be considered? Answers to these questions lead to analysis of the situation and knowledge gain.

Rolfe has proposed the developmental model of reflection (Figure 3) which is useful analysing and synthesizing information related to situation and organized into meaningful sequence. It is quick guide to develop habitual reflection practice among students as well as practitioners.

SCHÖN'S REFLECTION-IN-ACTION & REFLECTION-ON-ACTION

A leading M.I.T scientist, Ford professor and influential thinker, Donald Schön's seminal (Schön, 1983) book, The Reflective Practitioner, challenged practitioners to reconsider the role of technical knowledge versus "artistry" in developing professional excellence. The concept most notably affected study of teacher education, health professions and architectural design is – how professionals think about solving problems. Schön believed that people should be flexible and incorporate their life experiences and lessons learned into action. This type of learning is called as single–loop learning and double–loop learning.

The former refers to the process that occurs when person adjust his or her actions to keep pace with changing conditions. And then the latter refers to adjusting to the changing conditions, as well as to the creation of new and better ways of achieving goals. Donald Schön's (1983) book also introduced concepts such as 'reflection on action' and 'reflection in-action' where professionals meet the challenges of their work with a kind of improvisation learned in practice by reflecting during the action or reflecting on the action (Table 5)

TABLE 5: SCHON'S REFLECTION IN ACTION AND REFLECTION ON ACTION

Steps	Reflection In Action (During Experience / Event / Situation)	Reflection On Action (After Experience / Event / Situation)
I	Thinking ahead	Thinking through subsequent to situation
II	Analysing	Discussing
	Experiencing	
III	Critically responding	Reflective journal

The impact of Donald Schon's work on reflective practice has been significant. Reflective practice described by Donald Schon is been currently practiced by most of the professions including nursing.

GIBB'S REFLECTIVE CYCLE

Graham Gibbs is currently Honorary Professor at the University of Winchester where he is involved in a large scale research about student learning. He was previously Director of the Oxford learning institute at the University of Oxford. Gibbs (1988) published his reflective cycle in the book called 'Learning by doing'.

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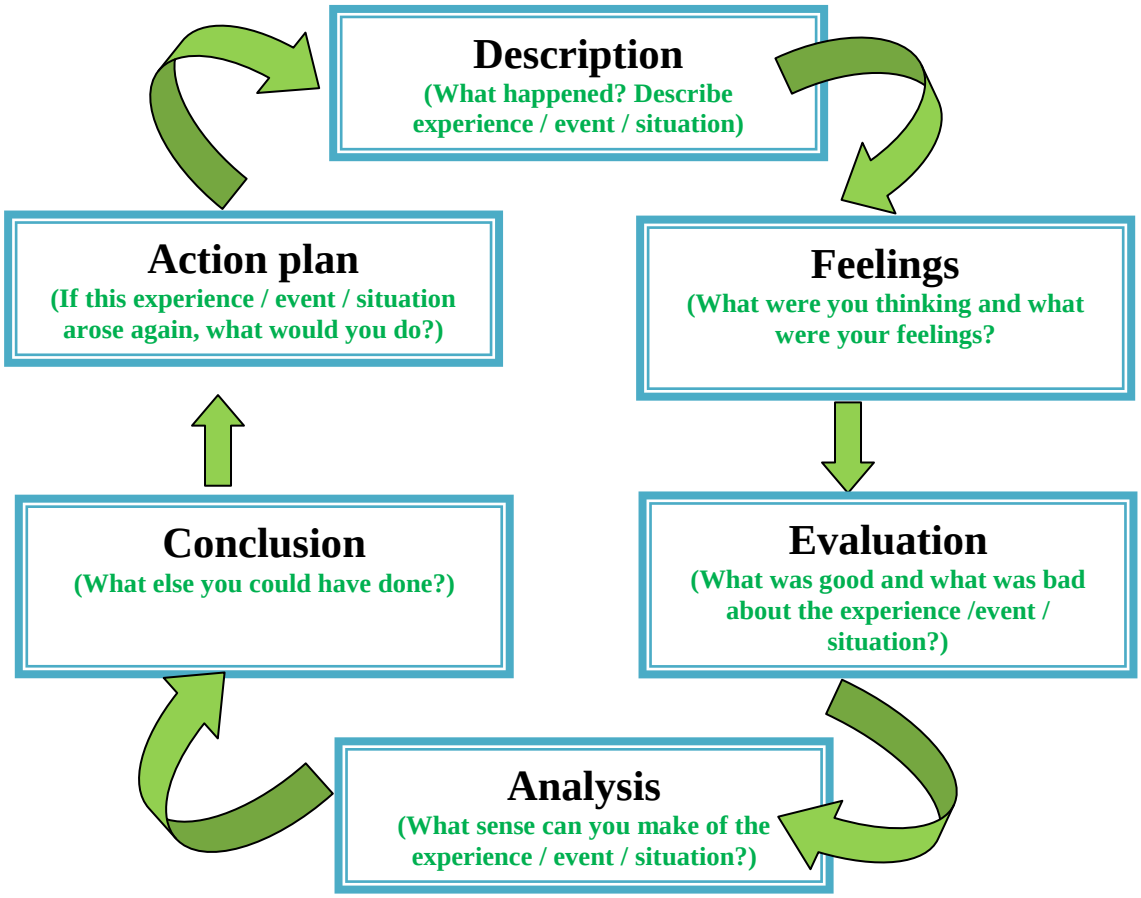

FIGURE 5: GIBB'S REFLECTIVE CYCLE

His reflective cycle presented how learners can link theory and practice through engaging in a cyclical sequence of activities: describing, feeling, evaluating, analysing, concluding and action planning. Gibb's reflective cycle encourages systematic thinking about the situation. This is one of the popular models of reflective practice and is used in many organisations in the world. Gibbs reflective cycle is taking an account of reflective practitioners' emotions.

The objectives of using Gibbs' reflective cycle are to challenge your assumptions, to explore different/new ideas and approaches towards doing or thinking about things, to promote self-improvement (by identifying strengths and weaknesses and taking action to address them), to link practice and theory (by combining doing or observing with thinking or applying knowledge). Gibbs cycle asserts that it is not enough to reflect; there is a need to put practice into the learning achieved by reflecting and new understanding gained.

Gibbs prompts the reflective practitioner to formulate an action plan on new learning achieved by reflective practice. This enables the reflective practitioner to look at their practice and see what they would change in the future, how they would develop/improve their practice during reflective practice process itself. This gives conclusion to thought process invested during reflective practice. This is also new beginning or base for future practice and thus provides sense of preparedness to practitioner. Gibbs reflective cycle (Figure 5) is self-explanatory for reflective practitioners. Still it is vital to provide mentoring and feedback for novice, in order to adapt to the skill of reflective practice seamlessly

SECTION III:EMPIRICAL LITERATURE ON REFLECTIVE PRACTICE

Empirical studies were reviewed from various databases namely CINAHL, PubMed, SOCIndex, PsychINFO, Ovid with search terms 'reflective practice', 'clinical practice', 'health professions'. Limitations were put up as publication in last twenty years to keep search close & relevant to the present time. Titles and abstracts searched manually for selection. Reflective practice studies done on or by health professionals were selected for the review. Selected studies tabulated to generate findings and ease of analysis. Findings from the studies converted into themes for understanding and discussion.

2.4 THEMES OF EMPIRICAL LITERATURE

Reflective practice was found applicable and beneficial to all trainee and health professionals such as medicine, physiotherapy, occupational therapy, speech and language therapy, nursing, midwifery, pharmacy oral health therapists, rehabilitationists, radiation therapists, mental health nursing, palliative care. This confirms the overall health care profession's involvement in reflective practice.

Benefits of reflective practice are widely recognised as selected studies are done in all corners of the world; Canada, USA, UK, Ireland, Italy, Spain, Cyprus, Sweden, Finland, Belgium, Norway, Australia, Hong Kong, Malaysia, Thailand, as well as South Africa. Only one study was done in India included in the review is done by radiation oncologists (Duraiswamy et al 2011) for neuropathic pain as critical incident nalysis and explored that reflective practice is the good way of learning and knowledge sharing by the group involved in the oncology pain management.

Milinkovic& field (2005) explored the key concepts of reflective practice and stated that student learning on the clinical placement is complex issue and cannot be defined by solely doing things. Reflective practice during clinical placement is essential if the student is going to learn from the experience. Therefore it is important for educators and institutions to include reflective practice as part of clinical education.

Several themes generated from the findings of the studies derived from literature. Themes are related to time, level of reflective practice, as well as perceptions and perspectives of students and professionals regarding reflective practice. Themes are as follows.

REFLECTIVE PRACTICE AS SKILL

Several studies considered reflective practice as skill and thus need to develop it through professional education. Reflective considered being generic skill as well as enhancing skills development of professional students.

Hatlevik (2012) conducted study in Norway to assess co-relation between acquired skills (reflective skill and practical skills) and theoretical knowledge of student nurses. The results indicated that reflective skills have mediating effect on students' coherence about theory and practice. It is further suggested that reflective practice skill is not only generic skill but essential for relevant professional knowledge and experience. Laverty (2011) in the study done physiology students to understand students' perspectives and attitudes towards reflective practice suggested that reflective skill is to be developed gradually and continually through the whole

program right from beginning. Milinkovic& Field (2005) conducted study in Australia to explore the key concepts of reflection and found that reflective practice enable radiography students learning by doing and thus it is a skill development through cognitive learning. It is therefore important to include reflective practice as learning strategies in clinical education.

The Australian study done on speech–language therapy students by Hill et al (2012) to describe depth of reflective practice demonstrated that reflective practice skill is developed from surface to deeper as student progresses to graduation, thus explicit teaching of reflective skills and its placement within academic curriculum is necessary. Smith & Jack (2005) conducted study to ascertain nursing students perceived impacts of reflective practice and found that it enhanced the skill development in meaningful way. Slandyk&Sheckley (2000) supported the same finding that significant clinical reasoning skill development during field experience is occurred due to occupational therapy students' reflective abilities. Slandyk&Sheckley (2000) explored the issues of clinical reasoning skill development during clinical practice among occupational therapists. It is suggested that significant clinical skills development occurs in twelve weeks fieldwork. The conventional planning of many learning skills activities as a part of clinical program may decrease clinical reasoning. It was further suggested that study to be conducted using control group to identify level of clinical reasoning in group using reflective practice with the group who did not.

Durgahee (1997) investigated the effects of learning moral and ethical reasoning through story telling among palliative care nursing students. The study findings suggested to be enhancing communication skills leading to conceptualization. It also facilitated insight development to reason fairly and ethically. The story telling used as reflective tool to reliving clinical experience.

Kok&Chabeli (2002) conducted study to determine effectiveness of reflective practice tool on the reflective thinking in clinical nursing education and validated guidelines to use reflective practice tool to facilitate reflective thinking among student nurses. The positive perception by the nursing students was that the development of problem solving skills attained through reflection by using analysis and evaluation of the situation, as well as self-evaluation led to intellectual growth.

REFLECTIVE PRACTICE AS TOOL

Many studies found reflective practice as tool to support and to promote practice changes (Norbye et al 2012) and for detecting and analyzing situations (Asselin, no year). In the study done by Lutz etal (2013) to evaluate perceptions about reflective practice, medical students stated that it reduces stress and serves as a tool for professional as well as personal development.

Montana et al (2010) and Charalamous (2003) suggested that reflective practice support nurses professional growth. In the Irish study done on physiotherapists conducted by Dowds& French (2008) highlighted that reflective practice is the tool to integrate learning into everyday practice and ultimately improves patient care.

In the study done by Mantzoukas& Jasper (2004) to explore nurses (staff nurses working in four medical and surgical wards of NHS trust hospital) views about reflective practice, it is was revealed that reflective practice was viewed as tool for advancing practice and knowledge as well as helping them to renegotiate their role in the organisations hierarchy.

Ker (2003) evaluated the feasibility of incorporating skills of intimate examination by medical students by using reflective approach. This was found advantageous to introduce medical students using simulation and reflective practice.

TIME OF REFLECTIVE PRACTICE

Reflection may lead to the implementation of learning from education to practice when the individual has awareness, motivation and ability to use reflection (Lowe et al, 2007). Time of reflective practice plays an important role in practicing professionals' clinical decisions. Teekman (2000) studied reflective thinking in actual nursing practice of staff nurses and found that nurses often engaged in reflection for action, which centered on here and now in order to act and reflect. Reflection for evaluation and reflection for critical enquiry could not be demonstrated in general practice. This suggested that the time is valuable element of reflective practice for clinical practitioners.

LEVEL OF REFLECTIVE PRACTICE

It is imperative to estimate the level and to determine the need of the student learner to engage into reflective practice. Level of reflective practice is raised as practitioner routine engaged in it .

Embo et al (2014) in their study to explore learners perceptions regarding reflective activities found that first year medical students needed structure reflective activities, whereas as students

progressed into their clinical experience they preferred less structured reflective activities. It was also found that activities for reflection-in-action and reflection-on-action are differently goal oriented. Thus suggested that require different placements in clinical training programs. O'Donovan (2005) discovered in her study that mental health nursing students primarily used reflection on action. Reflection in action was not demonstrated by students.

Fakude& Bruce (2003) conducted quasi experimental study in South Africa to investigate the journaling using Gibbs reflective cycle as a strategy to reflect on clinical experiences by student nurses. It was analysed that students had no difficulty in recalling clinical experience and were scored high on describing experience and lowest in response to action to be taken in future similar situation. Students were keen on immediate feedback for their reflective journaling.

BARRIERS OF REFLECTIVE PRACTICE

The following studies are able to identify barriers of reflective practice. Cashell (2010) studied radiation therapists perceived barriers for the use of reflection during their clinical practice which they thought can overcome by providing time, coaching and supportive environment for reflective practice by organisational initiatives. Ip et al (2012) & Laverty (2011) found that lack of time or time constraints are major barriers for reflective practice among nursing and clinical physiology students Ip et al (2012) also stated that students perceived lack of trusting relationship with their instructor as barrier to reflection.

Willgens (2013) explored internal barriers of reflective practice among physiotherapy students and found that students do have mindfulness and communication with colleagues but fail to have internal dialogue when in clinical area, which is hindrance for reflective practice. Willgens (2013) also found that students are taught for self-assessment but not taken into account the element of stress students have during clinical exposure. Also relying on past experience is not applicable for students as they are novice in any clinical situations.

STUDENT'S PERSPECTIVES ON USE OF REFLECTIVE PRACTICE

Burgess et al (2013) explored reflective capacity of clinical Psychology trainees in order to identify their training needs and found that novice trainee who are not taught reflective practice could engage in fleeting or rudimentary reflection; that too when planned interventions did not match expectations. Burgess (2013) asserted the similar fact that reflection occurs in novice

supports the need of systematic approach to include to teaching and training the reflective skills in clinical practice.

Hill et al (2012) described depth and breadth of reflective skill capacity of speech and languages. Students found that majority of the students can reflect whereas some students are critical reflectors from the start. In the study conducted by Rigby et al (2012) students reported that clinical reasoning skill is developed through reflective practice.

Schuessler et al (2012) reported that nursing students developed cultural humility over a period of time due to reflection on the clinical experiences. Cooke & Matarasso (2005) suggested that reflective practice in mental health is complex as difficulties in identifying ideal from reality. It requires complex reflective skills and thinking that need to be learned and honed. Webster (2010) examined effect of reflective writing on psychiatry nursing students empathy and stated that students 'gaining understanding' through creative expressions.

Reflective practice is found to be helpful in 'feeling supported' and 'developing confidence' by nursing students in the studies done by King-Okoye&arber (2014) as well as Montagna et al (2010). Garcia et al (2007) conducted Spanish study to ascertain nursing students perceived experience of reflective diary on clinical practice and identified that students contributed reflective practice to learning of 'getting out feelings', 'clarifying facts', 'going deeper in thinking', 'reinforcing knowledge', 'analysing situations', 'progressing on personal level', 'self-criticism'. Nursing students also expressed their opinions about reflective practice writing as reflective practice brings back sentimental memories, it is routine and boring, and it is not necessary to write and think (Garcia et al 2007).

Most nurses start their career with full of zest and successful completion of nursing education with vast theoretical knowledge, skill acquisition as well as professional attitude. Competence is acquired through experience at workplace. A Japanese study (Sakayo et al 2007) done on new graduate nurses discovered that reality shock composed elements such as unexpected situations in patient care, large number of patients under their care, sudden change in patient care situation, provision of nonstandard care, difficulties in communicating with patients and their families, difference between reality of the workplace and personal views of nursing, confusion regarding cooperation between multidisciplinary team members.

McMullan (2006) conducted study to determine nursing students' perceptions to use reflective practice portfolio for assessment and found that student nurses felt that reflective writing (portfolio) is time consuming and not associated with learning. They felt the conflict between assessment (evaluation) and learning through reflective practice. These studies focus the need of placing and modulating reflective practice as a learning tool for the students and not as evaluation exercises.

PROFESSIONAL'S PERSPECTIVES ON USE OF REFLECTIVE PRACTICE

Professionals engaged in formal or informal reflective practice in almost all health care disciplines and found it helpful and supportive. It was considered as metacognition of events and emotional ventilation.

Beres (2002) conducted a study to explore and explicate the process by which nurses learn and develop their clinical practice. Findings suggested use of clinical reasoning was central to the process of clinical practice development through integrative process where multiple types of information were brought simultaneously by nurses. Additional processes were use of knowledge construction by reliance upon past experiences, incorporation of intuition and engaging in reflective practices. Simpson & Courtney (2007) studied reflective journal documentation among nurses and found that reflection provided metacognition of events experienced during clinical practice. Nurses also revealed that journaling gave them opportunity to pen thoughts and writing down subjective and objective data, which gave them confidence.

Mantzoukas& Jasper (2004) explored UK nurses' views about reflection in daily practice and found that nurses understood it as conscious raising activity that would renegotiate nursing role within hospital setting. Teekman (2000) studied reflective thinking in actual nursing practice that is clinical area, and found that self-questioning was element of reflective practice. Dube&Ducharme (2014) conducted a study in Canada to evaluate effect of a reflective practice intervention on the attitudes, knowledge and interventions of nurses. Staff nurses participated in the study suggested that reflective practice promote sharing of nursing experiences and support acquisition of new knowledge. Lahti etal (2014) studied perspectives of nursing staff through reflective writing and found that nurses were able to identify development areas and making an action plan. Cashell (2010) explored radiation therapists understanding of the reflection and

indicated that it is integral part of their professional practice. It is suggested that outcome based studies need to be conducted to determine improvement in patient care.

Duffy (2009) conducted interviews in Ireland to find out experiences of staff nurse preceptors towards guiding students through reflective practice. Findings revealed that preceptors had limited knowledge of reflective practice and thus need training to guide students.

Asselin (no year) in the phenomenological study on reflective strategies used by nurses found that working through emotions and reliving experience to make sense of the situation. Siriwanji (2002) found the principles of Buddhist philosophy of meditation related to internal thinking during reflective practice. In this Thai study Siriwanji (2002) identified that nursing students managed to apply and found the experience contributed positively to their clinical learning.

It was also found that respondents often engage in reflection in action as well as pre perceptions played an important role. This suggests that informally nurses engage in reflective practice but do not overtly validate their tacit knowledge.

ORGANIZATIONAL INFLUENCE ON FOSTERING REFLECTIVE PRACTICE

Fillion et al (2014) explored the perceptions of rehabilitation professionals regarding their scholar role and found that dissatisfaction with the lack of knowledge sharing among clinicians and underdevelopment of reflective practice. Motivation, Critical incident analysis, emphasis on tacit knowledge and clinician intuition were found leading to self-confidence of professionals as scholars.

Formeris&Peden-McAlpine (2006) suggested that hospital culture had a significant impact on reflective thinking of nursing students. Mantzoukas& Jasper (2004) examined relationships between the organizational culture and practitioners (staff nurses) in their study and concluded that the concept of reflective practice appeared to be invalid by organizational hierarchy of the wards on the basis of power struggle. They added more to it that nurses were neither prohibited nor encouraged for reflective practice. While in the study (Mantzoukas& Jasper, 2004) it was explored that reflective practice was understood by nurses as a tool not only for advancing practice and knowledge, but also as a consciousness raising activity that could renegotiate the roles of power within hospital settings.

Kok&Chabeli (2002) conducted study to validate the institutional guidelines to facilitate reflective practice in clinical nursing and recommended that the use of guidelines at all levels of nursing and education to produce critical and analytical thinker through reflection to improve practice.

There is clear understanding from literature that organizational influence determine fostering of reflective practice among their staff and students alike. A collaborative approach between health service providers, institutes of nursing is vital for the successful development and implementation of reflective practice and learning in clinical placement.

MENTOR / PEER INFLUENCE

Mentors and peer responses are thought to be valuable by reflective practitioners in various studies.

Dube&Ducharme (2014) evaluated effects of reflective practice and found that mentors have special role to play in reflective practice as perceived by respondents. O'Donovan (2005) in the Irish study done on psychiatry nursing students found three major categories, understanding the process reflective practice, using reflective practice as part of clinical education and needs support and guidance for learning to be achieved. Mentor role is perceived as key element and adequate preparation, ongoing support were suggested as important factors.

Paget (2001) further found in the study that nursing students considered reflective practice more effective when facilitated by mentors. Embo et al (2014) focused further on the need of mentor by his findings from the study that respondents felt need of feedback from their reflection in order to support learners perceptions and its usefulness. Bennett et al (2013) suggested that even mentors can learn from students' reflection. Bennett et al (2013) further suggested that provision of space and time for reflective practice and feedback is necessary to complete learning cycle.

In the Norwegian study on nurses, physiotherapists and occupational therapists conducted by Norbye et al (2012) respondents have perceived need for the support by their leaders to implement changes after reflection. Paden (2011) investigated effects of guided reflective practice and found that it assisted students to learn and identify the learning.

Learning occurred by reflective practice is not only limited to individual but also can be shared and found valuable. Duariswamy et al (2011) conducted case study reflection on critical incident

in palliative care setting to explore issues and foster active learning through reflective practice and suggested that reflective practice is a good way of learning and acquired knowledge can be easily shared with the team. Motangna et al (2010) conducted a Meta study to describe reflective practice nursing field and asserted the need for sharing the clinical incidents and experiences for professional growth and development.

Plack et al (2008) found no significant difference between mentor and peer facilitated reflective practice among doctoral and master physiotherapy students but found mentors and peer facilitate reflective practice. Mori et al (2008) explored the potential trends of masters' physiotherapy students' reflective practice and found students valued peer feedback as much as mentor feedback on their reflective practice. Hong & Chew (2008) found that nursing students perceived motivation factor for reflective practice included feedback and guidance from their mentor and inhibiting factor as apprehension about writing negative feelings and personal attitude. Brown and Gillis (1999) are of the opinion that the development of higher-level reflective activities such as these requires expanded discussions in groups where students could re-examine their viewpoints and receive immediate feedback.

Studies are also done in order to supervise or mentor the students during clinical practice to foster reflective practice with instruments. Donnelli (2011) developed, tested and found that an instrument designed to measure faculty's perceptions of students' abilities to utilize reflective practice as self-learning strategies is effective to know student's ability to reflect. In the Swedish study done by Ekebergh (2011) developed learning model for students where theory and patients lived experiences used in clinical studies, and found that students could use reflective practice systematically. Kennison (2006) developed critical thinking scale (CTS) to evaluate student's reflective writing for the evidence of critical thinking and found as appropriate tool to use in clinical practice area.

Charalambous (2003) in the article published in ICUs & nursing web journal stated that the use of reflective practice is facilitator for learning and not a solution to the problem. But it is sure to raise more clinical reasoning and thus brings theory and practice closer. There are various ways to use it and various ways to cultivate it. Need is to find appropriate schedule and arrangement of the plan of reflective practice. This is facilitated by mentor and peer as well as group sharing.

SECTION IV:LITERATURE ON SOCIAL THEORY AND NURSING

Critical Social Theory allows exploration into individual experiences. The responses of student participants about their experiences provide the medium for articulating meaning in the study data obtained from six student participants enrolled in an associate degree nursing program and a baccalaureate-nursing program located in the south eastern U.S. Findings revealed that student participants became aware of their differences in filtering distractions when compared to other nursing students (Allen, 2013).

A research study was conducted in 1995 with seven women nurses from Southern Cross University, Australia(Glass, 1998). The aim was to investigate the possible relationship between female friendship, mentoring and nursing education. The researchers comprised six second-year nursing degree students and the programmeco-ordinator for the Bachelor of Nursing program. This research was framed in an emancipatory paradigm of critical social science and feminist theory. Reflective

practice journals were used as the research methods. The results indicated that there is an inextricable link between female friendship and peer mentoring. This research was framed in an emancipatory paradigm of critical social science and feminist theory.

Critical theory applied to nursing education provides an opportunity for students to share a revision and reconstruction of ideologies which are potentially developed through social interactions and family dynamics. The process of uncovering meaning through critical dialogue fosters different ways of knowing, emphasizes the value of subjective understanding, values historical and lived experiences, encourages a respect for diversity, and exemplifies partnership in learning.

Thompson (1987) reviewed development of critical thinking in nursing and highlighted its role in challenging domination of relations that exist within nurses. Nurses build reality with reflexivity and incorporate ideological and scientific explanation to the experience.

Critical theory is thus systemic, totalizing, integrating, and global. Social theory therefore has a mediating function for the critical theorists, integrating science and philosophy and mediating between research (Forschung) and theoretical construction and presentation (Darstellung)(Dubiel 1985). Critical theory mediates between various domains of reality, between parts andwhole, between appearance and essence and between theory and practice.

Giddens (1984) proposes that social structure and human being are complementary forces. And that structure human actions and ability to continuously grasp own place as socially accepted position in the context of social values is reflexivity. Malthouse et al (2014) conducted a qualitative study on professional corporate trainers and their situational reflective practices and highlighted individual contextual differences in reflections as practitioners. It was also highlighted that practitioners were progressively distanced from their previous experiences and became objective reflectioner.

CONCLUSION

Today's health care professionals must function in complex and changing health care systems, continuously refresh and update their knowledge and

skills, and frame and solve complex patient and healthcare problems. Preparing professionals who possess these capabilities is correspondingly complex. The importance of reflection and reflective practice are frequently noted in the literature and prominent scholars from diverse fields and disciplines have developed various models for reflective practice; indeed, reflective capacity is regarded by many as an essential characteristic for professional competence.

It is evident by discussion about theoretical perspectives of the reflective practice theory, and empirical studies, that the reflective practice is valuable for professional education as well as practice. Nursing is being one of the most important professional fields; reflective practice is being used and found effective in improvement of nurses' practice and ultimately patient care. Although nursing education and training programs provide students with solid technical foundations for practice and guidance for handling routine clinical problems, educational programs cannot possibly prepare nurse graduates for all of the situations that they will encounter during their professional careers. For this reason, it is imperative that nursing and other health care professionals prepare to be reflective thinkers.

Senediak& Bowden (2007) in their paper on 'Clinical supervision in advanced training in child and adolescent psychiatry: a reflective practice model explained need for providing reflective practice guidelines, it is imperative to establish explicit framework and method to initiate, implement and evaluate the processes of reflective practice with supervision, mentoring, guidance and feedback. Reflective practice is not an incidental event but it requires time, energy and organizational commitment.

Donaghy & Morss (2000) argued and stressed for about guided reflection in the health care discipline. They emphasized that the importance of linking reflective thinking to cognitive processes and clinical practice is to gather evidence of reflective practice, which usually occurs and termed as tacit knowledge and to make it explicit to facilitate critical appraisal.

Marks and McIntosh (2006) discussed in the article 'Achieving meaningful learning in health information management students: the importance of professional experience' that the ability to integrate theory and practice as well as professional and personal development can be achieved through reflective practice. They argued that education in health professions at the student level involves learning the theory, gaining knowledge and developing skill to apply this theoretical knowledge to practical situations. Essentials of this education process include stimulation of personal and professional growth through reflective practice. These vital educational elements are developed during clinical placement and post-placement feedbacks. These factors work together to advance a deep, meaningful and on-going process of learning through which professional excellence can be achieved in Health professions. This discussion leads us to understand that fostering reflective practice is depending on institutional and organisational will.

Bourdieu's theories suggest that a person's own position in terms of education, employment, status, background is vital to the way in which they see the world. According to Bourdieu, people must recognize their own positions and power within the field in order to interpret and report accurately.Historically the field of sociology has positioned care as a moral duty, an obligation or as a trait of justice and morality has been primarily featured a masculine perspective. Another perspective of care is concerned with feminist ethics. The feminist perspectives of caring challenges the philosophic foundations of the masculine justice theory and suggests that the notion of care is best understood from a perspective that focuses on the associations between people and on the contextual experiences of individuals involved in care.

Both Marxist and feminist traditions suggest that the capacity to reflect is a characteristic of all humans, while some social scientists have suggested that reflexivity is a particular characteristic of modernity. Nursing practices involve knowledge of and relationships with diverse culture and societies. Thompson (1987) reviewed development of critical thinking in nursing and highlighted its role in challenging domination of relations that exist within nurses.

NEED OF THE STUDY

Nursing has entered into university education and is practice discipline. Nursing education needs to prepare autonomous and competent nurses indulging in lifelong skill development and knowledge update. Nursing is profession where clinical practice is grown and developed with the individual nurse's experiences during their professional practice. Reflective practice is incorporated and integrated in all disciplines and health sciences around the world. The feminist social theory informed that the notion of care is best understood from a perspective that focuses on the associations between people (patients, families) and on the contextual experiences of individuals (nurses) involved in care. Social theory mediates between various domains of reality, between parts and whole, between appearance and essence and between theory and practice. Giddens (1984) proposed that social structure and human being are complementary forces to each other. Human actions and their abilities continuously grasp own place to be socially accepted and in the context of social values with reflexivity.

Nurses build reality with reflexivity and incorporate ideological and scientific explanation to the experience.The promotion of reflective practice and clinical supervision need to be incorporated, modified and refocused. The reflective practice has emerged as tools for the management of professional activity within a strategy of government in UK (DoH, 2001). As Indian nursing has not yet embraced reflective practice in the course work, there is a clear gap in the literature related to reflective practice in India, especially nursing. Thus it is valuable to generate empirical evidence to the Indian context. Gibbs reflective cycle was found comprehensive in given context and thus selected for the present study.

CHAPTER THREE
RESEARCH METHODOLOGY

INTRODUCTION

Research is an integral part of a good professional practice in many professions. In all health professions research and practice are well integrated. The methodology is the generic research strategy that drafts the way a research project is to be ventured and determine methods to be used. Methods described in the research methodology define the means of data collection and the way results to be analysed (Howell, 2013). This chapter deals with research approach and design, population and sampling technique, plan of data collection and analysis for the research.

3.1 RESEARCH AIM

The primary aim of the study is to examine reflective practice among nursing students in the clinical area. The second aim is to examine association between selected demographic and social variables and reflective practice of the students.

3.2 STUDY STATEMENT

A study to assess the effect of reflection on clinical performance in selected procedures by nursing students

3.3 OBJECTIVES OF THE STUDY

- Observe clinical performance of nursing students
- Guide nursing students to narrate clinical procedure performance.
- Impart knowledge about reflection tool.
- Guide nursing students to use reflection tool.
- Assess effect of reflection tool on nursing student's clinical performance.
- Associate selected demographic variables with reflective practice knowledge of nursing students.
- Associate selected demographic variables with attitude about reflective practice of nursing students.
- Associate selected social variable with reflective practice knowledge of nursing students.
- Associate selected social variable with attitude about reflective practice of nursing students.
- Analyse data of student's responses.

3.4 OPERATIONAL DEFINITIONS

1. Reflective practice tool

Reflective practice: Reflective practice is careful consideration or though on an option resulting from such consideration. (American heritage dictionary)

Tool: A device or implement used to carry out a particular function. (Tabers dictionary, 2001)

Reflective practice tool: Action or actions done with careful consideration and thought to evoke an opinion by a person.

In the present study: Modified Gibbs Reflective Cycle MGRC is reflective practice tool.

2. Clinical performance

Clinical: pertaining to actual patient environment founded on actual observation and for treatment of the patient. (Tabers dictionary, 2001)

Performance: The undertaking of physical and mental work or an accomplishment of the task. (Taber's dictionary, 2001)

Clinical performance: An accomplishment of the task founded on observation and for the treatment of the patient in his / her environment.

In the present study: Performances in selected procedure namely antenatal palpation, post metal mothers checks, newborn assessment are three procedures selected for clinical performance.

3. Nursing Procedure

Nursing: The care and nurturing of healthy and people, individually or in group or in communities

Procedure: A particular act or way of accomplishing desired results.

Nursing Procedure: A particular act or way of accomplishing desired results to care and nurture healthy or ill people.

In the present study: Selected nursing procedures namely antenatal palpation, post natal mothers checks, newborn assessment.

4. Students

Students: Pupils or persons are undergoing educational course or training.

In the present study: Nursing students belong to four different streams, namely masters of nursing, bachelor of nursing, post basic bachelor of nursing, general nursing midwifery as well as internship nurses.

3.5 RESEARCH APPROACH

Research approach is a systemic, objective method of discovery with empirical evidence. A research design is a procedural plan that is adopted by the researcher to answer research question validly, objectively and accurately (Kumar, 2014). Mixed method using quasi experimental research approach and descriptive qualitative approach adopted for the study.

This approach would help the researcher to evaluate effects of a reflective practice intervention on the clinical performance of the nursing students by testing hypothesis as well as explore attitudes and opinions of the students on using reflective practice intervention.

3.6 RESEARCH DESIGN

The design is the structure of the study, which provides framework to support study. In the present study the researcher selected pre and post-test one group design.

TABLE 1: DATA COLLECTION

Day 1	Day 7
PRE TEST	**POST TEST**
Knowledge questionnaire Observation checklist Narrative about clinical experience	Knowledge questionnaire Observation checklist Narrative about clinical experience using Gibbs reflective cycle Attitude and opinion questionnaire

The effect of reflective practice intervention on the clinical performance is evaluated by knowledge based questionnaire administered in pre and post-test. Attitudes of respondents towards use of reflective practice intervention namely Gibbs reflective cycle were derived from questionnaire administered in post-test only. Clinical performance in selected procedures was evaluated with observation checklist in pre and post-test. Intervention effect was studied by pre and post-tests score differences in knowledge questionnaire and observation checklists. Nursing students' attitudes and opinions about use of reflective practice tool namely Gibbs reflective cycle was modified reflective practice.

3.7 SETTING OF THE STUDY

The study was conducted into two selected nursing institutes in the Pune city, India. Students of both institutes belong to diploma, degree and master's program of nursing discipline.

3.8 POPULATION

According to Talbot (1995) a population is a group, whose members possess specific attributes that researcher is interested in studying. The population of the present study comprises of students from diploma, degree and master's programs of nursing discipline.

3.9 SAMPLE AND SAMPLE TECHNIQUE

A sample is a portion of the population that has been selected to represent the population of interest (Talbot, 1995). Convenient sample with non-probability sampling approach uses easily accessible participants from selected population who meet criteria of the study.

In the present study, students are selected by convenient sampling by the researcher. This was suitable for the study due to ease of accessibility from large population available in the selected institutes.

3.9.1 SAMPLE SIZE

The sample consisted of **347**female and male nursing students of diploma, degree and master's program from Dr. D.Y. Patil College of Nursing and St. Andrews College of Nursing in Pune city of India.

3.9.2 CRITERIA OF INCLUSION AND EXCLUSION

The objectives of the study directed for inclusion criteria. Nursing students of diploma, degree and master's program were included. Nursing administrators,

nursing practitioners in the ward and nursing tutors were not included in the present study for consistency in the samples.

3.10 DATA COLLECTION TECHNIQUE

Most important and crucial aspect of any research is data collection, which provides answers to the intended questions by researcher. Data collection relies on valid and appropriate instruments. The present study aimed at evaluating effect of reflective practice intervention on performance of nursing students in selected clinical procedures. Structured questionnaire, observation checklist, reflective practice intervention are part of intended data collection.

3.11 DEVELOPMENT OF THE TOOL

The structured questionnaire was prepared for assessing demographic information and knowledge related to reflective practice of nursing students. Demographic questions comprised of subjective information data of the individual nursing student. Questionnaire was prepared on knowledge about reflective practice and comprised of multi choice answers to questions. Factors considered were independent learning, self-pace, interest building, convenience in reading, attention span, size of question.

The Gibbs reflective cycle modified for the use in the study by included sub questions under main six questions. Selected procedures were antenatal examination, new born assessment and post natal examination. Observation checklists of the selected procedures were taken from the respective institutes and modified for consistency in the study.

Opinions and suggestions of experts from the various disciplines were considered for finalization of the data collection tool. Pathway of the data collection built for the understanding of investigator.

3.11.1 DESCRIPTION OF THE TOOL

The present study aimed at evaluating effect of reflective practice intervention (MGRC) on performance of nursing students in selected clinical procedures. Structured questionnaire,

observation checklist, reflective practice intervention are part of intended data collection. The structured questionnaire was prepared for assessing demographic information and knowledge related to reflective practice of nursing students. Demographic questions comprised of subjective information data of the individual nursing student. Questionnaire was prepared on knowledge about reflective practice and comprised of multi choice answers to questions. Factors considered were independent learning, self-pace, interest building, convenience in reading, attention span, size of question. The Gibbs reflective cycle modified for the use in the study by included sub questions under main six questions. Selected procedures were antenatal examination, new born assessment and post natal examination. Observation checklists of the selected procedures were taken from the respective institutes and modified for consistency in the study. Opinions and suggestions of experts from the various disciplines were considered for finalization of the data collection tool. Pathway of the data collection built for the understanding of investigator.

Data collection tool comprised of seven sections namely, demographic questionnaire, knowledge questionnaire, attitude questionnaire, procedure checklists, lesson plan, narrative about procedure and performance, narrative about procedure performance using Gibbs reflective cycle.

Section I contained demographic questions such as nursing designation, sex, age, professional qualification and professional experience.

Section II includes twenty knowledge questions related to reflective practice under knowledge, comprehension and application contents.

Section III consisted of ten questions on participants' attitude and opinions related to Gibbs reflective cycle and intended for post-test only.

Section IV comprised of observation checklists of three selected procedure namely antenatal examination, newborn assessment and post natal examination. Checklists comprised fifteen items and had rating scale for performance 2 to 0 for perfect, partial technique and need for improvement.

Section V is a lesson plan on reflective practice for through put between pre and post-test.

Section VI and Section VII is narration of nursing students. Section VI is pre-test narrated by nursing student about her experience during clinical procedure. Section VII is post-test narrated by nursing student about her experience during clinical procedure using Gibbs reflective cycle.

Variables of the study were knowledge scores in pre and post-tests, observation checklist scores in pre and post-tests. Attitude and opinion questionnaire was analysed thematically. Analysis of the data collection tabulated for the statistical means.

3.11.2 VALIDITY

Data collection tool, blue print and pathway of data collection with criteria checklist was submitted to twenty experts from various disciplines, respectively from nursing, medical, community health, education and statistics.

Modification of the items in section II of knowledge questionnaire in terms of simplicity and order were made. In section IV, numbers of items of observation checklists of selected procedures were made to fifteen by breaking down bigger items to smaller for ease and accuracy of rating. For example an item of vital sign was divided into temperature, heart rate, respiratory rate, blood pressure. Lesson plan was prepared with diagrams and bulleted statements for ease of comprehension. Suggestions were asked for the section III questionnaire on attitudes and opinions of students. Order of the questions changed and the tenth question was added about suggestions by students.

Pathway of data collection was improvised for ease of understanding of stages or phases of data collection. The research tool was finalised for data collection.

3.11.3 RELIABILITY

The reliability was determined by administering data collection tool to twenty nursing students of degree program. The data was tabulated by item coding and statistically analysed by paired t test. The methods of paired t test stresses inter score relation of items in the knowledge questionnaire. As well as correlation of items in the entire test as a whole. The reliability score was0.87

3.11.4 PILOT STUDY

The pilot study was conducted on twenty nursing students form diploma, degree and masters programs. To assess feasibility of the study and data collection plan.

Administrative permissions were obtained formally from respective institutional heads for data collection. Samples were selected by convenient sampling technique. The consent for the study

was obtained from each participant. The pilot study data collected with administration of pretest and posttest with seven day period in between. Intervention was administered on the first day of data collection. A narrative about clinical experience during incident of data collection was obtained on day 1 from each participant. On the seventh day similar narrator was obtained with the use of reflective practice intervention namely Gibbs reflective cycle from each participant. Attitude and opinion questionnaire was administered for overall response from each participant.

The data analysis was done by statistical tests. Findings indicated that Gibbs reflective cycle was effective on clinical performance of nursing students. Nursing students felt it was effective in terms of structured thinking, awareness and overall alertness. Observation checklists scores were significantly improved and item wise score was also changed. The attitude questionnaire responses were analysed by frequency and percentage. There was significant increase in scores of observation checklist of selected procedures due to the reflective practice and was evident by responses by nursing students.

3.12 DATA COLLECTION OF THE STUDY

The data collection was done in the nursing institutes around Pune city. Administrative permissions were obtained formally from respective institutional heads for data collection. Samples were selected by convenient sampling technique. The consent for the study was obtained from each participant.

The data collection was done with the help of trained investigators. Due to program scheduled by colleges each group of students from diploma, degree and masters were available in different hospital areas.

The study was conducted in two selected nursing institutes in the Pune city, India. Students of both institutes belong to diploma, degree and master's program of nursing discipline. The population of the present study comprises of students from diploma, degree and masters programs of nursing discipline. In the present study, students are selected by convenient sampling by the researcher. This was suitable for the study due to ease of accessibility from large population available in the selected institutes. The sample consisted of 347 female and male nursing students of diploma, degree and masters program from Dr. D.Y. Patil College of Nursing and St. Andrews College of Nursing in Pune city of India. The objectives of the study directed for inclusion criteria. Nursing students of diploma, degree and masters program were included.

Nursing administrators, nursing practitioners in the ward and nursing tutors were not included in the present study for consistency in the samples.

3.13 DATA ANALYSIS

Findings of the study were tabulated and items were coded. The analysis was done on the tabulated and coded findings of the study on the basis of objectives of the study. The descriptive and inferential statistical means were applied. The findings of the data were depicted in the plotted diagrams and charts in the next chapter. Analysis of the study was interpreted in terms of the statistical hypotheses and thematic analysis.

3.14 DISSEMINATION AND UTILIZATION

The findings of the study and analysis will be presented to the nursing discipline through seminars and conferences. Abstract and summary will be generated for the dissemination. Recommendations and implications to the nursing discipline will be formulated on the basis of discussion. On the basis of the objectives, discussion to identify further scope of improvement on the findings of the study will be done.

CHAPTER FOUR
DATA ANALYSIS

INTRODUCTION

The study was successful in getting information on various aspects of nursing students from various programs in the Pune city. The nursing students were from bachelor of nursing. Post basic bachelor of nursing, general nursing and midwifery, masters in nursing and nursing interns. Research was successful in getting information within the frame of data collection tool from 347 nursing students. The analysis of data collected is presented here in various sections as follows.

Section I: Descriptive analysis

Description of samples based on their demographic and social characteristics.

Section II: - Knowledge scores

Analysis of data related to the effect of reflection tool on knowledge of the nursing students.

Section III: - Clinical procedure scores

Analysis of data related to the effect of reflection tool on clinical procedures of the nursing students.

Section IV: - Attitude responses

Analysis of data related to responses of students about reflective practice tool.

Section V: - Association

Analysis of data related reflective practice associated with social and demographic variables.

4.1 SECTION I: DESCRIPTION ANALYSIS

Description of samples (nursing students) based on their personal characteristics was done by using frequency and percentage.

TABLE 1:DESCRIPTION OF SAMPLES N = 347

DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE%
YEAR OF TRAINING		
B.SC. First Year I BSc	43	12.4%
B.SC. Second Year II BSc	49	14.1%
B.SC. Third Year III BSc	30	8.6%
B.SC. Fourth Year IV BSc	29	8.4%
First year M.Sc. I MSc	18	5.2%
Second year M.Sc. MSc	16	4.6%
First year Post Basic B.Sc. I PBBSc	28	8.1%
Second year Post Basic B.SC. II PBBSc	25	7.2%
First year general nursing and midwiferyI RGNM	30	8.6%
Second year general nursing and midwiferyII RGNM	29	8.4%
Third year general nursing and midwiferyIII RGNM	25	7.2%
Intern B.Sc.	25	7.2%
GENDER		
Female	303	87.3%
Male	44	12.7%
AGE		
Up to 20 years	131	37.8%
21-30 years	194	55.9%
31-40 years	19	5.5%
Above 40 years	3	0.9%
PROFESSIONAL QUALIFICATION		
Student	50	14.4%
Diploma	84	24.2%
Bachelor	151	43.5%
Masters/above	62	17.9%
PROFESSIONAL EXPERIENCE		
0 -2 years	151	43.5%
3 - 5 years	163	47.0%
6 - 8 years	30	8.6%
> 8 years	3	0.9%

12.4% of them were B.Sc. First year student, 14.1% of them were B.Sc., second year student, 8.6% of them were B.Sc. Third year student, 8.4% of them were B.Sc. Fourth year student, 5.2% of them were M.Sc. First year student, 4.2% of them were M.Sc. Second year, 8.1% of them were First year PBBSC, 7.2% of them were second year PBBSC, 8.6% of them were first year RGNM, 8.4% of them were second year RGNM, 7.2% of them were third year RGNM and 7.2% of them were intern B.Sc.

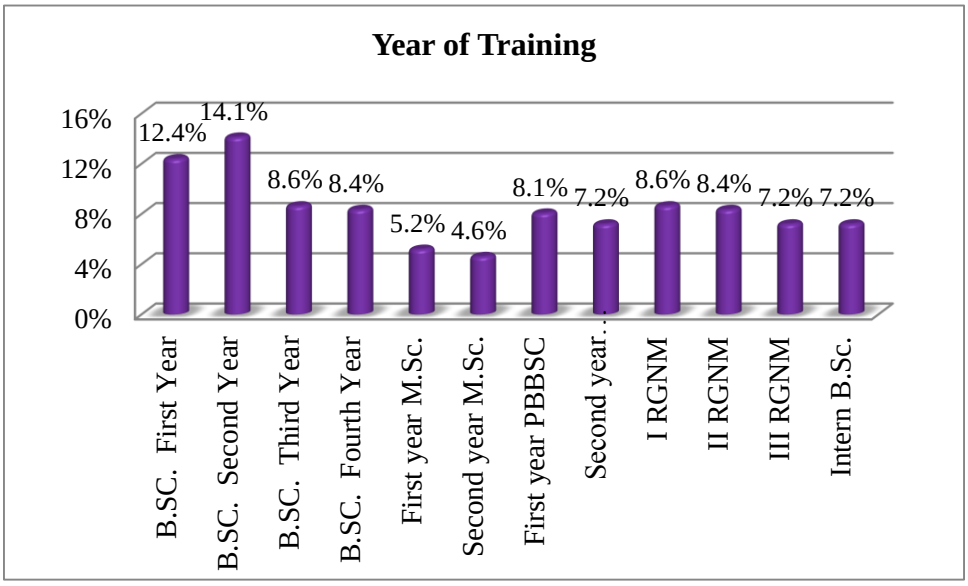

FIGURE 1: YEAR OF TRAINING IN NURSING

Majority of 87.3% of them were females and 12.7% of them were males.

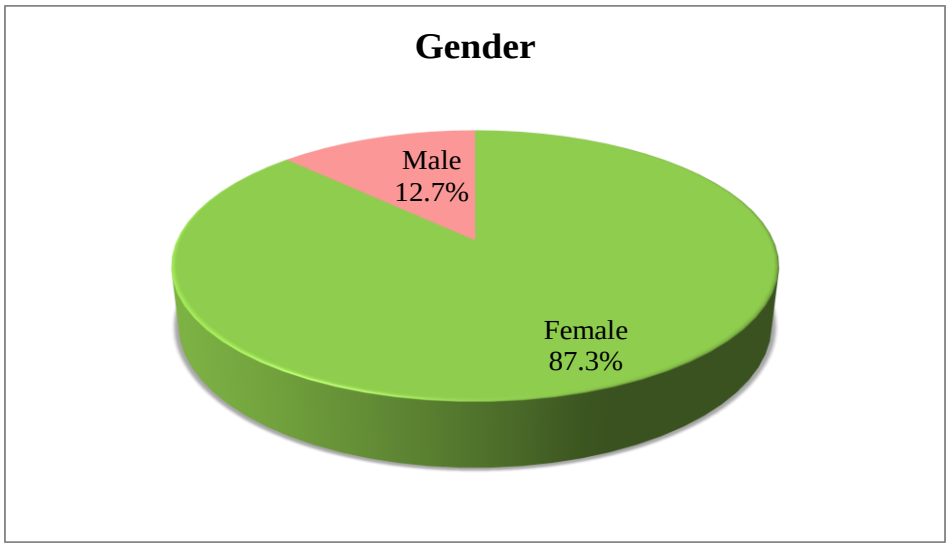

FIGURE 2: GENDER

37.8% of them were age below 20 years, 55.9% of them were age 21-30 years, 5.5% of them had age 31-40 years and 0.9% of them had age above 40 years.

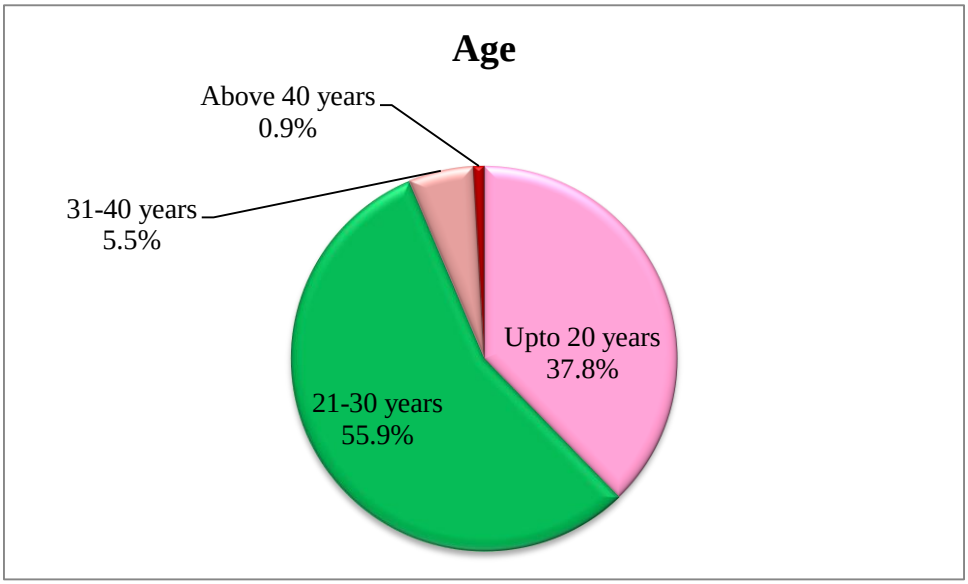

FIGURE 3: AGE

14.4% of them were student, 24.2% of them had diploma, 43.5% of them were bachelors and 17.9% of them were masters and (or) above.

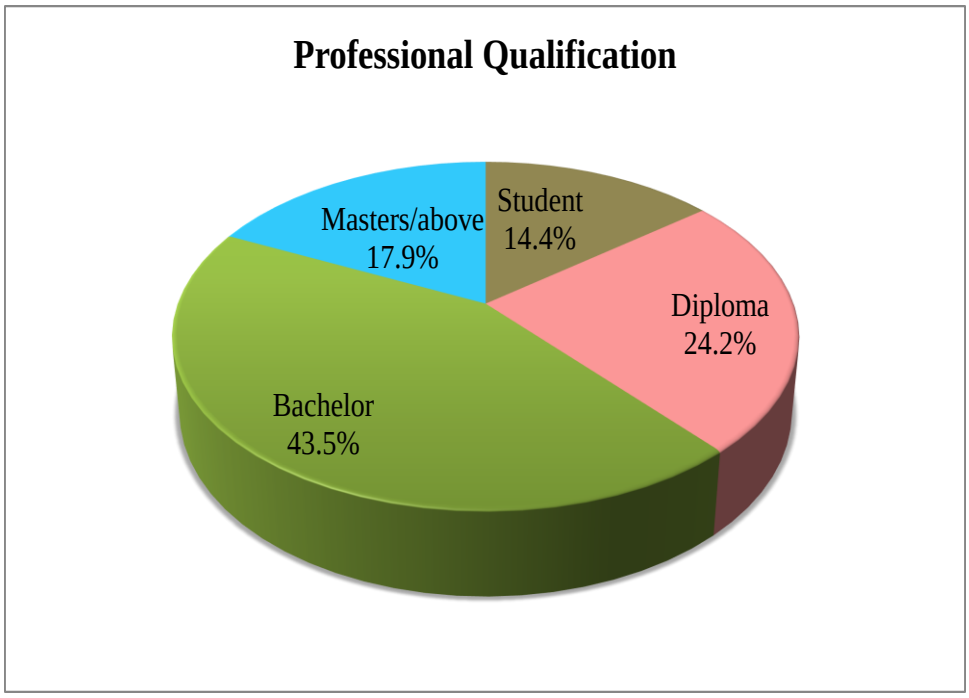

FIGURE 4: QUALIFICATION

43.5% of them were having up to two years of professional experience, 47% of them were having experience of 3-5 years, 8.6% of them had experience 6-8 years and 0.9% of them had professional experience more than 8 years.

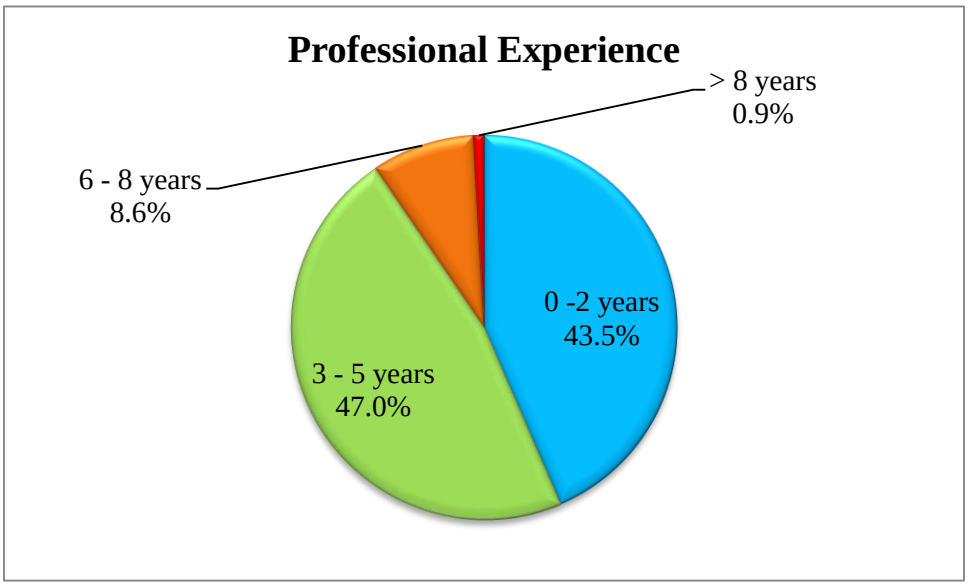

FIGURE 5: EXPERIENCE

TABLE 2: DESCRIPTION OF SAMPLES WITH SOCIAL CHARACTERISTICS

DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE%
MARITAL STATUS		
Married	88	25.4%
Unmarried	256	73.8%
Widow	3	0.9%
RELIGION		
Christian	30	8.6%
Hindu	284	81.8%
Muslim	13	3.7%
Other	20	5.8%

LANGUAGE		
English	21	6.1%
Hindi	19	5.5%
Marathi	268	77.2%
Other	39	11.2%
PRESENT RESIDENCE		
Own	51	14.7%
Rented	87	25.1%
Other	209	60.2%
PERMANENT RESIDENCE		
Local	89	25.6%
Pune District	107	30.8%
Other District	101	29.1%
Other state	50	14.4%
MOTHER'S EDUCATION		
Graduation	157	45.2%
Primary school	7	2.0%
Post-graduation	1	0.3%
Secondary or Higher secondary school	182	52.4%
FATHER'S EDUCATION		
Graduation	228	65.7%
Primary school	2	0.6%
Post-graduation	37	10.7%
Secondary or Higher secondary school	80	23.1%

Table 8 cont…..

DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE%
MOTHER'S OCCUPATION		
Business	34	9.8%
Government	55	15.9%
Home maker	121	34.9%
Private	137	39.5%
FATHER'S OCCUPATION		
Business	169	48.7%
Government	51	14.7%
Home maker	2	0.6%
Private	125	36.0%
FAMILY INCOME		
Rs.30001 to Rs.50000	81	23.3%
Above Rs.50001	266	76.7%
FAMILY TYPE		
Extended	69	19.9%
Joint	116	33.4%
Nuclear	162	46.7%
FAMILY MEMBERS		
Less than 5	138	39.8%
5 to 7	117	33.7%
8 to 10	88	25.4%
Above 10	4	1.2%
SIBLINGS -BROTHERS		
None	90	25.9%
One	183	52.7%
Two	74	21.3%
SIBLINGS - SISTERS		
None	88	25.4%
One	149	42.9%
Two	110	31.7%
BIRTH ORDER		
1st – Eldest	137	39.5%
Middle	131	37.8%
Youngest	79	22.8%

N=347

Majority of them 73.8% of them were unmarried, 25.4% of them were married and 0.9% of them were widow.

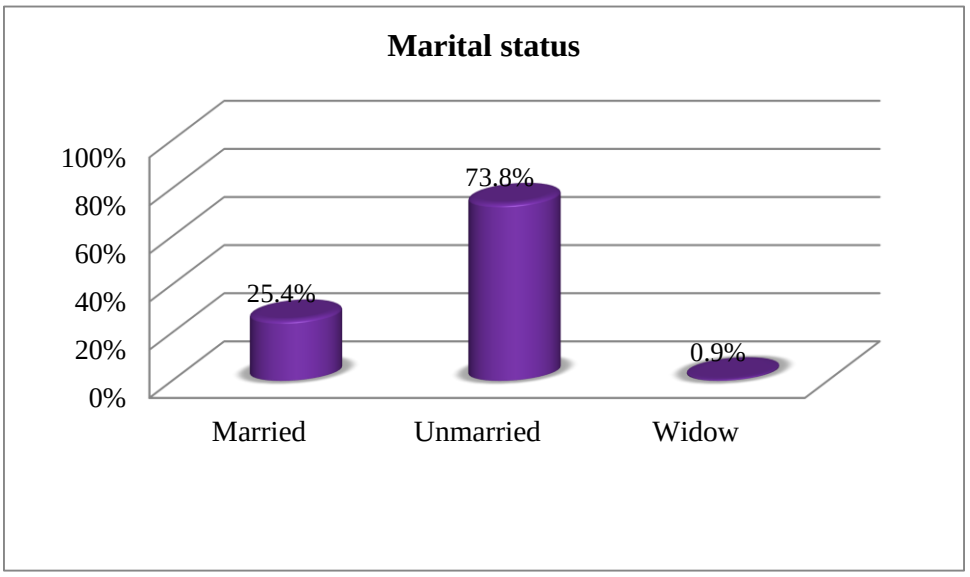

FIGURE 6: MARITAL STATUS

81.8% of them were Hindu, 8.6% of them were Christian, 5.8% of them were from some other religion and 3.7% of them were Muslim.

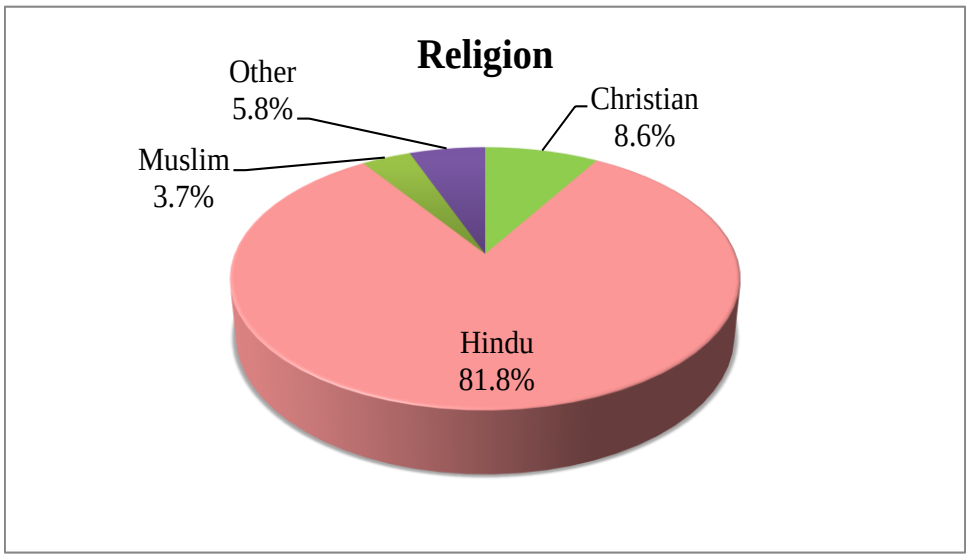

FIGURE 7: RELIGION

Majority of 77.2% of them were Marathi, 6.1% of them were English, 5.5% of them were Hindi and 11.2% of them were from other languages.

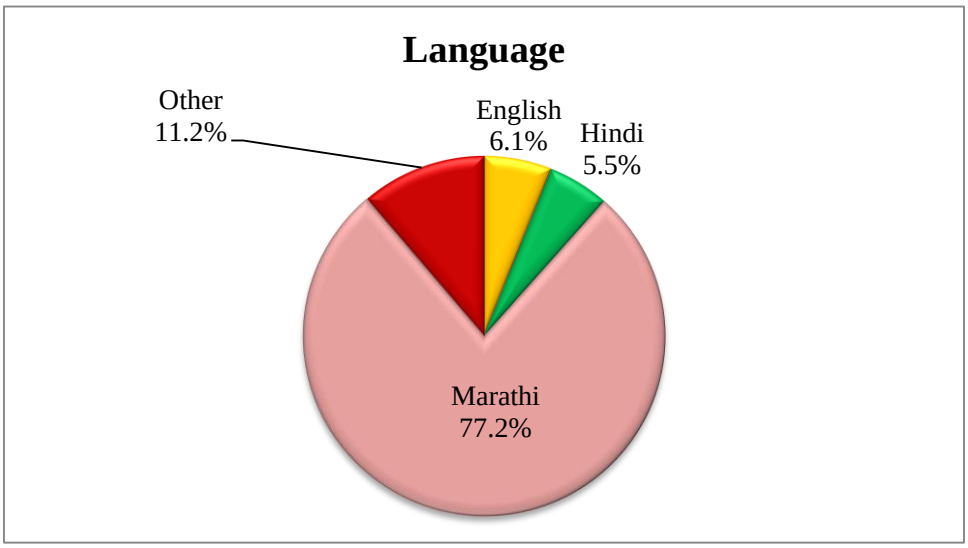

FIGURE 8: LANGUAGE

25.1% of them were having rented residence, 14.7% of them were having owned residence and 60.2% of them were from some other residence type.

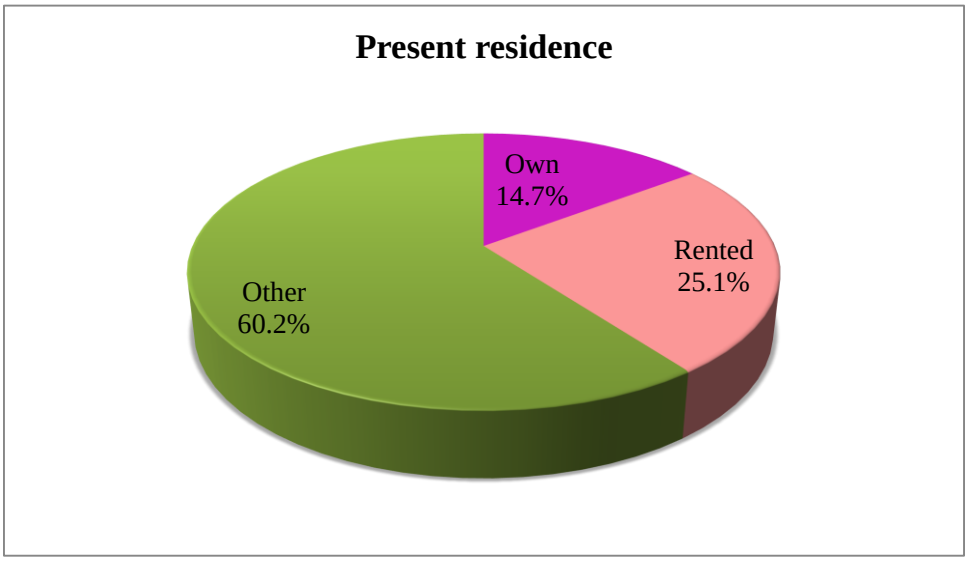

FIGURE 9: PRESENT RESIDENCE

25.6% of them have local permanent residence, 30.8% of them were from Pune district as permanent residence, 29.1% of them were from other district permanent residence and 14.4% of them had permanent residence of other state.

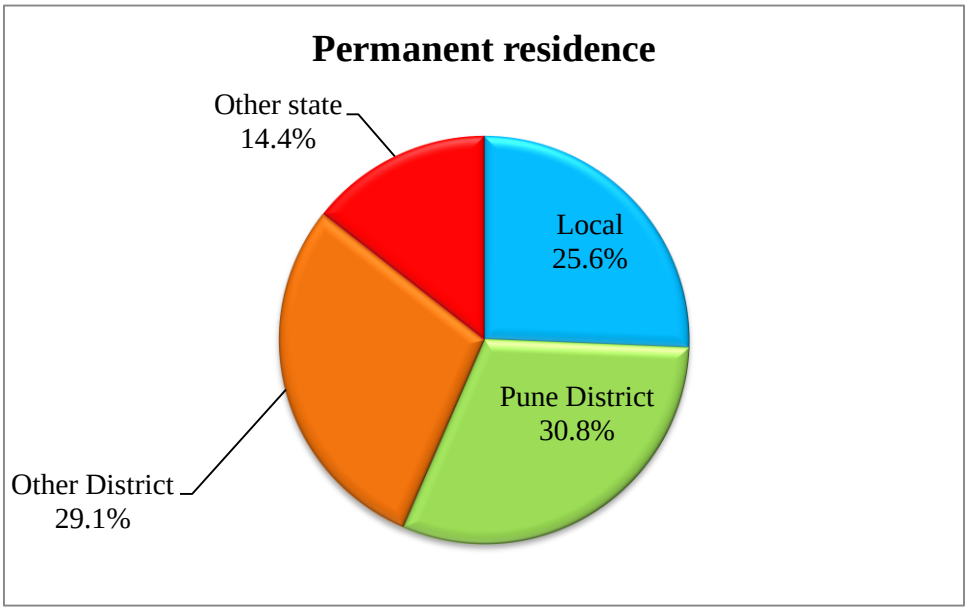

FIGURE 10: PERMANENT RESIDENCE

45.2% of their mothers had graduation, 52.4% of their mothers completed secondary or higher secondary, 2% of them have primary education and 0.3% of them were post-graduate

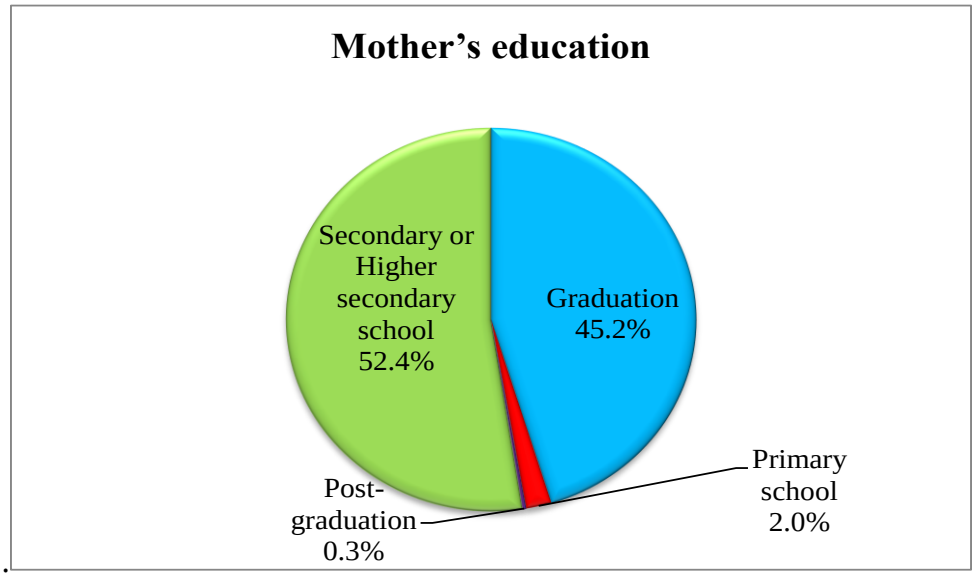

FIGURE 11: MOTHER'S EDUCTION

65.7% of their fathers had graduation, 23.1% of their fathers completed secondary or higher secondary, 10.7% of their fathers were post-graduate and 0.6% of them have primary education.

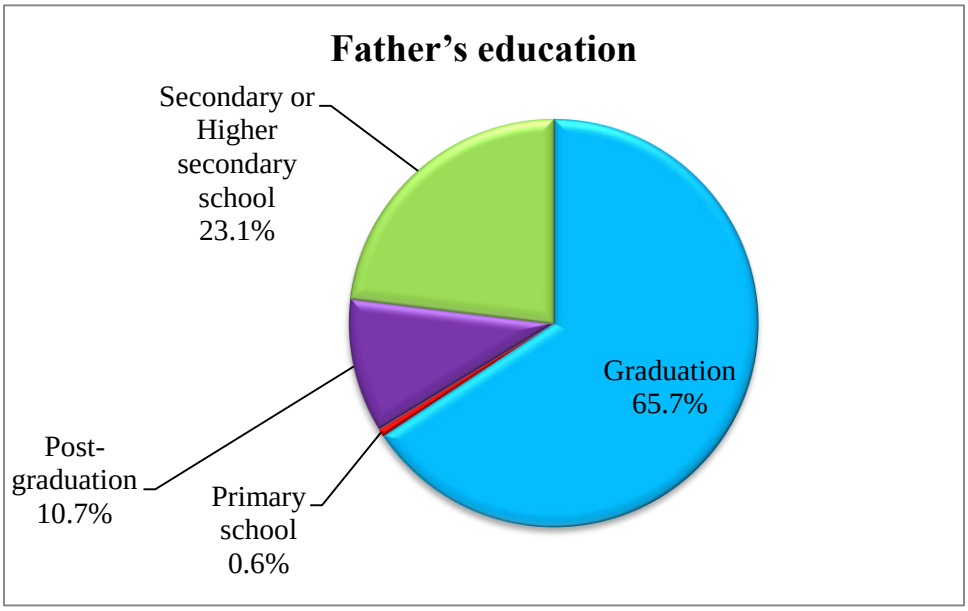

FIGURE 12: FATHER'S EDUCTION

9.8% of their mothers having business, 15.9% of their mothers having government service, and 34.9% of them were homemakers and 39.5% of their mothers were private servant.

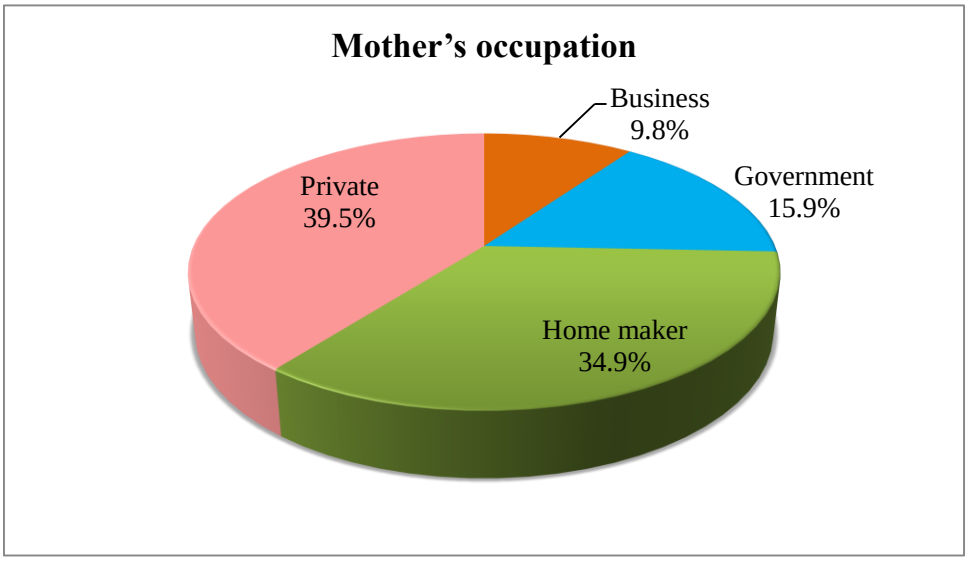

FIGURE 13: MOTHER'S OCCUPATION

48.7% of their fathers were having business, 14.7% of their fathers were government servant, 0.6% of them were homemakers and 36% of their fathers were private servant.

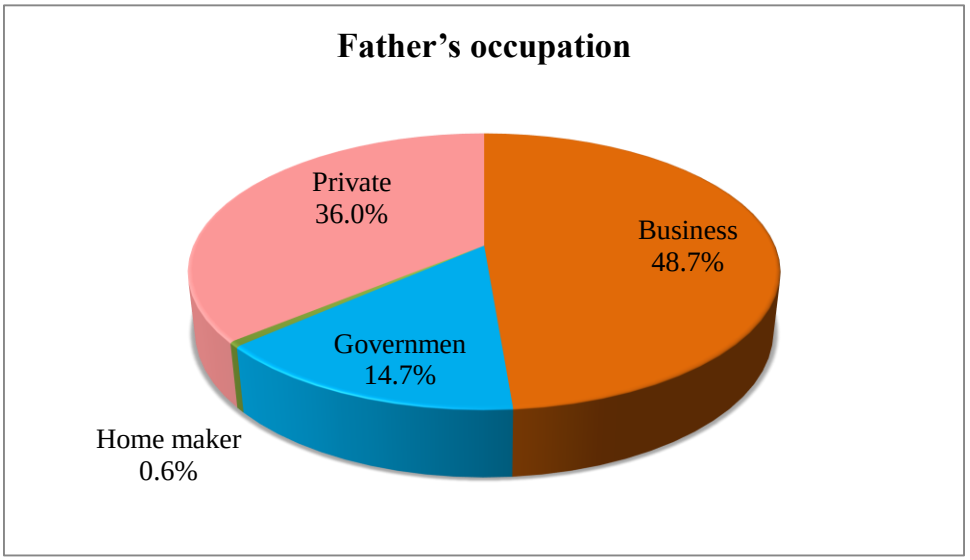

FIGURE 14: FATHER'S OCCUPATION

Majority of 76.7% of them were having their family income above Rs. 50000 and 23.3% of them were having their family income Rs.30001-50000.

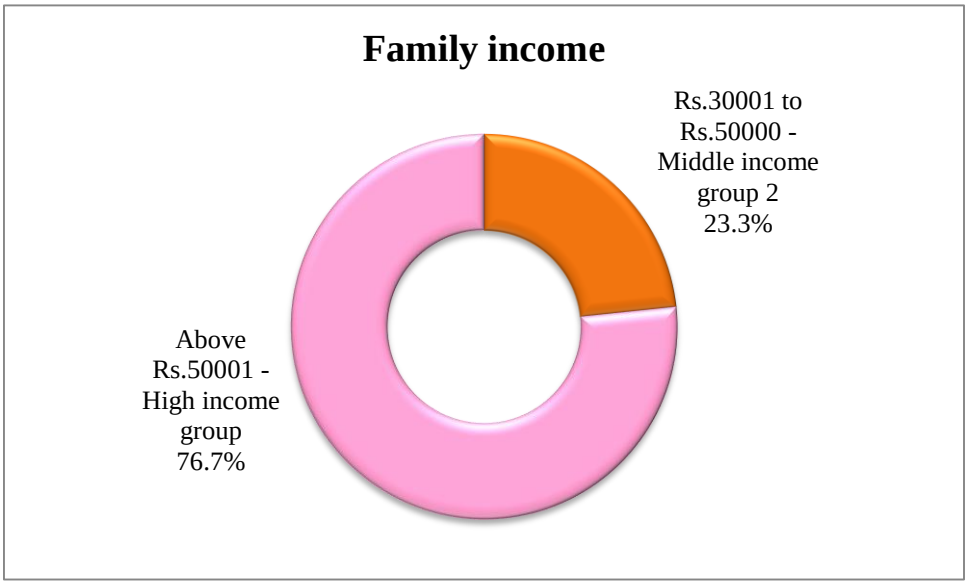

FIGURE 15: FAMILY INCOME

19.9% of them were from extended family, 33.4% of them were from joint family and 46.7% of them were from nuclear family.

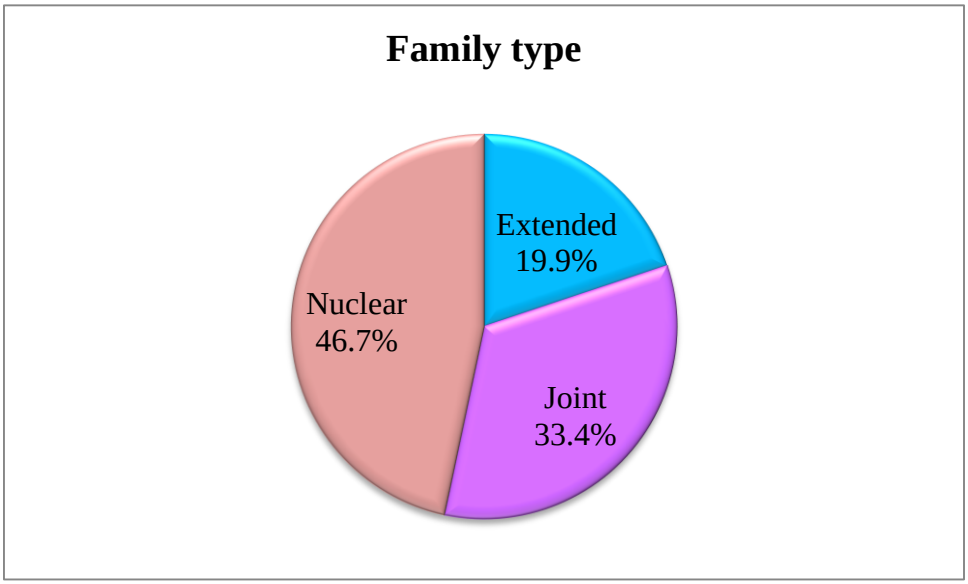

FIGURE 16: FAMILY TYPE

39.8% of them were having less than 5 family members, 33.7% of them were having 5 to 7 family members, 25.4% of them were having 8 to 10 family members and 1.2% of them were having more than 10 family members.

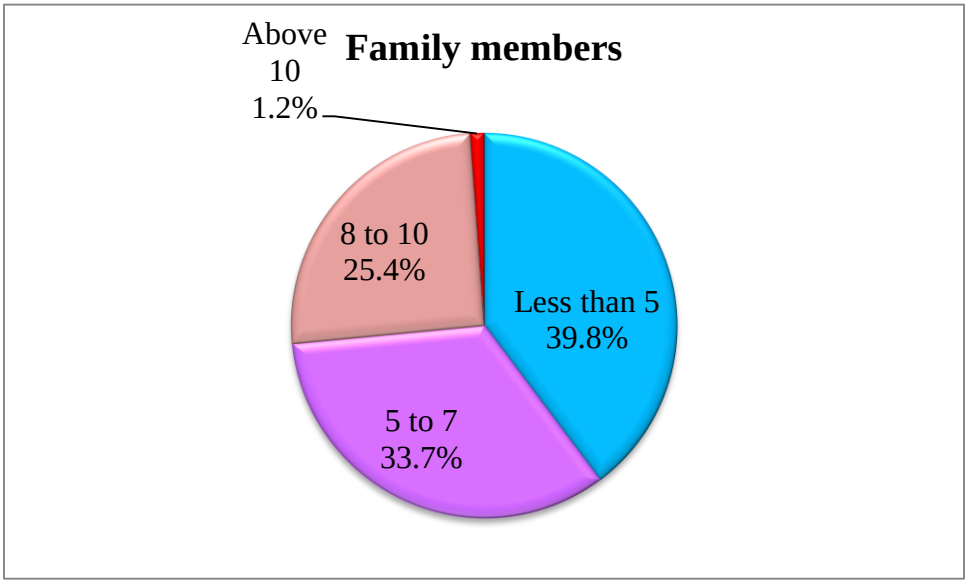

FIGURE 17: FAMILY MEMBERS

25.9% of them did not have brother, 52.7% of them had one brother and 21.3% of them had two brothers.

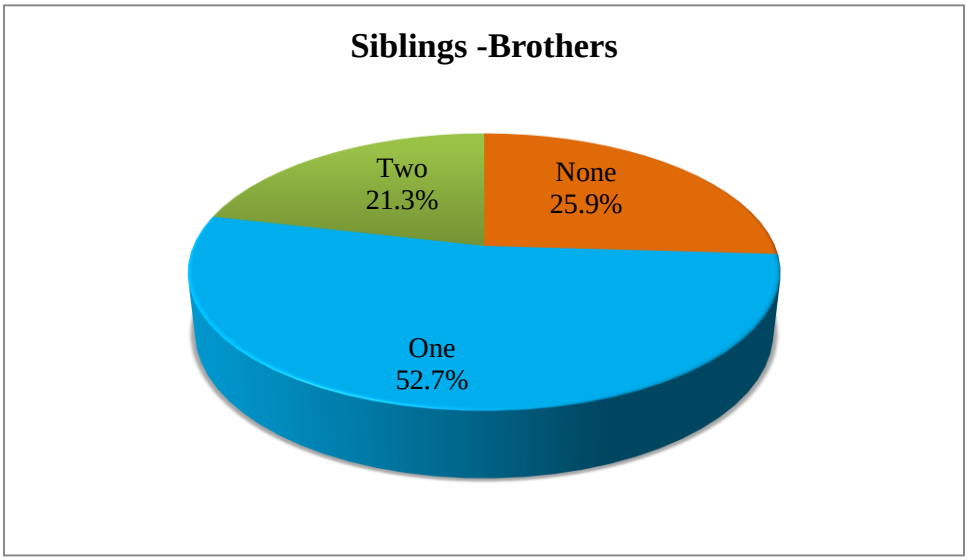

FIGURE 18: SIBLINGS: BROTHERS

25.4% of them did not have sister, 42.9% of them had one sister and 31.7% of them had two sisters.

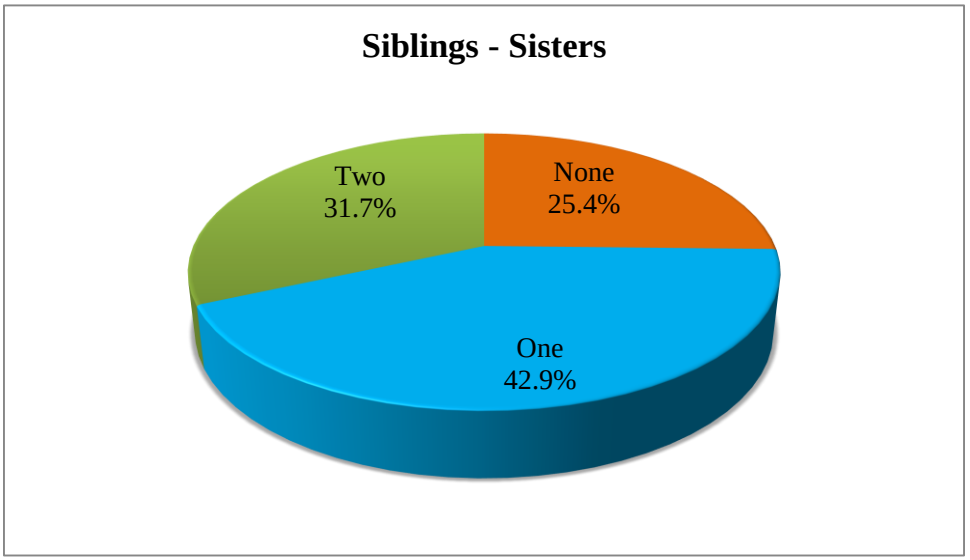

FIGURE 19: SIBLINGS: SISTERS

39.5% of them were the eldest, 37.8% of them were middle and 22.8% of them were youngest.

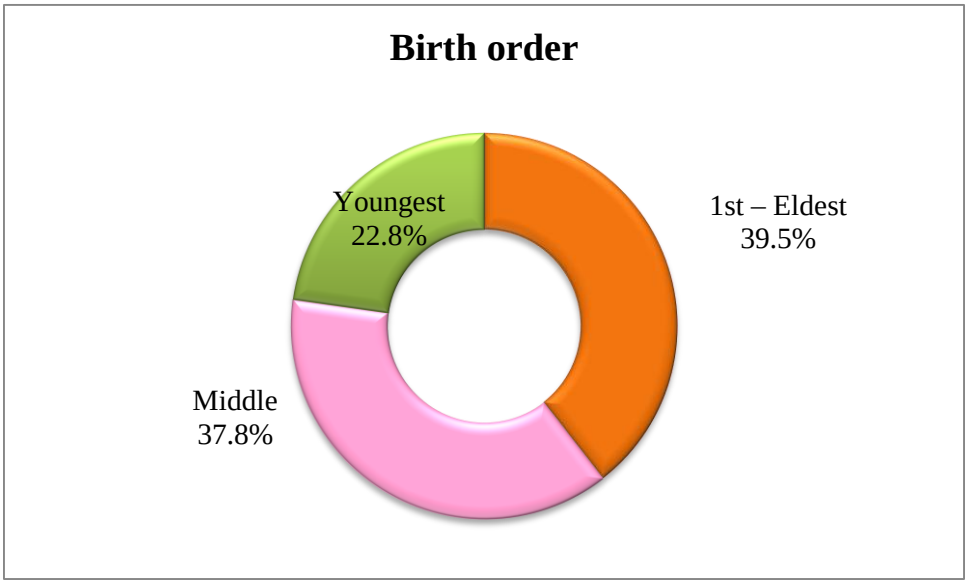

FIGURE 20: BIRTH ORDER

4.2 SECTION II: KNOWLEDGE SCORES

Analysis of data related to the effect of reflection tool on knowledge of the nursing students was conducted by using paired t test.

TABLE 3: KNOWLEDGE ABOUT REFLECTIVE PRACTICE OF THE STUDENTS N=347

Admin	Mean	SD	T	df	p-value
Pretest	8.9	2.0	65.1	346	0.000
Posttest	18.5	2.0			

Statistical analysis conducted by applying paired t-test for comparison of pretest and posttest knowledge scores of nursing students. Average knowledge score in pretest was 8.9 which increased to 18.5 in posttest. T-value for this comparison was 65.1 with 346 degrees of freedom. Corresponding p-value was 0.000 which is small (less than 0.05), the null hypothesis is rejected. This indicates that the knowledge of the nursing students improved significantly after reflection tool. Reflection tool was found to be significantly effective in improving the knowledge of the nursing students.

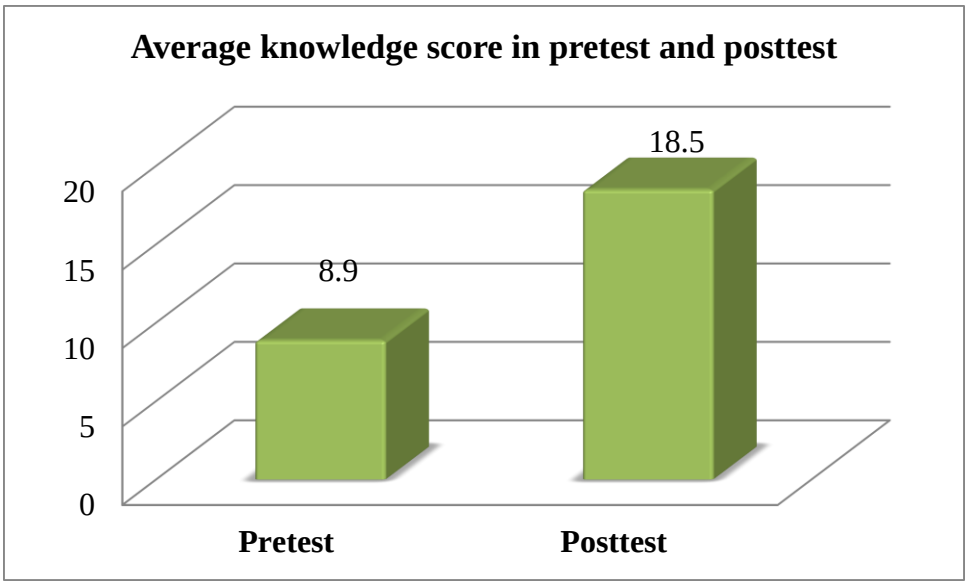

FIGURE 21: KNOWLEDGE SCORE IN PRETEST AND POSTTEST

4.3 SECTION III: CLINICAL PROCEDURE SCORES

Analysis of data related to the effect of reflection tool on clinical procedures of the nursing students was conducted by using paired t test.

TABLE 4: CLINICAL PROCEDURES OF THE NURSING STUDENTS N=347

Admin	Mean	SD	T	df	p-value
Pre-test	16.1	1.0	40.9	346	0.000
post-test	22.7	3.0			

Researcher applied paired t-test for comparison of pretest and posttest clinical procedures scores of nursing students. Average clinical procedures score in pretest was 16.1 which increased to 22.7 in posttest. T-value for this comparison was 40.9 with 346 degrees of freedom. Corresponding p-value was 0.000 which is small (less than 0.05), the null hypothesis is rejected. This indicates that the clinical procedures of the nursing students improved significantly after

reflection tool. Reflection tool was found to be significantly effective in improving the clinical procedures of the nursing students.

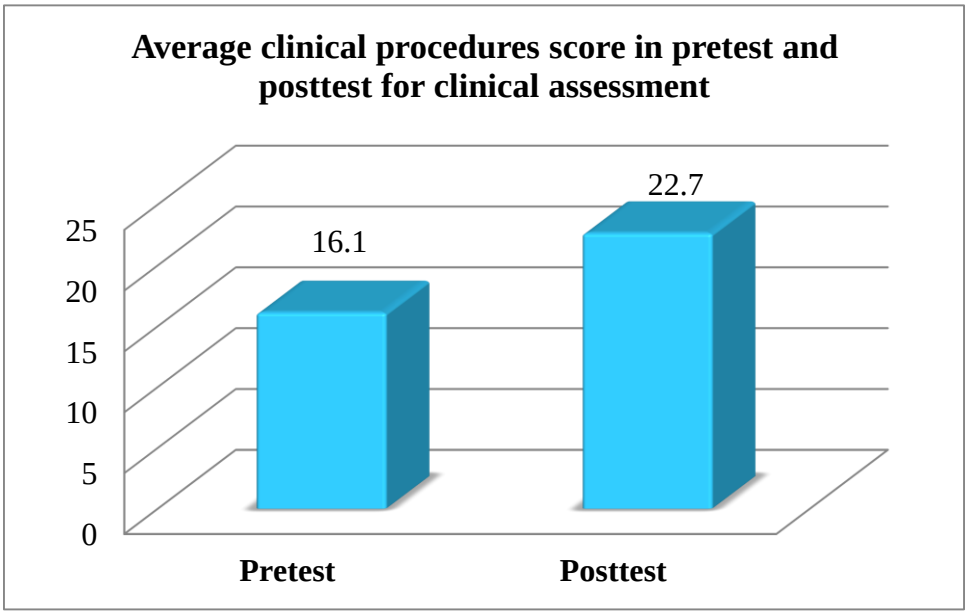

FIGURE 22: AVERAGE CLINICAL PROCEURES SCORES PRETEST AND POSTTEST

Researcher applied paired t-test for comparison of area wise pre-test and post-test clinical procedures scores of nursing students.

TABLE 5: AREAWISE CLINICAL PROCEDURE SCORES

Area	Admin	Mean	SD	T	df	p-value
Antenatal checks	Pre-test	16.3	1.4	37.8	94	0.000
	Post-test	25.5	2.2			
New born assessment	Pre-test	16.0	0.9	38.2	150	0.000
	Post-test	20.7	1.4			
Post natal checks	Pre-test	16.1	0.9	21.8	100	0.000
	Post-test	22.9	3.0			

Average clinical procedures score in pre-test were 16.3, 16 and 16.1 which increased to 25.5, 20.7 and 22.9 in post-test. T-values for this comparison were 37.8, 38.2 and 21.8. Corresponding

p-values were of the order of 0.000 which are small (less than 0.05), the null hypothesis is rejected. This indicates that the area wise clinical procedures of the nursing students improved significantly after reflection tool. Reflection tool was found to be significantly effective in improving the area wise clinical procedures of the nursing students.

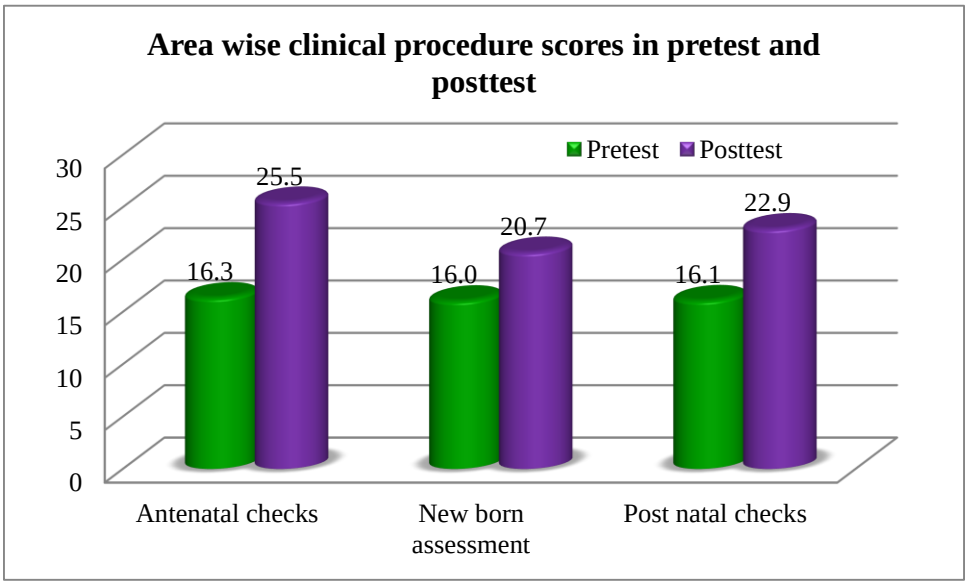

FIGURE 23: AREAWISE CLNICAL PROCEDURE SCORES

4.4 SECTION IV: ATTITUDE RESPONSES

Analysis of data related to attitudes about reflective practice tool were sought by responses of students about reflective practice tool was conducted using frequency and percentage for description.

TABLE 6: RESPONSES OF THE STUDENTS ABOUT REFLECTIVE PRACTICE TOOL

Do you think reflective practice help	Frequency	Percentage%
Fairly good	14	4.0%
Good	253	72.9%
Excellent	80	23.1%

72.9% of the students responded that reflexive practice is of good help, 23.1% of them opined that it is excellent and 4% of them responded that reflexive practice is fairly good.

FIGURE 24: STUDENTS RESPONSE 1

TABLE 7: ELABORATION OF RESPONSE FROM Q 1

Elaborate response	Frequency	%
Active thinking	22	6.3%
Allows improvement and useful	23	6.6%
Can be used to check understanding of students in teaching	2	0.6%
Checking of own thoughts	1	0.3%
Critical thinking is done	17	4.9%
Cycle is good way	2	0.6%
Difficult to express thoughts and feelings	23	6.6%
Difficult to implement every time & varies in thinking	2	0.6%
Emotions and feelings are there	1	0.3%
Feel satisfied with thinking process	2	0.6%
Feelings and thoughts are known	32	9.2%
Gives answers to questions	1	0.3%
Good	2	0.6%
Help to evaluate reflective practice	19	5.5%
Helpful for self-evaluation in clinical practice	11	3.2%
Helpful in thinking	29	8.4%

Helps to check/inspect errors during practice and improve clinical practice	12	3.5%
Helps to identify strong and weak points	11	3.2%
Helps to improve clinical practice and self-learning	11	3.2%
Helps to practice	4	1.2%
Helps to recall, understand, express feelings related to incident, helps to analyze	2	0.6%
Helps to understand students' needs and self-evaluating	1	0.3%
Improves skills and helps to gain in depth knowledge and skill	2	0.6%
Need help to develop	1	0.3%
TABLE 14: ELABORATION OF RESPONSE FROM Q 1 continues		
Need time and guidance	16	4.6%
Needs guidance	18	5.2%
Needs practice and set time	15	4.3%
Needs support	2	0.6%
Needs time	4	1.2%
Organized thinking about own actions	1	0.3%
Overcome fear and give confidence	8	2.3%
Overcome lacks in practices, improve knowledge in particular action	8	2.3%
Self-evaluation, develop new understanding, non-threatening	12	3.5%
Thinking about us	1	0.3%
Understand and initiate care, makes focus on need by looking at inner feelings	14	4.0%
We do it but do not know it	1	0.3%
We think actively	2	0.6%
With practice skill can be developed, steps are easy	11	3.2%
To express thoughts and feelings	1	0.3%

TABLE 8: STUDENTS RESPONSE ABOUT MGRC ON CLINICAL PRACTICE

Effect of Modified Gibbs Reflective Cycle (MGRC) on learning in nursing practice (clinical)	**Freq**	**%**
Little help	2	0.6%
Fairly good	53	15.3%
Good	200	57.6%
Excellent	92	26.5%

57.6% of the students responded that effect of Modified Gibbs Reflective Cycle (MGRC) on learning in nursing practice is good, 26.5% of them opined that it is excellent, 15.3% of them responded that Modified Gibbs Reflective Cycle is fairly good and 0.6% of them stated that Modified Gibbs Reflective Cycle is of little help.

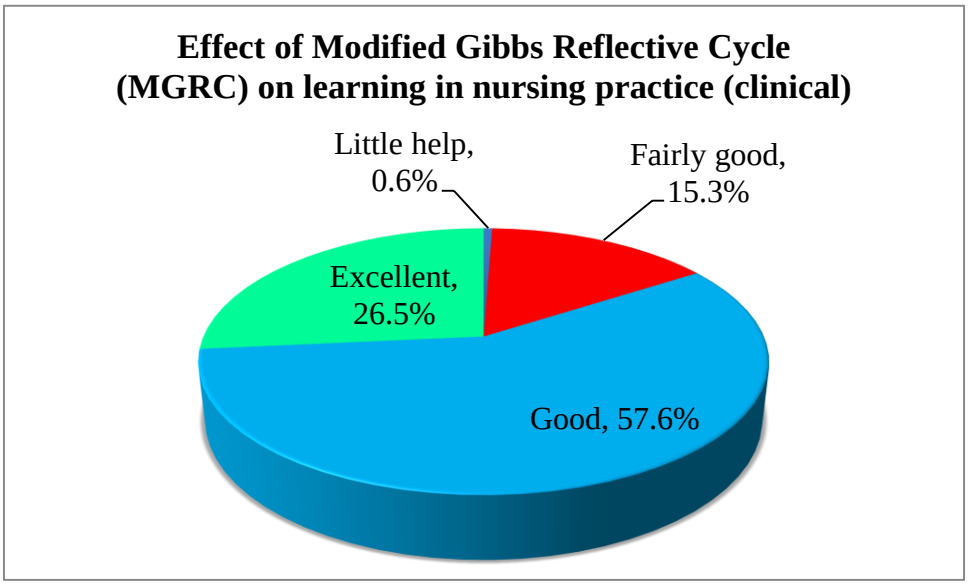

FIGURE 25: EFFECT OF MGRC ON LEARNING IN CLINICAL NURSING PRACTICE

TABLE 9: DIFFICULT STEP OF MGRC

DIFFICULTIES FACED USING MGRC	FREQUENCY	PERCENTAGE%
Analysis needs time	19	5.5%
Analysis step	21	6.1%
Conclusion	8	2.3%
Differentiate evaluation and analysis	12	3.5%
Difficult to express thoughts and feelings	13	3.7%
Divide steps in positive and negative	15	4.3%

Easy to follow steps	9	2.6%
Evaluation & analysis	37	10.7%
Express thoughts and feelings	13	3.7%
Judge good and bad	2	0.6%
Knowledge is needed	13	3.7%
Lack of time and knowledge to reflect	5	1.4%
Needs to revise each step with practice	15	4.3%
No difficulties	35	10.1%
Organization and recollection of incident	15	4.3%
Recall of event	34	9.8%
Steps are easy but needs practice	15	4.3%
Steps are easy to follow	14	4.0%
Steps are easy to follow, needs time	2	0.6%
Systematic description	13	3.7%
Taking instant action in front of seniors	13	3.7%
Thoughts and feelings difficult to express	4	1.2%
To review and practice more	4	1.2%
To write evaluation & analysis	1	0.3%
DIFFICULTIES FACED USING MGRC	**FREQUENCY**	**PERCENTAGE%**
Understanding concepts needs concentration	13	3.7%
Write evaluation & analysis	2	0.6%

TABLE 10: SIMPLEST STEP

Simplest step	Freq	%

Action plan	12	3.5%
Analysis	1	0.3%
Evaluation	8	2.3%
Recall	221	63.7%
Thoughts	105	30.3%

63.7% of the nursing students opined that recall is the simplest step, 30.3% of them stated that thoughts is the simplest step, 3.5% of them responded that action plan is the simplest step, 2.3% of them opined that evaluation is the simplest step and 0.3% of them stated that analysis is the simplest step.

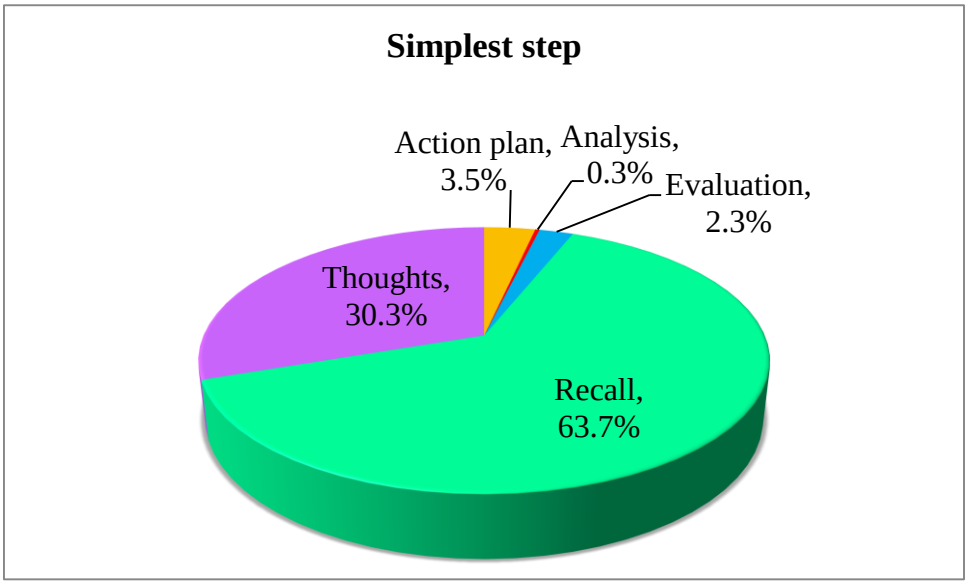

FIGURE 26: SIMPLEST STEP

TABLE 11: SKILLS USED WHILE USING MGRC

Enlist skills used in reflective thinking during use of MGRC	Frequency	Percentage%
Analytical ability	28	8.1%
Analytical ability, judgment	19	5.5%
Critical thinking	137	39.5%
Judgment	32	9.2%
Judgment, memory	7	2.0%
Memory	35	10.1%
Memory, critical thinking	22	6.3%
Recollecting thoughts	4	1.2%
Self-dialogue	63	18.2%

39.5% of the students responded that critical thinking is used in reflective thinking during use of MGRC, 18.2% of them opined that self-dialogue is used, 10.1% of them opined that memory is used and 9.2% of them opined that judgment is used in reflective thinking during the use of MGRC.

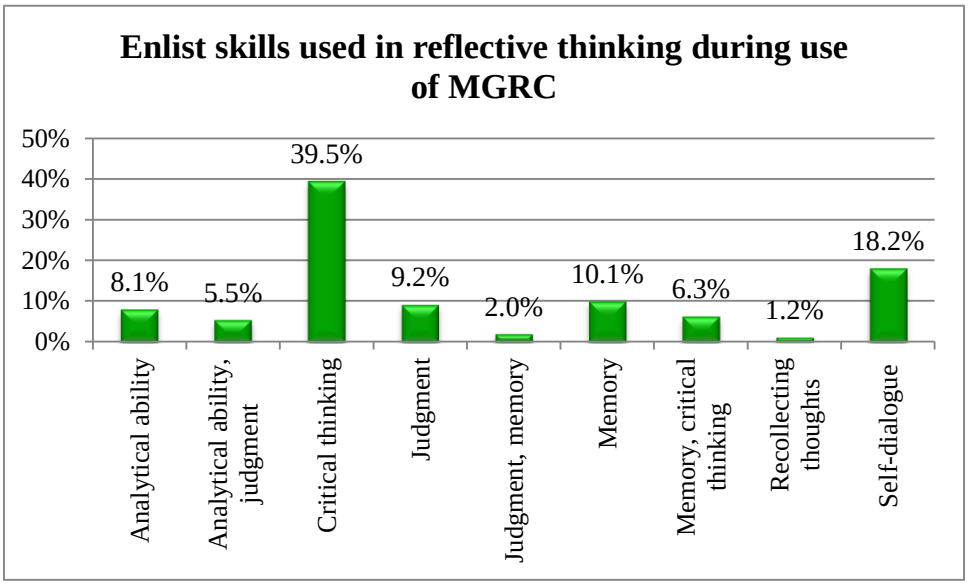

FIGURE 27: SKILLS USED IN MGRC

TABLE 12: STUDENTS RESPONSE ABOUT USE OF MGRC IN NURSING

Do you think you can use Modified Gibbs Reflective Cycle in your area of nursing practice?	Freq	%
Yes	307	88.5%
May be	39	11.2%
Do not know	1	0.3%

Majority of 88.5% of the students stated that MGRC can be used in their area of nursing practice, 11.2% of them opined that MGRC may be used and 0.3% of them opined that they do not know if MGRC can be used in their area of nursing practice.

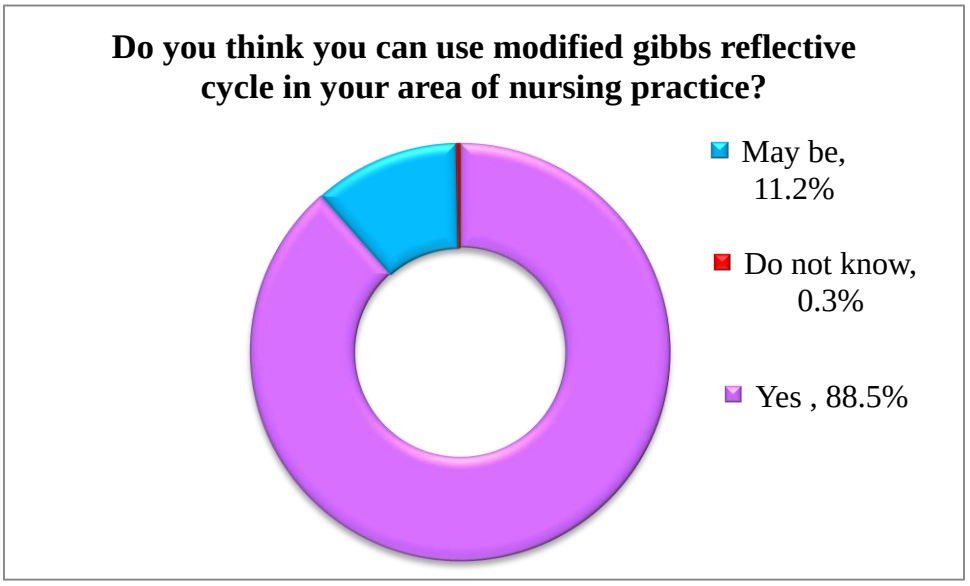

FIGURE 28: STUDENT'S RESPONSE ABOUT USE OF MGRC IN NURSING

TABLE 13: STUDENTS RESPONSE ABOUT MGRC

Responses of students about help of reflective practice for improvement in clinical practice in nursing were sought.

Do you think reflective practice help for improvement in clinical practice in nursing?	Frequency	Percentage%
Yes	303	87.3%
May be	43	12.4%
Do not know	1	0.3%

Majority of 87.3% of the students responded that reflective practice helps for improvement in clinical practice in nursing, 12.4% of them opined that reflective practice may help for improvement in clinical practice in nursing and 0.3% of them stated that they do not know if reflective practice helps for improvement in clinical practice in nursing.

FIGURE 29: STUDENT'S RESPONSE ABOUT MGRC

TABLE 14: STUDENTS RESPONSE ABOUT TIME USED FOR REFLECTION WITH MGRC

Responses of students about Time utilized to reflect on chosen incident using MGRC were sought.

Time utilized to reflect on chosen incident using MGRC	Freq	%
0 – 10 minutes	34	9.8%
11 – 20 minutes	310	89.3%
21 – 30 minutes	3	0.9%

Majority of 89.3% of the nursing students opined that 11-20 minutes are utilized to reflect on chosen incident using MGRC, 9.8% of them stated that 0-10 minutes are required and 0.9% of them stated that 21-30 minutes are required to reflect on chosen incident using MGRC.

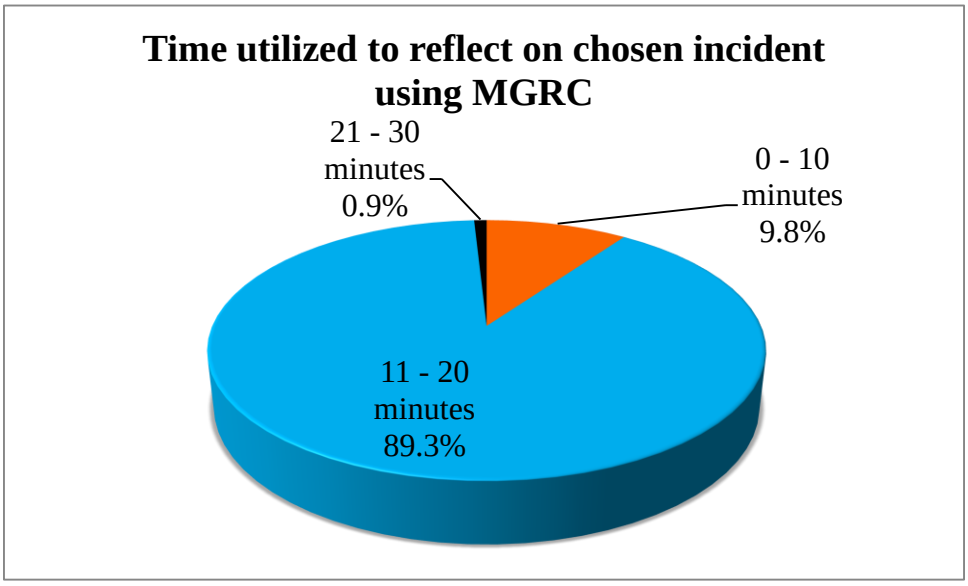

FIGURE 30: TIME USED FOR REFLECTION WITH MGRC

Responses of students about type of feedback after reflective practice they would like to use were sought. 39.5% of the students opined that they would like to use verbal description of reflective tool, 32.3% of them stated that they would like to use group discussion, 24.5% of them stated that they would like presentation and 2.9% of them responded that they would like assignment on reflective tool.

TABLE 15: TYPE OF FEEDBACK AFTER REFLECTIVE PRACTICE WITH MGRC

What type of reflective tool you would like to use?	Freq	%
Presentation	85	24.5%
Verbal description	137	39.5%
Assignment	10	2.9%
Group discussion	112	32.3%

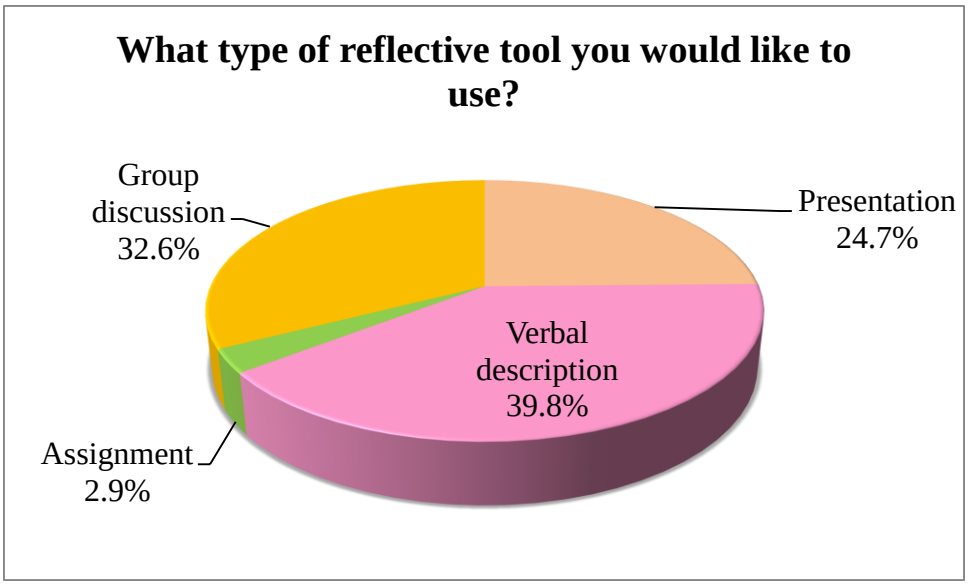

FIGURE 31: TYPE OF FEEDBACK AFTER REFLECTIVE PRACTICE

38.9% of the students need mentor, 20.5% of them stated that they need time, 20.2% of them stated that they need practice, 8.4% of them suggested immediately after incidence and 11.5% of them suggested no marks.

TABLE 16: SUGGESTIONS BY STUDENTS

List your suggestions	Freq	%
Immediately after incidence	29	8.4%
Need mentor	135	38.9%
Need practice	70	20.2%
Need time	71	20.5%
No marks	40	11.5%

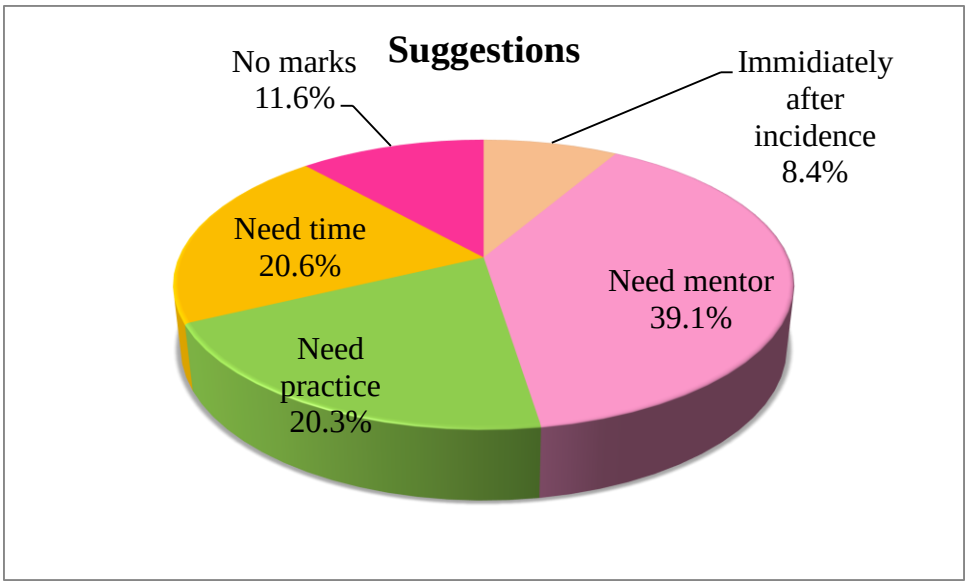

FIGURE 32: STUDENTS SUGGESTIONS FOR REFLECTIVE PRACTICE WITH MGRC

4.5 SECTION V: ASSOCIATION

Analysis of data related with demographic variables' using Fisher's exact test. Association between knowledge and demographic variables was assessed using Fisher's exact test.

TABLE 17: FISHER EXACT TEST FOR ASSOCIATION BETWEEN KNOWLEDGE AND DEMOGRAPHIC VARIABLES

Demographic variable		**Knowledge**			**p-value**
		Poor	**Average**	**Good**	
Gender	Female	42	258	3	0.662
	Male	8	36	0	
Age	21-30 years	31	163	0	0.1809
	31-40 years	1	18	0	
	Above 40 years	1	2	0	
	Up to 20 years	17	111	3	
Professional qualification	Bachelor	27	174	3	0.7596
	Diploma	15	69	0	
	Intern	2	23	0	
	Masters & above	6	28	0	
Professional experience	0 -2 years	19	129	3	0.4694
	3 - 5 years	24	130	0	
	6 - 8 years	6	32	0	
	> 8 y ears	1	3	0	

Since all the p-values are large (greater than 0.05), none of the demographic variable was found to have significant association with knowledge.

TABLE 18: FISHER EXACT TEST BETWEEN ATTITUDE AND DEMOGRAPHIC VARIABLES

Demographic variable		**Attitude**			**p-value**
		Fairly Good	**Good**	**Excellent**	
Gender	FEMALE	9	221	73	0.0285
	MALE	5	32	7	
Age	21-30 years	9	144	41	0.4327
	31-40 years	2	13	4	
	Above 40 years	0	3	0	
	up to 20 years	3	93	35	
Professional qualification	Bachelor	11	151	42	0.04315
	Diploma	0	60	24	
	Intern	0	16	9	
	Masters & above	3	26	5	
Professional experience	0 -2 years	3	108	40	0.026
	3 - 5 years	6	115	33	
	6 - 8 years	3	28	7	
	> 8 years	2	2	0	

Since all the p-values are large (greater than 0.05), none of the demographic variable was found to have significant association with attitude.

TABLE 19: FISHER'S EXACT TEST FOR ASSOCIATION BETWEEN KNOWLEDGE AND SOCIAL CHARACTERISTICS

Social characteristics		Knowledge			p-value
		Poor	Average	Good	
Marital	Married	12	76	0	0.567
	Unmarried	37	216	3	
	Widow	1	2	0	
Religion	Christian	4	26	0	0.885
	Hindu	40	241	3	
	Muslim	3	10	0	
	Other	3	17	0	
Language	English	3	18	0	1.000
	Hindi	3	16	0	
	Marathi	39	226	3	
	Other	5	34	0	
Pres. Res.	Own	8	42	1	0.621
	Rented	10	77	0	
	Other	32	175	2	
Perm. Res.	Local	11	77	1	0.780
	Pune District	15	91	1	
	Other District	19	81	1	
	Other state	5	45	0	
Mother's education	Graduation	22	132	3	0.313
	Primary school	2	5	0	
	Post-graduation	0	1	0	
	Secondary or Higher secondary school	26	156	0	
	Primary school	0	2	0	
	Post-graduation	3	34	0	
	Secondary or Higher secondary school	8	72	0	
Mother's Occupation	Business	4	30	0	0.658
	Government	9	46	0	
	Home maker	20	101	0	
	Private	17	117	3	
Father's occupation	Business	20	149	0	0.077
	Government	6	45	0	
	Home maker	1	1	0	
	Private	23	99	3	

Table 25 Cont....

Social characteristics		**Knowledge**			**p-value**
		Poor	**Average**	**Good**	
Family type (N,E,J,S)	Extended	12	57	0	0.550
	Joint	15	101	0	
	Nuclear	23	136	3	
#of family members	Less than 5	22	115	1	0.781
	5 to 7	18	97	2	
	8 to 10	10	78	0	
	Above 10	0	4	0	
Siblings - Brothers	None	12	77	1	0.918
	One	28	154	1	
	Two	10	63	1	
Siblings - Sisters	None	14	72	2	0.169
	One	16	132	1	
	Two	20	90	0	
Your birth order	Eldest	17	119	1	0.442
	Middle	17	113	1	
	Youngest	16	62	1	

Since all the p-values are large (greater than 0.05), none of the social variable was found to have significant association with knowledge.

TABLE 20: FISHER EXACT TEST FOR ASSOCIATION BETWEEN ATTITUDE AND SOCIAL CHARACTERISTICS

Social variable		Do you think reflective practice help			p-value
		Fairly Good	Good	Excellent	
Marital	Married	6	64	18	0.450
	Unmarried	8	186	62	
	Widow	0	3	0	
Religion	Christian	2	22	6	0.575
	Hindu	10	205	69	
	Muslim	0	11	2	
	Other	2	15	3	
Language	English	2	15	4	0.782
	Hindi	0	14	5	
	Marathi	10	197	61	
	Other	2	27	10	
Pres. Res.	Own	2	39	10	0.702
	Rented	5	59	23	
	Other	7	155	47	
Permt. Res.	Local	2	65	22	0.837
	Pune District	4	78	25	
	Other District	4	74	23	
	Other state	4	36	10	
Mother's education	Graduation	5	112	40	0.843
	Primary school	0	6	1	
	Post-graduation	0	1	0	
	Secondary or Higher secondary school	9	134	39	
Father's Education	Graduation	10	162	56	0.804
	Primary school	0	2	0	
	Post-graduation	2	26	9	
	Secondary or Higher secondary school	2	63	15	
Mother's Occupation	Business	1	24	9	0.235
	Government	2	38	15	
	Home maker	5	98	18	
	Private	6	93	38	
Father's occupation	Business	7	125	37	0.977
	Government	2	38	11	

	Home maker	0	2	0	
	Private	5	88	32	

Table 26 Cont.....

Social variable		**Do you think reflective practice help**			**p-value**
		Fairly Good	**Good**	**Excellent**	
Family Mon. Inc (1,2,3,4)	Rs.30001 to Rs.50000 - Middle income group 2	3	66	12	0.120
	Above Rs.50001 - High income group	11	187	68	
Family type (N,E,J,S)	Extended	5	52	12	0.186
	Joint	5	78	33	
	Nuclear	4	123	35	
#of family members	Less than 5	4	97	37	0.047
	5 to 7	7	94	16	
	8 to 10	3	58	27	
	Above 10	0	4	0	
Siblings - Brothers	None	3	66	21	0.996
	One	8	132	43	
	Two	3	55	16	
Siblings - Sisters	None	7	63	18	0.173
	One	3	106	40	
	Two	4	84	22	
Your birth order	Eldest	5	105	27	0.158
	Middle	8	95	28	
	Youngest	1	53	25	

Since all the p-values are large (greater than 0.05), none of the social variable was found to have significant association with attitude.

TABLE 21: FISHER EXACT TEST FOR ASSOCIATION BETWEEN SIMPLEST STEP AND SOCIAL CHARACTERISTICS

Social characteristics		Which step is simplest to follow					p-value
		Action plan	Analysis	Evaluation	Recall	Thoughts	
Marital status	Married	2	0	0	61	25	0.611
	Unmarried	10	1	8	158	79	
	Widow	0	0	0	2	1	
Religion	Christian	1	0	1	16	12	0.806
	Hindu	11	1	6	181	85	
	Muslim	0	0	0	9	4	
	Other	0	0	1	15	4	
Language	English	1	0	1	11	8	0.725
	Hindi	0	0	1	13	5	
	Marathi	11	1	6	169	81	
	Other	0	0	0	28	11	
Pres. Res.	Own	2	0	1	30	18	0.830
	Rented	5	0	2	57	23	
	Other	5	1	5	134	64	
Mother's education	Graduation	6	0	3	99	49	0.306
	Primary school	0	0	0	5	2	
	Post-graduation	0	0	0	1	0	
	Secondary or Higher secondary school	6	1	5	116	54	
Father's Education	Graduation	7	0	5	138	78	0.013
	Primary school	0	0	0	0	2	
	Post-graduation	2	0	1	21	13	
	Secondary or Higher secondary school	3	1	2	62	12	
Father's occupation	Business	6	0	6	101	56	0.676
	Government	2	0	1	33	15	
	Home maker	0	0	0	1	1	
	Private	4	1	1	86	33	
Family Mon. Inc (1,2,3,4)	Rs.30001 to Rs.50000 - Middle income group 2	3	1	2	52	23	0.548
	Above Rs.50001 - High income group	9	0	6	169	82	
Family	Extended	1	0	1	42	25	0.235

type (N,E,J,S)	Joint	7	0	1	80	28	
	Nuclear	4	1	6	99	52	

Table 27 cont.…

Social characteristics		**Which step is simplest to follow**					**p-value**
		Action plan	**Analysis**	**Evaluation**	**Recall**	**Thoughts**	
#of family members	Less than 5	3	1	3	83	48	0.602
	5 to 7	4	0	4	75	34	
	8 to 10	5	0	1	61	21	
	Above 10	0	0	0	2	2	
Siblings - Brothers	None	2	1	1	51	35	0.334
	One	7	0	6	118	52	
	Two	3	0	1	52	18	
Siblings - Sisters	None	5	0	3	53	27	0.383
	One	5	1	4	101	38	
	Two	2	0	1	67	40	
Birth order	Eldest	3	0	4	89	41	0.738
	Middle	7	0	2	84	38	
	Youngest	2	1	2	48	26	

Since p-value corresponding to Father's education is small (less than 0.05, Father's education was found to have significant association with their attitude towards which step is simplest to follow.

TABLE 22: FISHER EXACT TEST FOR ASSOCIATION BETWEEN TIME UTILISED FOR REFLECTIVE PRACTICE AND SOCIAL CHARACTERISTICS

Social characteristics		Time utilized to reflect on chosen incident using MGRC			p-value
		0 - 10 Minutes	11 - 20 Minutes	21 - 30 Minutes	
Marital status	Married	5	83	0	0.378
	Unmarried	29	224	3	
	Widow	0	3	0	
Religion	Christian	4	25	1	0.482
	Hindu	26	256	2	
	Muslim	1	12	0	
	Other	3	17	0	
Language	English	2	19	0	0.210
	Hindi	3	16	0	
	Marathi	21	244	3	
	Other	8	31	0	
Pres. Res.	Own	4	47	0	0.747
	Rented	6	80	1	
	Other	24	183	2	
Permt. Res.	Local	10	78	1	0.114
	Pune District	6	100	1	
	Other District	8	92	1	
	Other state	10	40	0	
Mother's education	Graduation	14	142	1	0.788
	Primary school	1	6	0	
	Post-graduation	0	1	0	
	Secondary or Higher secondary school	19	161	2	
Father's Education	Graduation	24	202	2	0.616
	Primary school	0	2	0	
	Post-graduation	1	36	0	
	Secondary or Higher secondary school	9	70	1	

Table 28 cont.…

Social variable		Time utilized to reflect on chosen incident using MGRC			p-value
		0 - 10 Minutes	11 - 20 Minutes	21 - 30 Minutes	
Mother's Occupation	Business	2	32	0	0.400
	Government	2	52	1	
	Home maker	16	104	1	
	Private	14	122	1	
Father's occupation	Business	15	151	3	0.472
	Government	3	48	0	
	Home maker	0	2	0	
	Private	16	109	0	
Family Mon. Inc (1,2,3,4)	Rs.30001 to Rs.50000 - Middle income group 2	12	69	0	0.192
	Above Rs.50001 - High income group	22	241	3	
Family type	Extended	3	66	0	0.003
	Joint	5	110	1	
	Nuclear	26	134	2	
#of family members	Less than 5	17	121	0	0.134
	5 to 7	12	103	2	
	8 to 10	4	83	1	
	Above 10	1	3	0	
Siblings - Brothers	None	8	81	1	0.255
	One	20	163	0	
	Two	6	66	2	
Siblings - Sisters	None	12	75	1	0.522
	One	11	137	1	
	Two	11	98	1	
Your birth order	Eldest	17	118	2	0.420
	Middle	11	120	0	
	Youngest	6	72	1	

Since p-value corresponding to family type is small (less than 0.05, family type was found to have significant association with Time utilized to reflect on chosen incident using MGRC**.**

TABLE 23: FISHER EXACT TEST FOR ASOCIATION BETWEEN DIFFICULT STEP OF MGRC AND SOCIAL CHARACTERISTICS

Social characteristics		Difficulties faced using MGRC			p-value
		Difficulties in steps	Difficulties with other factors	No difficulties	
Marital status	Married	55	17	16	0.841
	Unmarried	165	50	41	
	Widow	2	0	1	
Religion	Christian	14	10	6	0.377
	Hindu	188	51	45	
	Muslim	8	2	3	
	Other	12	4	4	
Language	English	9	7	5	0.334
	Hindi	11	4	4	
	Marathi	179	48	41	
	Other	23	8	8	
Pres. Res.	Own	33	11	7	0.918
	Rented	55	17	15	
	Other	134	39	36	
Permt. Res.	Local	60	17	12	0.490
	Pune District	71	20	16	
	Other District	62	19	20	
	Other state	29	11	10	
Mother's education	Graduation	98	32	27	0.553
	Primary school	4	0	3	
	Post-graduation	1	0	0	
	Secondary or Higher secondary school	119	35	28	
Father's Education	Graduation	142	45	41	0.559
	Primary school	2	0	0	
	Post-graduation	24	10	3	
	Secondary or Higher secondary school	54	12	14	
Mother's Occupation	Business	20	6	8	0.087
	Government	37	14	4	
	Home maker	83	20	18	
	Private	82	27	28	

Table 29 cont…

Social characteristics		Difficulties faced using MGRC			p-value
		Difficulties in steps	Difficulties with other factors	No difficulties	
Father's occupation	Business	113	28	28	0.585
	Government	31	13	7	
	Home maker	1	0	1	
	Private	77	26	22	
Family Mon. Inc (1,2,3,4)	Rs.30001 to Rs.50000 - Middle income group 2	59	16	6	0.148
	Above Rs.50001 - High income group	163	51	52	
Family type (N,E,J,S)	Extended	43	14	12	0.968
	Joint	73	23	20	
	Nuclear	106	30	26	
#of family members	Less than 5	90	26	22	0.293
	5 to 7	76	22	19	
	8 to 10	54	19	15	
	Above 10	2	0	2	
Siblings - Brothers	None	65	14	11	0.115
	One	111	35	37	
	Two	46	18	10	
Siblings - Sisters	None	60	16	12	0.735
	One	91	33	25	
	Two	71	18	21	
Your birth order	Eldest	86	28	23	0.994
	Middle	84	25	22	
	Youngest	52	14	13	

Since all the p-values are large (greater than 0.05), none of the social variables were found to have significant association with Difficulties faced using MGRC.

TABLE 24: FISHER EXACT TEST FOR ASSOCIATION BETWEEN DIFFICULT STEP OF MGRC AND SOCIAL CHARACTERISTICS

Social characteristics		Suggestions					p-value
		Immediately after incidence	Need mentor	Need practice	Need time	No marks	
Marital status	Married	7	34	13	24	10	0.619
	Unmarried	22	99	56	47	30	
	Widow	0	2	1	0	0	
Pres. Res.	Own	4	20	9	10	8	0.000
	Rented	9	34	21	10	12	
	Other	16	81	40	51	20	
Perm. Res.	Local	4	36	22	12	13	0.000
	Pune District	9	41	18	27	12	
	Other District	10	40	20	22	9	
	Other state	6	18	10	10	6	
Mother's Occupation	Business	2	12	7	8	5	0.000
	Government	5	22	12	8	8	
	Home maker	14	47	26	18	14	
	Private	8	54	25	37	13	
Family Mon. Inc (1,2,3,4)	Rs.30001 to Rs.50000 - Middle income group 2	7	35	13	17	8	0.000
	Above Rs.50001 - High income group	22	100	57	54	32	
Family type	Extended	10	26	17	11	5	0.000
	Joint	7	45	22	24	16	
	Nuclear	12	64	31	36	19	
Siblings - Brothers	None	6	38	17	18	11	0.000
	One	15	73	34	35	25	
	Two	8	24	19	18	4	
Siblings – Sisters	None	8	31	22	21	6	0.000
	One	7	58	30	30	22	
	Two	14	46	18	20	12	
Your birth order	Eldest	10	53	37	25	12	0.000
	Middle	9	52	23	29	17	
	Youngest	10	30	10	17	11	

Since p-values corresponding to present residence, permanent residence, mother's occupation, monthly family income, family type, number of

brothers, number of sisters and birth order are small (less than 0.05), the social variables present residence, permanent residence, mother's occupation, monthly family income, family type, number of brothers, number of sisters and birth order were found to have significant association with their suggestions for using reflective practice tool in clinical area by nursing students.

CHAPTER FIVE

CONCLUSION

INTRODUCTION

The primary aim of this study was to examine reflective practice among nursing students in the clinical area. The secondary aim was to examine the association between the selected demographic and social variables and reflective practice of the students to understand their influence on the nursing student's reflective practice. This was achieved with research undertaken and titled as 'A study to assess the effect of reflection on clinical performance in selected procedures by students'.The objectives of the study were:

- Observe clinical performance of nursing students.
- Guide nursing students to narrate clinical procedure performance.
- Impart knowledge about reflection tool.
- Guide nursing students to use reflection tool.
- Assess effect of reflection tool on nursing student's clinical performance.
- Associate selected demographic variables with reflective practice knowledge of nursing students.
- Associate selected demographic variables with attitude about reflective practice of nursing students.
- Associate selected social variable with reflective practice knowledge of nursing students.
- Associate selected social variable with attitude about reflective practice of nursing students.
- Analyse data of student's responses.

Quantitative methods with pre and post-test one group design were adopted for the study. This approach helped the researcher to evaluate the effects of a reflective practice intervention on the clinical performance of the nursing students by testing hypothesis as well as to explore attitudes and opinions of the students on using reflective practice intervention.

The effect of reflective practice intervention on the clinical performance was evaluated by knowledge based questionnaire administered in pre and post-test. Attitudes of respondents towards use of reflective practice intervention in a 'modified Gibbs reflective cycle' were derived from questionnaire administered during post-test. Clinical performance in selected procedures was evaluated with an observation checklist in pre and post-test. Intervention effect was studied by pre and post-tests score differences in knowledge questionnaire and observation

checklists. Nursing students' attitudes and opinions about use of reflective practice tool, namely the Gibbs reflective cycle was modified for reflective practice.

The first four objectives of the study were accomplished by observing clinical performance of 347 nursing students in selected nursing procedures in a clinical area by guiding them to narrate their experience of clinical performance using the modified Gibb's reflective tool. The responses were sought to determine the attitude of nursing students towards using MGRC and its use in nursing. The knowledge about reflective practice tool was imparted through a lesson plan and interactive session. The pathway of data collection is elaborated in the research tool (Appendix I). Statistical significance tests were used to determine the association between demographic, social variables and knowledge as well as attitude scores.

5.1 DESCRIPTIVE ANALYSIS

Descriptive analysis of data collected reported 87.3% nursing students were females and 12.7% were males. 55.9% had age between 21 to 30 years. 43.5% of them had up to two years of professional experience, 47% of had experience of 3-5 years. 73.8% nursing students were unmarried. 81.8% were belonged to Hindu religion and 77.2% had Marathi as their first language. 60.2% nursing students were residing away from their home and 85.5% were from various districts of Maharashtra. 45% of mothers and 65% of fathers among parents of nursing students had obtained at least a graduate level of education. Occupation of mothers of nursing students was varied as home maker 34.9%, private employment 39.5%, government employment 15.9% and 9.8% had self-employment. Whereas 48.7% fathers of nursing students had self-employment, 36% had private employment, 14.7% were in government employment and 0.6% were homemakers. 46.7% were from nuclear family followed by 33.4% from joint and 19.9% from extended family. 39.8% nursing student had less than 5 members, while 33.7% had 5 to 7 members in the family in the family. 25.4% had 8 to 10 members and 1.2% had above 10 members in the family. 42. 9% had at least one sibling. 39.5% nursing students were the eldest child while 37.8% were of middle birth order. 76.7% of nursing student's family had income above Rs.50000/-.

5.2 STATISTICAL ANALAYSIS

Paired t-test for comparison of average clinical procedures scores of nursing students of pre-test score 16.1 and post-test score 22.7 was applied. Corresponding p-value was 0.000 (less than 0.05), and the null hypothesis was rejected. This indicates that the clinical procedures of the nursing students improved significantly after reflection tool.

The reflection tool was found to be significantly effective in improving the clinical procedures of the nursing students. Paired t-test for comparison of area wise pre-test and post-test clinical procedures scores of nursing students was applied. Average clinical procedures score in pre-test were 16.3(AN area), 16(NB area) and 16.1(PN area) which increased to 25.5(AN area), 20.7(NB area) and 22.9(PN area) in post-test. Corresponding p-values were of the order of 0.000 (less than 0.05), where the null hypothesis was rejected. This indicates that the area wise clinical procedures of the nursing students improved significantly after reflection tool, which was found to be significantly effective in improving the area wise clinical procedures of the nursing students.

Descriptive analysis of data related to responses of students about reflective practice tool was conducted where 72.9% of the students responded that reflexive practice is of good help, 23.1% of them opined that it is excellent and 4% of them responded that reflexive practice is fairly good. When asked to elaborate their responses about reflective practice tool (Modified Gibb's Reflective Cycle MGRC), nursing students reported that feelings and thoughts are acknowledged, helpful in thinking and that MGRC is helpful in allowing improvement and is useful in clinical area of nursing practice.

Majority of students 63.7% reported 'recall' as the simplest step, whereas 30.3% reported 'thoughts and feeling'. Nursing students also reported difficulties faced in the evaluation and analysis of incidences as a novice practitioner, which was also used in the differentiating evaluation and analysis step of MGRC. Difficulty in judging of 'good' and 'bad' or expressing thoughts and feeling were also reported. Time and concentration needed to use MDRC, need of more practice and writing were also reported as difficulties.

Responses of students about skills used in reflective thinking during use of MGRC were reported as follows - 39.5% of the students responded that critical thinking is used in reflective thinking during use of MGRC, 18.2% of them opined that self-dialogue is used, 10.1% of them opined

that memory is used and 9.2% of them opined that judgment is used in reflective thinking during the use of MGRC. Majority (89.3%) of the nursing students opined that 11-20 minutes are utilized to reflect on chosen incident using MGRC, 9.8% of them stated that 0-10 minutes are required and 0.9% of them stated that 21-30 minutes are required to reflect on chosen incident using MGRC.

Majority (87.3%) of the students responded that reflective practice helps for improvement in clinical practice in nursing, 12.4% of them opined that reflective practice may help for improvement in clinical practice in nursing and 0.3% of them stated that they do not know if reflective practice helps for improvement in clinical practice in nursing. Majority (88.5%) of the students stated that MGRC can be used in their area of nursing practice, 11.2% of them opined that MGRC may be used and 0.3% of them opined that they do not know if MGRC can be used in their area of nursing practice.

39.5% of the students opined that they would like to use verbal description of reflective tool, 32.3% of them stated that they would like to use group discussion, 24.5% of them stated that they would like presentation and 2.9% of them responded that they would like assignment on reflective tool. 38.9% of the students need mentor, 20.5% of them stated that they need time, 20.2% of them stated that they need practice, 8.4% of them suggested immediately after incidence and 11.5% of them suggested no marks.

SUMMARY OF ANALYSIS

In the context of the current study, the students perspectives on reflective practice was found to be consistent with previous studies where novice students engage in reflective practice (Burgess et al., 2012); enhanced skill development (Smith and Jack, 2005; Slandyk and Sheckley, 2000); majority of students reflecting with some being critical reflectors (Hill et al., 2012); development of confidence (Montagna et al., 2010); and where the focus was on discussion of reflection instead of writing about reflection (Garcia et al., 2007).

The current study generated significant evidence through a quantitative method approach and provides ample and robust suggestions based on the result and its findings. The study found that demographic and social variables have no significant association with knowledge scores about reflective practice and on difficulties faced using reflective practice.

Father's education was found to have significant association with the nursing students attitude towards which step is simplest to follow. Family type was found to have significant association with time utilized to reflect on chosen incident using MGRC. Further investigation on the influence and correlation of the relationship of the father and family figures with reflection practices needs to be undertaken and is recommended as part of future work in conclusion to this study.

The social variables such as residence, parent's occupation, family income, family type, number of brothers, number of sisters and birth order were found to have significant association with their suggestions for using reflective practice tool in clinical area by nursing students. There is need to assess the rationale for the influence of social background on reflective practice probably with different research approach.

The reflective practice tool (Modified Gibbs' Reflective Cycle MGRC) was found significantly effective in improving clinical performance among nursing students representing new entrant to novice staff nurse.

5.3 IMPLICATIONS

The implications of this study are on nursing practice as well as education. This is the first study to examine reflective practice in the Indian context. Reflective practice is used in most of the health care professions and most importantly in nursing all around the world. Indian nurses and healthcare system has not yet embraced this essential tool.

Hokheimer (Josephson, 2014) suggested that for when a person develops reality, they use their own insight related to their personal life, which is influenced by the family and social background. The present study tried to understand the nursing student's demonstrated individual differences while using reflective practice tool to reflect on their own clinical performance. The study findings were found to be complying with Hokheimer's suggestions.

Nursing professional development is based on lifelong learning, and is an internally motivated application of the metacognitive ability of a person. Critical theory of reflexivity (Josephson, 2014) suggests that nursing students being able to connect internally with their own thoughts and feelings directs decision making and care. The findings of the present study suggest that nursing

students can connect to their own thoughts and feelings by using MGRC, which also provides an opportunity to decide a future action plan for clinical performance.

The nursing students responded positively and found modified Gibb's reflective cycle good (57.6%) or excellent (26.5%) for learning in nursing. As this was the first opportunity for participating nursing students to use reflective practice, they needed more time to practice (40.9%), or needed help and a preferred mentor (39.1%) for assistance. However, nursing students (89.3%) used 11 to 20 minutes to narrate clinical performance using MGRC which demonstrated an applicability of it's use.

It is imperative to use knowledge gained through this study while inculcating reflective practice in nursing students for their professional development as a competent nurse. The nursing students reported that MGRT acknowledged their thoughts and feeling and was helpful in thinking and performance in clinical area of nursing practice.

It was preferred for use with a mentor and to be conducted immediately after an incidence. The evidence from this study suggested that reflective practice tools like MGRC should be used in clinical areas with praxis for nursing students to develop professional reflective thinking. Most of the social variables have significant effect on using reflective practice and to develop reflective skill. This study also found that nursing students follow their habitus and capitals as informed by social theory of practice.

The study was successful in assessing the effect of MGRC in clinical nursing area and as a helpful approach to establish an explicit framework and method to initiate the reflective practice in nursing education in India, to implement and to evaluate the processes of reflective practice with supervision, mentoring, guidance and feedback. It is to be noted, however, that reflective practice is not an incidental event and will require time, energy and organizational commitment.

Nursing students were open to reflective practice and were able to give thoughtful suggestions for its use in nursing practice. The researcher found that nursing students had genuine interest in using MGRC and discussing their experience in group. It is significant to know that this was first opportunity to use reflective practice tool in Indian context.

5.4 LIMITATIONS OF THE STUDY

The study used only one of the reflective practice tools, which was the modified Gibb's reflective practice cycle that was limited to three selected procedures in clinical area. This study was done in a limited geographic area for nursing students, namely in Pune city, and was limited to one group pre and post-test.

5.5 RECOMMENDATIONS

This study suggested that there is a need to establish an explicit framework and method to initiate the reflective practice in nursing education and to implement and evaluate the processes of reflective practice with supervision in nursing colleges in India. This study also provided evidence for the role for nursing teachers as mentors or guide. Organizations role for inculcating reflective practice is evident from literature, and can be further studied based upon this study comments about their importance and influence.

5.5.1 NURSING EDUCATION:

Students can have reflective practice sessions in clinical areas, with teachers as mentors. Teachers can use MGRC for their teaching sessions, evaluating program implementation and projects.

5.5.2 NURSING PRACTICE:

Reflective practice of 'critical incidence', 'ward analysis' and 'individual clinical practice' can be done with MGRC. In the clinical area, this method can be used as a case study and for multidisciplinary meetings.

5.5.3 NURSING RESEARCH:

- The current study used a qualitative approach. Different approaches can be applied to examine reflective practice among nursing students such as variations in the qualitative method.
- The study can be replicated in more health care professions.
- The study can be expanded for health professionals as well as students.
- The study can be undertaken for other educational professions.

- The study can be comparatively evaluated through different reflective practice methods and models.
- The study can be modified to generate evidence on efficacy of two different models of reflective practice in the discipline.
- The study can be modified to reflect on various educational events such as conferences, workshops, courses etc.

5.5.4 NURSING ADMINISTRATION:

MGRC can be used as a tool for the evaluation of any event, conference, workshop and educational program in nursing. MGRC can also be used for problem solving and individual professional development by nursing administrators and managers.

CONCLUSION

This study was successful in generating evidence and findings for using the MGRC reflective practice tool for clinical practice in nursing in the Indian context. Nursing students using modified Gibb's reflective cycle as part of reflective practice has not yet been utilized in Indian nursing education. Responses of nursing students related to the use of reflective practice tool were genuine and authentic. The modified reflective practice tool was found effective as a way of introducing reflective practice for nursing students. The findings of the study provide the necessary motivation for the development of new learning approaches for nursing students which will also be beneficial to other health professionals.

The importance of understanding social characteristics of nursing students is highlighted by the findings evaluated in this study. Various social characteristics were found influential in the reflective practice of nursing students. Reflective practice is concerned with critically analysing perceptions, thoughts and feelings associated with the action. In this sense, reflective practice can be used in clinical nursing to address social conditions influencing health and health care. Reflective practice implications and consequences are one of the four pillars of nursing research, education clinical practice and administration. Indian nursing has not yet fully embraced or adopted a wholesome use of reflective practice. This study provides empirical data on reflective practice used in nursing within an Indian context.

Overall, MGRC was found to be effective in improving the nursing student's clinical performance and was preferred for use with a mentor immediately after incidence. The evidence from the study suggests that reflective practice tools such as MGRC should be used in clinical areas and use of praxis should be advocated for nursing students to develop professional reflective thinking. Most of the social variables have a significant effect on using and developing practice, with evidence suggesting that nursing student's follow their habitus and capitals as informed by the social theory of practice. Thus, it is imperative to use knowledge gained by this study while inculcating reflective practice in nursing student for their professional development as a competent nurse and health-care professional.

PERSONAL GAIN BY THE STUDY

This study gave me insight into reflective practice and it's use as a researcher and made me aware of my thoughts and feelings as well as the methods for analysing them. The student's perspectives and the effect of social background were evident in the study and were complying to other studies done on reflective practice. The new outlook to understand the thinking of others was gained due to the guiding social theory used for this study. This research has given me a personal pleasure and professional satisfaction for adapting and completing research in the area of reflective practice with an Indian context.

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APPENDIX

DPU

Dr. D. Y. PATIL VIDYAPEETH, PUNE
(DEEMED UNIVERSITY)
(Accredited by NAAC with 'A' grade)
Dr. D.Y. PATIL COLLEGE OF NURSING

Mrs. Khurshid S. Jamadar
Principal

Ref. No. : DYPV/CON/ 323
Date : 07/09/2014

To,
Mrs. Nilima J. Pandit
Ph.D. Scholar

Sub: Permission for students and teachers to participate in the Ph.D. study.

Dear Madam,

I permit the students and teachers to participate in the Ph. D study conducted by you on the topic, "A study to assess the effect on reflection on clinical performance in selected procedures by nursing students"

Thanking you.

Yours faithfully,

PRINCIPAL
Dr. D.Y.Patil College of Nursing
Pimpri, Pune - 411 018

Plot No. BGP-190, Near Pavana Industries, Bhosari MIDC, Pune- 411026, Maharashtra, India.
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Phone No 020 24432591, 24452867, Fax - 020 24432592
Email - standrewscon@gmail.com Web: www.standrewscon.in

St.ACON/Rsch/ /2014 Date:01/09/2014

To,
Mrs. Nilima Pandit
Ph.D Scholar

Subject: Permission for students and teachers to participate in the Ph.D study.

Dear Madam,

I permit the students and teachers to participate in the Ph.D study "A study to assess the effect of reflection on clinical performance in selected procedures by Nursing Students".

Thanking you.

Brig. (Mrs.) Janulet Dean (Retd.)
Principal
St. Andrews College of Nursing
Pune - 411 002.

Editor's Letter

CERTIFICATE

This is to certify that I have edited the study done by Mrs.Nilima Jitendra Pandit On "A Study to assess the effect of reflection on clinical Performance in selected procedures by nursing Students" .A thesis which will be submitted to Tilak Maharashtra Vidyapeeth, Pune, for the degree of doctor of Philosophy (PhD).I wish her best Wishes for the same.

Name: Mrs.Anuradha Dnyanesh Lanke

Qualification: M.A (English Lit.)B.ed

Sign:

Date:

Statisticians Letter

Certificate

This is to certify that I have done the statistical Analysis for the study done by Mrs. Nilima Jitendra Pandit on "A study to assess the effect on reflection on clinical performance in selected procedures by nursing students" A thesis which will be submitted to Tilak Maharashtra Vidyapeeth, Pune for the degree of Doctor of Philosophy (Ph.D)

I wish her best wishes for the same.

Name: - Mrs.Vaishali Chirmade

Qualification: - M.Sc. (Statistics)

Sign Vaishali

Date

APPENDIX - D

VALIDITY LETTER

CERTIFICATION OF VALIDATION

This is to certify that the tool constructed by Mrs. Nilima Pandit, a Ph.D. student of Tilak Maharashtra Vidyapeeth, Pune, to be used in her study titled, "A STUDY TO ASSESS THE EFFECT OF REFLECTIVE PRACTICE INTERVENTION ON CLINICAL PERFORMANCE IN SELECTED NURSING PROCEDURES DONE BY NURSING STUDENTS." has been validated by me.

Signature

Name:-

.....

Designation:-

.....

Date:-

.....

APPENDIX - E

CONSENT OF PARTICIAPANTS

CONSENT FOR PARTICIPATION IN RESEARCH STUDY

I ---------- HEREBY GIVE MY FULL CONSENT FOR PARTICIPATION IN RESEARCH STUDY TITLED '**A STUDY TO ASSESS THE EFFECT OF REFLECTIVE PRACTICE INTERVENTION ON CLINICAL PERFORMANCE IN SELECTED NURSING PROCEDURES DONE BY NURSING STUDENTS.**

. I HAVE BEEN EXPLAINED ABOUT THIS STUDY AND I AM WILLING TO PARTICIPATE IN THIS STUDY.

SIGNATURE

PARTICIPANT

DATE:

APPENDIX - F

BLUE PRINT

STRUCTURED KNOWLEDGE QUESTIONNAIRE

S.NO	CONTENT	ITEM NUMBER	TOTAL	%
1	DEMOGRAPHIC INFORMATION	1,2,3,4,5	5	20
2	KNOWLEDGE	6, 9, 14, 17, 18, 23, 24	7	28
3	COMPREHENTION	7, 10, 11,13, 15, 19, 20	7	28
4	APPLICATION	8, 12, 16, 21, 22, 25	6	24
	TOTAL QUESTIONS		25	100

APPENDIX - G

LIST OF EXPERTS FOR VALIDATTION

CONTENT VALIDITY BY EXPERTS FROM HEALTH PROFESSIONALS

No.	EXPERTS	DISCIPLINE
1	JAYABALA AGHAMKAR	NURSING
2	D.PRIYA	NURSING
3	VIJAYAN	PHYSIOTHERAPY
4	NAZIA SUTAR	NURSING
5	ROMA SELVARAJ	NURSING
6	DR.GAIKWAD	MEDICAL
7	SUREKHA S.	NURSING
8	DHANSHREE KOTWAL	NURSING
9	SUCHETA YANGAD	NURSING
10	DR.PATWEKAR	MEDICAL
11	SHWETA JOSHI	NURSING
12	SADHANA ADHYAPAK	NURSING
13	RUPALI SALVI	NURSING
14	DR.TAPTI BHATTACHARJEE	NURSING
15	DR.PITRE	NURSING
16	DR.CHOUDHARI	MEDICAL
17	NISHA NAIK	NURSING
18	RANJANA TRAMBYAKE	NURSING
19	MONITA T.	NURSING
20	SUNDARI APTE	NURSING
21	JYOSTNA DESHPANDE	NURSING
22	KHURSHID JAMADAR	NURSING
23	MADHURI SHELKE	NURSING
24	KALPANA BHANDARI	NURSING
25	VAISHALI CHIRMADE	STATISTICIAN
26	NISHA DESHPANDE	NURSING
27	BHAGYASHREE G.	NURSING
28	DR.PALKEKAR	PHYSIOTHERAPY
29	DR.VISHAL	OCCUPATIONAL THEARAPY
30	MARYLIN SHINDE	NURSING

APPENDIX - H

RESEARCH TOOL

RESEARCH TOOL	
SECTION	
I	Demographic questionnaire
II	Knowledge questionnaire
III	Attitude questionnaire
IV	Procedure checklists
V	Lesson plan
VI	Narrative about procedure performance
VII	Narrative about procedure performance using Gibbs reflective cycle

PATHWAY
PHASE ONE Distribute (Pre Test) Demographic (Section I) and Knowledge questionnaire (Section II)
PHASE TWO A) Procedure checklist (Pre Test) (Section IV) 1) Newborn assessment 2) Postnatal checks 3) Antenatal palpation
B) Narrative about procedure performance by student (Section VI)
PHASE THREE CLASS ROOM Lesson plan : (Section V) Reflective practice Gibbs reflective cycle
After seven days
PHASE FOUR A) Procedure checklist (Post Test) (Section IV) 1) Newborn assessment 2) Postnatal checks 3) Antenatal palpation
B) Narrative about procedure performance by student with Gibbs reflective cycle. (Section VII)
PHASE FIVE Distribute (Post Test): Demographic (Section I) and Knowledge questionnaire (Section II), Attitude questionnaire (Section III)

❖ **CODE:**

❖ **Your organization:**

You are working in

a) Name of organization: ----------

b) Place:----------

Dear All,

Greetings to you

Nurses provide care in all health care settings. They frequently use their theoretical knowledge and experience in clinical judgment. Due to constant health care developments, nurses need to tune into progress ever so faster.

This letter requests your support and participation in a study on **Reflective Practices Used By Nurses**. Kindly attempt all items and hand over sheets to researcher.

Thank you.

There are total 3 sections. First and second sections comprise of multiple choice items. Please select the best option according to you. Third section has exercise to use Modified Gibbs Reflective Cycle in the format given, followed by questions for your best response based on your opinion about reflective practice used with Modified Gibbs reflective Cycle.

---------- / / 2013

Please tick your choice of option ✓

Section I:-

1) **Identify yourself: you are:** ----------(Year of Training)
2) **You are:**
   a) Female
   b) Male
3) **Your age:** --------- years
4) **Professional qualification is :**
   a) Student ----------
   b) Diploma ----------
   c) Bachelor ----------
   d) Masters/above ----------
5) **Your professional experience:**
   a) 0 to 2 years
   b) 3 to 5 years
   c) 6 to 8 years
   d) More than 8 years

Section II:-

6) **What do you mean by reflection?**
   a) Checking your actions
   b) Concluding experience
   c) Learn effectively from one's experience
   d) Thought processing
7) **Reflection involves**
   a) Self-questioning
   b) Viva voice by teacher
   c) Anticipating failure
   d) Ideas in mind
8) **Reflective thinking helps to develop-**

a) New understanding
b) Ability to check errors
c) Criticism
d) Individual complex

9) Reflective practice is

a) Continuous process
b) Static process
c) Vertical process
d) Horizontal process

10) Reflective practice helps to

a) Develops awareness about own thoughts
b) Connect theory to practice
c) Build personal knowledge in practice
d) All of above

11) Who can engage in reflective practice?

a) Educators
b) Marketing professionals
c) health care professionals
d) All of above

12) Influencing element on developing reflective practice

a) Scheduled time
b) Formal tests
c) Supportive environment
d) Challenges

13) Factors affecting reflective practice

a) Lack of Support
b) Less Knowledge
c) Time constraint
d) Place

14) ERA cycle related to reflective practice is

a) Education,Research, Administration
b) Education, Reference, Action
c) Experience, Reflection, Action
d) Experience, Research, Academics

15) Reflective practice allow following

a) Express feelings associated
b) Search thoughts
c) Promote motivation
d) Hide mistakes

16) Reflective practice is developed effectively with

a) Mentor
b) Parents
c) Friends
d) Self

17) Methods of reflection are

a) Narratives
b) Journals
c) Diary or log
d) All

18) Importance of reflective practice is

a) Avoid repetition
b) Be conscious of our potential
c) Confirm knowledge
d) Point out mistakes

19) Description of incident is

a) Ability to recall
b) Ability to read
c) Ability to write
d) Ability to note

20) Self-awareness in reflective practice involves

a) Exploration of ideas
b) Analysis of own feelings
c) Knowledge of self
d) Self-practice

21) Reflective practice helps healthcare professionals because

a) Its ever changing
b) Its complex
c) Its human related
d) All of above

22) Barriers of reflective practice

a) Fear of judgment
b) Lack of time
c) Fatigue d) All of above

23) Learning with Reflective practice is

a) Lifelong
b) Incidental
c) Departmental
d) Continuous

24) Reflective practice is focusing on

a) Individual's experience
b) Incident
c) Policy and procedure
d) Workload

25) Reflective practice can be used in

a) Life experiences
b) Professional practice
c) Education
d) All of above

Section III:-

Based on **use of Modified Gibbs Reflective Cycle** for reflective practice of your chosen incident in section III please response to following items:

1) Do you think reflective thinking used in Gibbs Reflective Cycle helps in Nursing? Please tick √

0 *-Did not help* ***1*** *-Little help*
2 *-Fairly good* ***3*** *- Good*
4 *- Excellent*

2) Kindly elaborate your response for your choice of answer to 1) a), above

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3) How do you describe effect of Modified Gibbs Reflective Cycle on learning in nursing practice? Please tick √

0 *-Did not help,* ***1*** *-Little help,*
2 *-Fairly good,* ***3*** *- Good,*
4 *– Excellent*

4) What are difficulties you faced using steps of Modified Gibbs reflective cycle?

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5) Which step is simplest to follow?

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6) Enlist your skills used in reflective thinking during use of modified Gibbs cycle. -

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7) Do you think you can use Modified Gibbs Reflective Cycle in your area of nursing practice?

a) Yes
b) No
c) May be
d) Do not know

8) Do you think Reflective practice help in improvement in clinical practice in Nursing?

a) Yes
b) No
c) May be
d) Do not know

9) Please scale time you have utilized to reflect on chosen incident using modified Gibbs reflective cycle.

a) 0-10 minutes
b) 11-20 minutes
c) 21-30 minutes
d) More than 30 minutes

10) What type of reflective tool you would use – (you can choose multiple options)

a) Presentation
b) Verbal description
c) Assignment
d) Group discussion

11) List your suggestions to use reflective practice in Nursing.

SECTION IV: PROCEDURE CHECKLISTS

Checklist for observing newborn assessment procedure

Note: Give score 2 for perfect technique, 1 for partial and need to improve, 0 for wrong technique. Add the total.

	Newborn Assessment	**Pre test**	**Post test**
1	Preparation		
2	Explanation to mother		
3	Newborn reflexes		
4	Temperature		
5	Heart rate		
6	Respiration		
7	Skin		
8	Head molding + fontanels		
9	Neck - Clavicles		
10	Face		
11	Mouth		
12	Abdomen		
13	Genitals and Anus		
14	Analysis of intervention		
15	Communication to mother		
	Total score		

10 – 15 Need to improve in skill

16 - 20 Satisfactory technique

21 – 24 Good technique

25– 30 excellent technique

PRE TEST SCORE:

POST TEST SCORE:

Checklist for observing postnatal checks of mother procedure

	Post natal checks	**Pre test**	**Post test**
1	Temperature		
2	Heart rate		
3	Respiration		
4	Blood pressure		
5	Pain assessment		
6	Fundal palpation		
7	Lochia		
8	Perineum		
9	Breasts		
10	Calf tenderness		
11	Sleep and Rest		
12	Micturition		
13	Bowels		
14	Exercises		
15	Diet and Nutrition advice		
	Total score		

Note: Give score 2 for perfect technique, 1 for partial and need to improve, 0 for wrong technique.

Add the total.

10 – 15 Need to improve in skill

16 - 20 Satisfactory technique

21 – 24 Good technique

25– 30 Excellent technique

PRE TEST SCORE:

POST TEST SCORE:

Checklist for observing antenatal palpation procedure

	Antenatal palpation	**Pre test**	**Post test**
1	Hand hygiene		
2	Explanation		
3	History		
4	Empty bladder		
5	Position(semi recumbent)		
6	Dignity (cover)		
7	Visual exam:		
8	Size Shape of abdomen		
9	Observation:Scar, Linea, Skin		
10	Observation: Fetal movements		
11	Fundal height		
12	Lateral palpation		
13	Pelvic palpation		
14	Auscultation of fetal heart		
15	Fetal presentation		
	Total score		

Note: Give score 2 for perfect technique, 1 for partial and need to improve, 0 for wrong technique.

Add the total.

10 – 15	Need to improve in skill
16 - 20	Satisfactory technique
21 – 24	Good technique
25– 30	Excellent technique

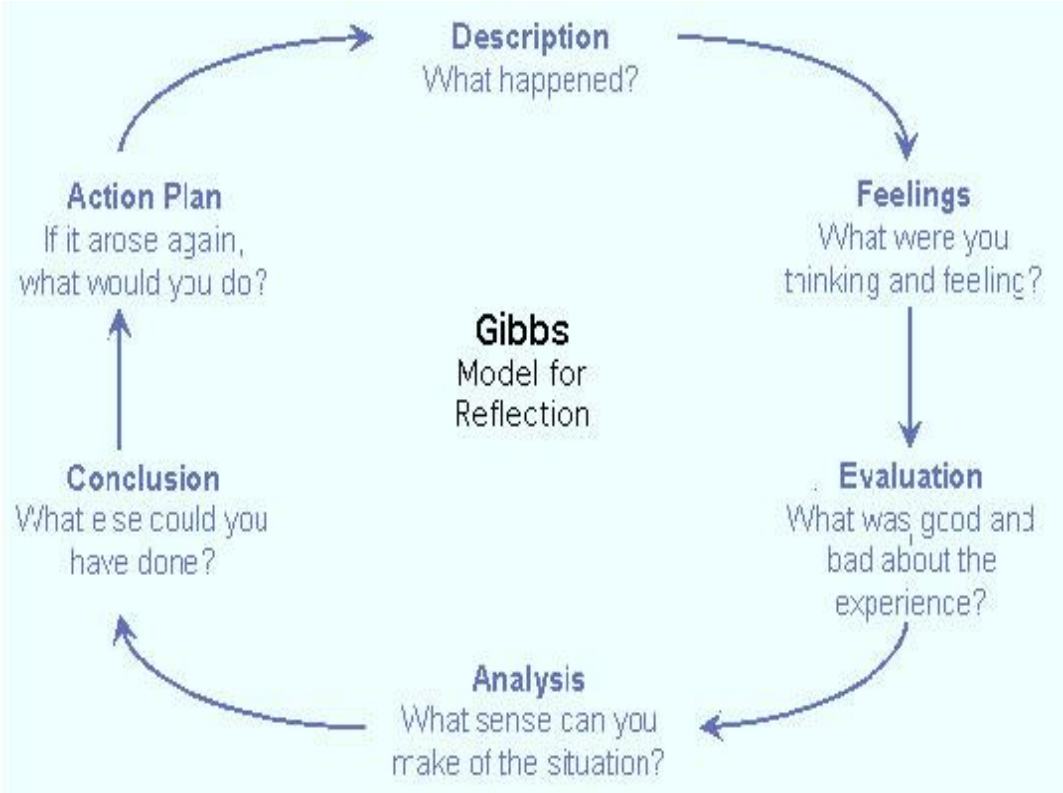
PRE TEST SCORE:

POST TEST SCORE:

SECTION VI: NARRATION ABOUT INCIDENCE (PRE TEST)

SECTION VII:

NARRATION ABOUT PROCEDURE USING GIBBS CYCLE (POST TEST)



Description: ----------

Feelings: ----------

Evaluation: ----------

Analysis: ----------

Conclusion: ----------

Action plan: ----------

SECTION V:

REFLECTIVE THINKING AND REFLECTIVE TOOL(LESSON PLAN)

Aim: To provide knowledge about Reflective practice

Objectives:

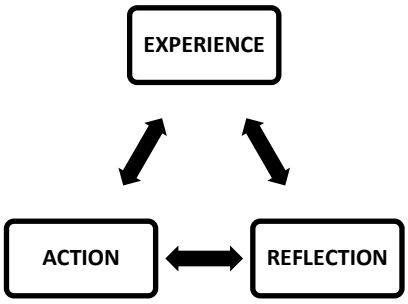
1) To understand the concept of reflective practice.
2) To appreciate how reflective practice can be seen as strategy for learning.
3) To understand reflective processes.
4) To use reflective practice tool.
5) To evaluate learning experience.

Definition of reflective practice:

Schön (1983): Reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline.

Components of reflective practice:

An ERA cycle of reflective practice



- Reflective practice can be an important tool in practice-based professional learning settings where individuals learning from their own professional experiences, after or along with formal teaching or knowledge transfer.
- It is the most important source of personal professional development and improvement, particularly in professional development for practitioners in the areas of education and healthcare.
- Reflective Practice is associated with learning from experience, and is viewed as an important strategy for health professionals who embrace lifelong learning.
- Due to the ever changing context of healthcare and the continual growth of medical knowledge, there is a high level of demand on healthcare professionals' expertise.
- Due to this complex and continually changing environment, healthcare professionals could benefit from a program of reflective practice.
- Critically reviewing their initial understanding on the problem and generating alternate solutions.
- Assisting the health care professional by providing a new learning situation that will develop their skills and knowledge base.
- In the field of nursing there is concern that actions may run the risk of habitualisation, thus dehumanising patients and their needs. In utilising Reflective Practice, nurses areable to plan their actions and consciously monitor the action to ensure it is beneficial to their patient.
- The act of reflection is seen as a way of promoting the development of autonomous, qualified and self-directed professionals. Engaging in Reflective Practice is associated with the improvement of the quality of care, stimulating personal and professional growth and closing the gap between theory and practice.

Reflective processes are stages of thoughtful activity that one go through when we consciously decide to go through an reflective experience.

Stage 1: Selecting critical incident to reflect on
Stage 2: Describing experience
Stage 3: Analyzing experience
Stage 4: Interpreting experience
Stage 5: Exploring alternatives
Stage 6: Framing action

Evaluate learning experience:

- Is this new learning for you?
- What is ERA?
- How many stages are in Gibbs reflective cycle?
- What are these stages?
- Did you recall theory during reflective thinking?
- Main points identified from reflection on the experience.
- What are learning points?
- Describe your feelings? Name them.
- Describe professional development achieved.

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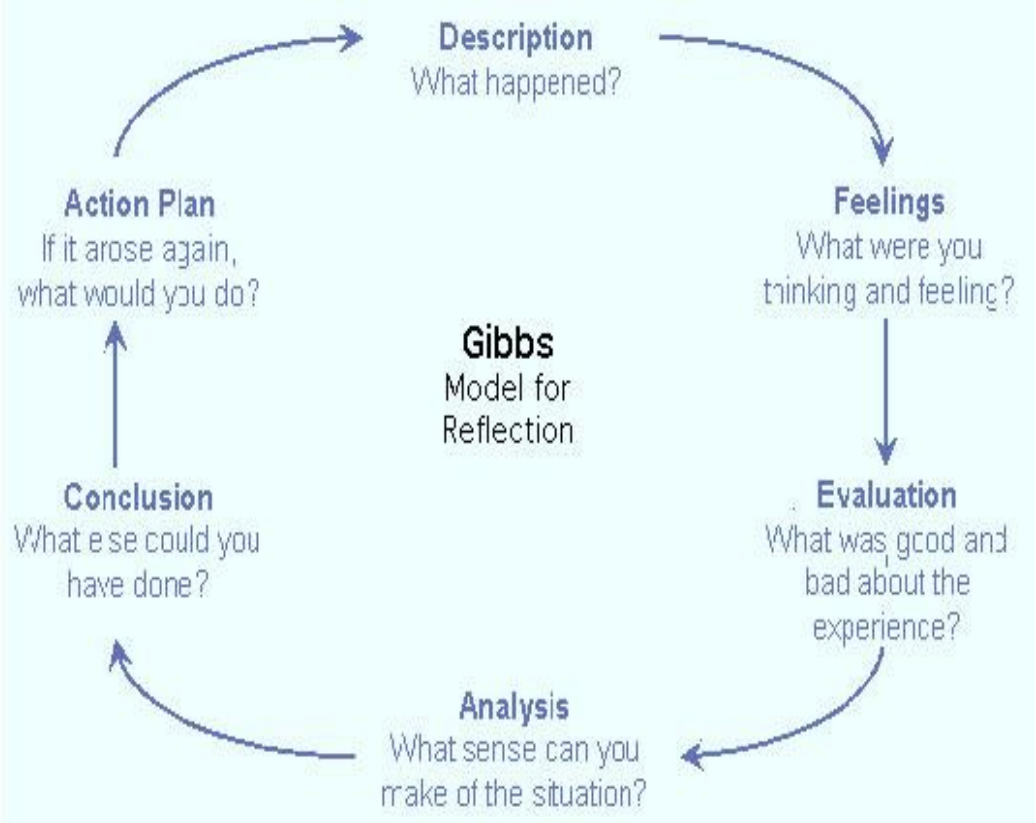

Gibbs Reflective Cycle is named after Professor Graham Gibbs, University of Oxford. After setting up the Open University's Centre for Higher Education Practice, in 2004, Graham Gibbs was appointed Director of the Institute for the Advancement of Learning at OxfordUniversity. Gibbs first outlined the Reflective Cycle in 1988 in *Learning by Doing:* A guide to teaching and learning methods

Reflective Tool explained:

1) Description
   a) Did you witness or participate during chosen episode of reflection?
   b) Did you know nursing actions to be taken during chosen episode?
   c) Describe as a matter of fact just what happened during chosen episode for reflection.
2) Feelings
   a) What were you thinking at that time?
   b) What were you feeling at that time?
3) Evaluation
   a) List points about what was GOOD about the experience.
   b) List points about what was BAD about the experience.
4) Analysis
   a) What sense can you make out of the situation?
   b) What does it mean?
   c) What were your hopes for the outcome of the incident?
   d) How do you think you have performed?
   e) How did you narrate chosen episode of reflection?
5) Conclusion
   a) What else could you have done?
   b) What should you perhaps not have done?
6) Action Plan
   a) Next time, what would you do differently?
   b) How will you adapt your practice in the light of this new understanding?

APPENDIX - I

Ph.D COURSE WORK CERTIFICATE

Tilak Maharashtra Vidyapeeth, Pune

(Declared under section 3 of UGC Act 1956 vide notification no.F-9-19/85-U-3
dated 24th April 1987 by the Government of India)

Certificate

(Issued as per UGC Regulations 2009)

This is to certify that ***Ms. Nilima Jitendra Pandit*** *has successfully completed the Ph.D. Course Work in* ***the Department of Nursing*** *in the academic year* ***2011-2012****.*

She has successfully cleared the Semester-end-Examination and now can register for Ph.D. course.

Tilak Maharashtra Vidyapeeth Pune India 1921

Head
Ph.D. Section

*Date :*30/4/2012