CHAPTER - I
INTRODUCTION

“We make a living by what we get but, we make a life by what we give”
-Winston Churchill

1.1. BACK GROUND OF THE STUDY

The ever expected happiest moment in every mother’s life is “childbirth” and the mother enjoys presence of “healthy newborn”. the ultimate goal of safe motherhood is healthy mother and healthy newborn, both the mother and child sector considered to be the crucial and vulnerable population to health problems, mothers health affects the child since child is dependent on mother, therefore there lies a great responsibility to all health professionals to protect and promote women and child health and prevent them from all potential health problems. Puerperium is the period following the body tissues especially the pelvic organ revert back approximately to pre-pregnant state both anatomically and physiologically by within six weeks (DC. Dutta 2016). Puerperium period is hard, irritable and stress full period where the mother needs to be cared well to protect her from immediate health problems, Though physiological changes in puerperium occurs naturally there are several nursing problems faced by the postnatal mothers in their crucial puerperal period, both mother and child are in risky and are vulnerable to postnatal complications, also the health care providers like nurses, physicians and other paramedical workers are burdened with stress at work place (Parul Sharma 2014), basically the problems arise from the administration side in any hospital setting where nursing problems should be identified, there is a need for regular evaluation of every protocol of nursing care since implementation of comprehensive nursing care requires adequate manpower, finance and adequate resources to manage the entire mother’s need; since a quality care is expected by every mother and even rights of every postnatal mother too, therefore providing optimum work environment became essential component of health care system (Suresh K. Sharma 2013)

The postpartum period, defined by the World Health Organization as the period from childbirth to the 42nd day following delivery WHO (2005), it is a critical period for both mothers and newborns. About 529,000 maternal deaths occur worldwide each year because of pregnancy-related complications in the antenatal, intrapartum, and postpartum periods, especially in resource-limited settings WHO (2005). These deaths are often
sudden and unpredictable, with 11% to 17% occurring during childbirth itself and 50% to 71% occurring during the postpartum period (WHO 2005).

World health organization had published guidelines (2013) of postnatal care every five years after thorough survey of health status of mother and child, Adapting the guidelines in the health institutions will not only improve the postnatal care but also reduces the incidence of mortality and morbidity rates in mother and child. The recommendations by WHO(2013) are after an uncomplicated vaginal birth in a health facility, healthy mothers and New born should receive care in the facility for at least 24 hours after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48–72 hours), between days 7–14 after birth, and six weeks after birth.

As per WHO guidelines (2013) First 24 hours after birth all mothers should have regular assessment of vaginal bleeding, uterine Contraction, fundal height, temperature and heart rate routinely during the first 24 hours starting from the first hour after birth. Blood pressure should be measured shortly after birth. If normal, the second blood pressure measurement should be taken within six hours. Urine void should be documented within six hours. Beyond 24 hours after birth at each subsequent postnatal contact, enquiries should continue to be made about general well-being and assessments made regarding Micturition and urinary incontinence, bowel function, healing of perineal wound, if any headache, fatigue, back pain, perineal pain, breast pain, perineal hygiene, uterine tenderness and lochia. Breastfeeding progress should be assessed at each postnatal contact. At each postnatal contact, mother should be asked about their emotional wellbeing, family and social support that they receive as usual coping strategies for dealing with day-to-day matters. All mothers and their families/partners should be encouraged to express their health care professional about any changes in mood, emotional state and behavior that are outside of the mother’s normal pattern. At 10–14 days after birth, all mothers should be asked about resolution of mild, transitory postpartum depression “maternal blues”. If symptoms are not resolved, the mother’s psychological well-being should be assessed for early signs of postnatal depression, and if symptoms persist, a detailed evaluation to be done to treat the postnatal mother. Mother’s should be observed for any risks, signs and symptoms of domestic abuse should be
informed whom to contact for advice and management, asked about resumption of sexual intercourse and possible Dyspareunia as part of an assessment of overall well-being two to six weeks after birth. If there are any issues of concern at any postnatal contact, the woman should be managed and/or referred according to other specific WHO guidelines (2013).

Other important recommendations are Home visits in the first week after births to care the mother and newborn, in each postnatal care contact the newborn should be referred for further evaluation if any signs of poor sucking, history of convulsions, fast breathing rate more than 60 per minute, severe chest in-drawing, no spontaneous movement, fever with temperature above 37.5 °C, low body temperature less than 35.5 °C, any jaundice in first 24 hours of life, or yellow palms and soles, family should be encouraged to seek health care early if they identify any of the danger signs in-between postnatal care visits all babies should be exclusively breastfed from birth until 6 months of age. Mothers should be counseled and provided support for exclusive breastfeeding at each postnatal contact. Daily chlorhexidine 7.1% solution or gel, application to the umbilical cord stump during the first week of life is recommended for newborns that are born at home. Bathing should be delayed until 24 hours after birth. Appropriate clothing of the baby for ambient temperature is recommended. The mother and baby should not be separated and should stay in the same room 24 hours a day. Communication and play with the newborn should be encouraged. Immunization should be promoted as per existing WHO guidelines (2013). Preterm and low-birth-weight babies should be identified immediately after birth and should be provided special care as per existing WHO guidelines (2013).

In this study investigator has adapted the WHO guidelines (2013) and modified it as teaching module taken only slice of perinatal care that is comprehensive postnatal nursing strategies under expert guidance, this CPNS module is taken as training and reinforcement tool to educate the nurses to follow the strategies of CPNS and assess the outcome of postnatal nursing problems since all postnatal mothers are vulnerable to common postpartum illness that increases the chance to postpartum mortality and morbidity rate, this study had the aim to elicit three important outcomes postnatal nursing problems such as physical, functional and psychological nursing problems leading to physical, functional and psychological wellbeing respectively in postnatal mother,
important components or strategies of CPNS are, to promote physical wellbeing that strategies that reduces postnatal physical nursing problems includes encourage and assist the mother in early ambulation after adequate rest will reduce leg pain and prevent thrombosis.

(Ms. Rajdawinder Kaur 2017), meet the hygienic needs such as skin care, perineal care, breast and nipple care will allow the nurse and mother to check for any problems such as breast engorgement, breast, nipple infections, perineal infections (Rinku Mathew 2013), meet Nutritional needs of postnatal mother and newborn in lactation period by assisting the postnatal mother to take up balanced diet (Angel Rajakumari 2015), assist to breastfeed the newborn, meet the elimination needs such as bowel and bladder to prevent urinary incontinence, retention of bladder, constipation, prevent rectal bleeding, prevent minor illness in postnatal mother such as Headache, fatigue, back pain, perineal pain, breast pain, uterine tenderness and abnormal excessive bleeding (Tawheda Mohamed Khalefa 2016).

In this study of CPNS strategies that promote functional wellbeing, and to reduce postnatal functional nursing problems by early detection of variations in postnatal vital index of temperature—hyperthermia and hypothermia, pulse-tachycardia and bradycardia, respiration-tachypnea and bradypnea, blood pressure-hypertension and hypotension, check of lochia flow and regular check of fundal height of postnatal mother were assessed regularly which will allow the nurse to enable implement the primary prevention of postnatal illness and prevent potential complications (Suplee Patricia D 2012).

In this CPNS strategy to promote psychological wellbeing and to reduce postnatal psychological nursing problems, mental status assessment, guidance and counseling provided to postnatal mothers by the nurses in the to detect early postpartum blues, anxiety and potential postnatal depression in mothers in postnatal period (Lydia Kanise 2013).

Majority of postnatal mothers have the knowledge deficit about self-care and newborn care especially breastfeeding of newborn therefore Health education and discharge instruction is important because imparting knowledge will make difference in postnatal mothers perception and it improves adherence and coping level towards self-care and newborn care, Poreddivijayalakshmi et al (2015) conducted study on knowledge,
attitudes, and breast feeding practices among postnatal mothers, revealed that majority 88.5% of the mothers faced the nursing problems of lack of knowledge of breast feeding, mother with better the knowledge had more positive attitude than non-breastfeed mothers hence it is important that nurses should spare time to provide prenatal education to mothers and fathers on breast-feeding.

All postnatal mothers should be given information about the physiological process of recovery after birth, and postnatal health problems that are common, with advice to report any health concerns to health care personnel, in particular, signs and symptoms of sudden and profuse blood loss or persistent increased blood loss, faintness, dizziness, palpitations, tachycardia. Signs and symptoms of pre-eclampsia or eclampsia such as headaches accompanied by one or more of the symptoms of visual disturbances, nausea, vomiting, epigastric or hypochondriac pain, feeling faint, convulsions during first few days after birth. Signs and symptoms of infection are fever, shivering, and abdominal pain with offensive vaginal loss. Signs and symptoms of thromboembolism are unilateral calf pain, redness or swelling of calves, shortness of breath or chest pain. Postnatal mother should be counseled on nutrition, hygiene, especially hand washing, on birth spacing and family planning (WHO Guidelines 2013).

All postnatal mothers should be encouraged to mobilize (Harmanjyot Kaur 2015) as soon as appropriate following the birth, encouraged to take gentle exercise and make time to rest during the postnatal period, Iron and folic acid supplementation should be provided for at least three months, The use of antibiotics among women with a vaginal delivery and a third or fourth degree perineal tear is recommended for prevention of wound complications. Psychosocial support by a trained person is recommended for the prevention of postpartum depression among women at high risk of developing this condition. The Guidelines Development Group of WHO (2013) reported there is insufficient evidence to recommend the routine distribution of, and discussion about, printed educational material for prevention of postpartum depression. Health professionals should provide an opportunity for mothers to discuss their birth experience during their hospital stay. Therefore investigator has taken up the slice of responsibility to prove that it is important to evaluate the existing nursing care implemented and what are the existing actual nursing problems in the postnatal mother thereby reinforcement of implementation of CPNS will definitely bring down the potential postnatal illness in mother.
There is a need arise in south India especially in Karnataka where maternal morbidity rate is slightly higher 144 per one lakh live birth (WHO, 2013). Maternal outcomes of postnatal nursing health problems commonly observed in the postpartum period are postpartum hemorrhage, fever, abdominal and back pain, abnormal discharge, puerperal genital infection, thromboembolism, and urinary tract complications (Bashour 2008), as well as psychological and mental health problems such as postnatal depression that could be prevented by early detection and systematic observation and individualized nursing care also with regular postnatal follow up.

Every year approximately 3.7 million babies die in the first four weeks of life. Most of these infants are born in developing countries and most die at home. Nearly 40% of all deaths of children younger than five years old occur within the first 28 days of life. Three causes of infections namely, asphyxia, and preterm birth-account for nearly 80% of these deaths, therefore Millennium Development Goals were aimed to reduce the MMR and IMR by 2017, therefore detailed research is needed in the area of postnatal care to evaluate the present status of health of mother and newborn (Bashour 2008).

Ministry of health and family welfare Government of India (2013) have published and reported strategic approach on reproductive maternal newborn and adolescent health in India. Globally 287,000 maternal deaths have occurred in the year 2010, MMR was 210 per 100,000 live births, sub-Saharan Africa 56% and southern Asia 29% accounted for 85% of maternal deaths in 2010, and at country level India accounted for 19% (56000 in numbers) of all global maternal deaths. Recommendations given by WHO on postnatal care has to be followed in every health settings on postnatal care, since as per the Latest Sample Registration report (2010) about MMR given by Registrar-General of India on MMR in Kerala 66, Tamilnadu 90 Maharashtra 87, Andhra 110 and Karnataka 144 found to decline in south India in comparing north India. On comparing all states in south, Karnataka state needs more attention than other states. There is need for further research to screen the implementation of nursing care at all levels, therefore the researcher was interested to investigate the present scenario of postnatal health and elicit postnatal nursing problems after implementing the CPNS and to prove after implementation of CPNS whether postnatal nursing problems are reduced and compare it with routine postnatal care with aim to implement the recommendations given by world health organization on comprehensive postnatal care in different hospitals settings at Bengaluru,
Karnataka, thereby good postnatal outcome evaluated as reduction in postnatal physical, functional, psychological nursing problems leading to physical wellbeing, functional wellbeing and psychological wellbeing of postnatal mother respectively.

1.2. SIGNIFICANCE AND NEED OF THE STUDY:

The mothers and the children comprises of 62% population in India. They are specially risk groups, maternal mortality is one of most sensitive indices of health care delivery system. Although safe motherhood is dictum of today, high maternal mortality rate in India sadly reflects poor hospital status and the nursing system. According to the Latest Sample Registration Report about MMR given by Registrar –General of India for Karnataka that MMR was 178 (2007-2009) per 100,000 live births, declined to 144 (2010-2012) per 100000 live births a decline of 34% percentage. Though all effort were made to integrate the central health programs to promote maternal and newborn health such as JananiSurakshaYojana to improve the institutional deliveries, Madilu, PrasutiAraike, mother and child health wings and 108 ArokyaKavacha with an aim to achieve the millennium development goals, yet Karnataka state stands slightly highest in MMR therefore there is a definite need to investigate this area of lacuna to achieve the MDG by 2020.

On comparing other states in south India, other states have reached the goal of reducing the maternal mortality rate, Karnataka state is slightly lagging in reducing maternal mortality rate since Millennium Development Goals of maternal mortality rate of 100 per 100000 live birth by the year 2015 whereas MMR is 144 per 100000 live birth in Karnataka, since 78,000 mothers die every year due to Pregnancy related cause in puerperal period due to the deliveries conducted by the staff other than nurse, lack of adequate facilities to provide emergency obstetric care, inadequate staffs to give the individualized care contribute to high MMR in most of the states in India. The investigator had the interest to take up the slice of the maternal child care that is postnatal care alone to check the nursing problems in receiving the postnatal care in hospital setting based on the concepts framed and recommended by world health organization in postnatal health care guide 2013 and USAID (2014) maternal health vision for action evidence.

Many work related problems are faced by the nurses to provide quality care, Meenakshi et al (2012) conducted the study on work related nursing problems among the
nursing staff; the study setting was undertaken at the Government General Hospital Gulbarga. Main objective of the study were to know the socio demographic characteristics of staff nurses, to know the reasons for accepting the job among staff nursing profession and to identify the nursing problems faced by the staff nurses and report the government to rectify their nursing problems. Findings of the study revealed that 70% reported that staff nurses accepted job to support their families in spite of bad working conditions and lack of resource, therefore it is important to support the nurses at bedside to provide a resourceful environment so that there is reduction in occupational stress and nurses get hustle free environment to provide optimum nursing care.

Strategic approaches published by ministry of health and family welfare (2014) is about introduction of a strategic approach on reproductive, maternal, newborn and adolescent health, where these strategies are framed from the recommendations given by WHO maternal health guidelines as per Indian setup to adapt in all health settings. The investigator has taken up recommendations to evaluate its implementation in the hospital settings to elicit the extent of postnatal nursing problems after implementing these comprehensive postnatal nursing care strategies (CPNS) in selected hospital settings located in Bengaluru, Karnataka. Through this approach the investigator will be able to elicit postnatal nursing problems of postnatal care, and solve these problems by reinforcement of comprehensive postnatal care. These postnatal strategies include provision of rest and early ambulation of mother, meet their hygienic needs in order to protect them from infection in breast, nipple and perineal wound and to have sense of wellbeing, check the postnatal vital index like vital signs, measure fundal height and check lochia flow regularly, meet the Nutritional needs, meet the elimination needs, provide complete newborn care, treat and manage minor illness in mother and newborn and do early discharge, provide psychological support, health education on important aspects of postnatal care like breast feeding breast and nipple care, newborn care, family planning, identify the danger signs in postnatal period, and in newborn, immunization and follow up care, provide discharge instruction and the most important is to provide psychological counseling to the postnatal mothers who are more vulnerable to postnatal depression (Bobbie Posmontier 2008).

The investigator has planned to implement these strategies by the following steps: Reinforcement about these strategies to nurse are done by investigator in their continuing
nursing education programme, postnatal Nursing Problems are elicited as Comprehensive Postnatal Nursing Strategies are implemented with postnatal mother and by the nurses, Present interventions are assessed in the postnatal ward on 5th day, to assess to what extent the CPNS can be implemented and care received by the postnatal mother also analyzed also Postnatal mother’s satisfaction in implementation of CPNS in receiving postnatal care is assessed.

The investigator will be able evaluate quality care provided in hospitals with an aim to improve the maternal health care services, especially when the complications arises that leads to preventable maternal death(Rudman 2007). Juliana Santana (2014) conducted study on Quality of nursing care and satisfaction of patients attended at a teaching hospital, The main aim of the study was to assess the quality of nursing care, the patients' satisfaction indirectly reflecting less number of nursing problems in implementing the postnatal care, the study concluded that the patients' satisfaction level with the nursing care received was high. These results indicate that the institution needs to center its objectives on a continuing evaluation system of the care quality, aiming to attend to the patients' expectations.

Regular Evaluation of Implementation of postnatal nursing procedure and protocols will reduce the potential postnatal illness, therefore reinforcement and training of comprehensive postnatal nursing care strategies are essential to prevent the postnatal complications and postnatal nursing problems, similarly Charlotte warren (2009) conducted study to assess changes in the quality of care following the introduction of a new postnatal package. The Intervention were Introduction of comprehensive postnatal package of care, with three targeted assessments within 48 hrs of birth,1–2 weeks and 6 weeks, to providers working in maternity and maternal and child health clinics. The Main outcome of the study is to measure to improve quality of postnatal counseling. The Results of the study showed Increased mean scores for counseling on danger signs in the newborn (0.24– 1.39) and infant feeding (1.33 –2.19) were noted. The total quality of care index for the newborn increased overall but remained lower than desired (from 3.37 to6.45 out of 11). Essential maternal care index improved (3.4–8.72 out of 23). More women accepted a family planning method at 6 weeks (35– 63%).the study concluded that the introduction of new comprehensive postnatal care package improved performance
of providers in counseling in maternal and newborn complications, infant feeding and family planning.

Increased occupational stress- found among Nurses in aspects of heavy workload, shortages in qualified staff, supplies, security, working at Government Hospitals, Bengaluru.(Lucia D’ Ambruosa, Ghana-2005). Majority of postnatal mothers expressed no satisfaction in quality care in government hospital Dakshina Kannada district, Mangalore (Jipi Varghese-2012). Acute shortages of qualified staff in government maternal health centers, their practice were restricted and risky (Bharati sharma-2012). In this research study the investigator is interested to study to elicit the problems after implementation of comprehensive postnatal nursing strategies to the postnatal mothers by nurses in selected hospital settings at Bengaluru, Karnataka.

Lydia Kanise Chimtembo (2013), conducted study to assess quality of postnatal care that midwives provide to women seeking comprehensive postnatal services in health facilities in Dedza district, the central region of Malawi. The study design was descriptive cross sectional and utilized quantitative data collection and analysis method to determine structural, process and outcome components of postnatal care in two facilities that offer emergency obstetric and neonatal care and five that offer basic emergency obstetric and neonatal care. All 60 midwives who were providing postnatal care during the time of study in the district were interviewed using a structured questionnaire. In addition, the midwives actual practice was observed and compared to a standard checklist on postnatal care practice which was developed by the Malawi Ministry of Health. Data were analyzed using SPSS version 16.0. Results show that structure for providing postnatal counseling services was inappropriate and inadequate. Furthermore, the contents of postnatal services were below reproductive health standards because the clients were neither monitored nor examined physically on discharge. On average, all the seven facilities scored 48% on postnatal services rendered which is far below the recommended 80% according to the Reproductive Health Standards. There is a need to provide basic infrastructure in all the basic emergency obstetric and neonatal care facilities. In addition, refresher training courses for midwives in maternal and neonatal health with emphasis on postnatal care are recommended. There is also a need to restructure the maternal and neonatal health departments in the facilities so that the postnatal care units become standalone priority sites to improve the quality of the postnatal care services rendered.
Barbara et al 2012 conducted study to improve the Quality and Efficiency of Postpartum Hospital Education, the purpose of this study was to investigate the implementation of an evidence-based, streamlined, education process comprehensive education booklet, individualized education plan, and integration of education into the clinical pathway and nurse education to improve the quality and efficiency of postpartum education during hospitalization. A one-group pretest–posttest design was used to measure the quality of discharge teaching for new mothers and efficiency of the education process for registered nurses before and after implementation of an intervention. Results indicated that a comprehensive educational booklet and enhanced documentation can improve efficiency in the patient education process for nurses.

Sandhya Timilsina et al (2015) conducted a study on Knowledge of Postnatal Care among Postnatal Mothers since Mothers and newborns are vulnerable to illness and deaths during the postnatal period. Postnatal period is the important part of maternal health care as the serious and life threatening complications can occur in postnatal period. The health of the mother is regarded as the indicator of health of the society so postnatal care is important for the health of mother and newborn as well. A descriptive research design was used in this study. Non probability purposive sampling technique was used to select the postnatal mothers. One hundred ninety six postnatal mothers were interviewed face to face using structured questionnaires. Most of the respondents 79(40.31%) belongs to 22-25 age groups and the mean age was 24.12 years. Majority of the respondents 182(92.86%) were Hindu. All the respondents were literate. Out of 196, 146(74.48%) of the respondents, got information from friends and family. Most of the respondents 123(62.76%) had average level of knowledge on postnatal care. Highest knowledge was in the area of danger sign of mothers and newborn and the lowest in the areas of family planning. The overall mean percentage was 64.34. There was significant association of level of knowledge with selected demographic variables; occupation (χ² =5.008) and education level (χ² =48.75). Mothers had moderate level of knowledge about postnatal care. Highest knowledge was present in danger sign and lowest in family planning. Awareness program is required to improve maternal knowledge on postnatal care.

With a view to recommend the state government and related health agency to implement the comprehensive postnatal nursing strategies in all the hospitals which make
the nurses to overcome from postnatal nursing problems and to provide complete care, where both mother with newborn as well as nurses have the satisfaction in providing care, ultimately good quality care reduces the incidence of MMR, the aim of this study is to bring to the light about these postnatal nursing problems so that in future all the postnatal mothers have reduced postnatal physical, functional and psychological nursing problems leading to increased satisfaction of nursing care and promotes the outcomes of physical, functional and psychological wellbeing in the mothers respectively.

1.3. STATEMENT OF PROBLEM:
“A study to elicit the outcome of postnatal nursing problems after implementation of comprehensive postnatal nursing strategies by the nurses among postnatal mothers in the selected hospitals at Bengaluru, Karnataka”,

1.4. OBJECTIVES OF THE STUDY:
Objectives of the study were:
1. To determine the outcome of Postnatal Nursing Problems in postnatal mothers after implementation of CPNS by the nurses in the study group and control group
2. To compare satisfaction level after implementation of CPNS among the postnatal mothers in control and study group.
3. To compare the outcome of Postnatal Nursing Problems and satisfaction level after implementation of CPNS among the postnatal mothers in control and study group.
4. To find out the correlation with outcome of postnatal nursing problems and satisfaction level among the postnatal mothers in study group who received CPNS in study group.
5. To find the association of selected demographic variables of postnatal mothers and the outcome of Postnatal Nursing Problems in the study and control group
6. To find the association of satisfaction level and selected demographic variables of postnatal mothers after implementation of CPNS by nurses in the study and control group

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1.5. OPERATIONAL DEFINITIONS:

1. **Elicit:** it is the response generated by postnatal mothers after implementation of routine nursing care and CPNS in control and study group respectively.

2. **Outcome:** It is assessed as physical wellbeing, functional and psychological wellbeing of the postnatal mother after the implementation of CPNS in study group.

   **a. Physical wellbeing:** it is assessed as absence of common physical postnatal illness such as pain the lower legs due to lack of early ambulation, absence of breast and nipple problems, perineal care problems, problems in meeting Nutritional needs, problems in meeting elimination needs, absence of minor illness in the mother

   **b. Functional wellbeing:** It represents the normal values of vital signs of postnatal mother that is assessed as the postnatal vital index by the nurses such as checking body temperature, pulse, respiration, blood pressure also assessment of fundal height and lochia flow of postnatal mother.

   **c. Psychological wellbeing:** It is represents absence or decrease in psychological problems in postnatal mother such as fear, anxiety and mood swings, and depression.

3. **Comprehensive Postnatal Nursing Strategies (CPNS):** It is a training module that has the complete modified WHO Guidelines of postnatal nursing care strategies to Implement better quality postnatal nursing care that includes ten important postnatal components such as providing rest and early ambulation, meet the hygienic needs, check the postnatal vital index like vital signs, fundal height, lochia ,meet the Nutritional needs, meet elimination needs meet newborn care, treat and manage minor illness in mothers, treat and manage minor illness in newborn, provide psychological support, health education and discharge instruction provided for 5 days of postnatal care in selected hospitals Bengaluru.

4. **Postnatal mother:** mothers who have delivered normally and admitted in the postnatal ward.

5. **Nurse:** Nurse who are registered in respective nursing council as General Nurse Midwife, Bachelors in Nursing and Post Basic B.Sc Nursing
6. **Selected Hospitals:** It represents setting of study included in study group and control group are chosen from available BBMP hospitals serving care for maternal health located in Bengaluru, Karnataka.

7. **Postnatal nursing problems:** It represents actual common postnatal illness or actual and potential nursing problems present in Puerperal period classified as

   a. **physical problems** pain the lower legs, breast and nipple illness, delay in wound healing of episiotomy with infected perineal wound, problems in meeting nutritional needs has vomiting, diarrhea, constipation, problems in meeting elimination needs such as distended bladder, incontinence painful urination, bleeding via anus, presence of minor illness in the mother such as hot red painful leg, breast and nipple infection, perineal infections, bladder and bowel illness, hyperpyrexia, fowl smelling vaginal discharge with large blood clots in 4hrs, severe pain in episiotomy sutured area, severe headache with blurred vision,

   b. **Functional problems:** it represents deviations in the values of normal postnatal vital index reported to postnatal mother such as in body temperature showing hyperpyrexia or hypothermia, in pulse tachycardia or bradycardia, in respiration tachypnea or bradypnea, in blood pressure hypertension or hypotension, also assessment of fundal height of postnatal mother showing sub-involution of the uterus and the lochia flow

   c. **Psychological problems:** it represents presence of psychological illness reported in the postnatal mother such as postpartum anxiety, mood swings and early signs of depression.

1.5.1 **Demographic variables:**

   **Nurse:**

   1.5.1.1. **Age:** the chronological age as reported by the nurse. For the purpose of the study the age was classified as (a)26-30 years, (b) 31-35 years and (c)41-45 years.

   1.5.1.2. **Course:** the professional education completed and informed by the nurse, For the purpose of the study the course was classified as (a)GNM(b) B.Sc.Nursing and (c)Post Basic B.Sc nursing
1.5.1.3. **Type of Family:** the type of family where nurse belong to reported by the nurse. For the purpose of the study the type of family was classified as (a) Nuclear (b) Joint and (c) Extended family

1.5.1.4. **Monthly Income:** monthly income obtained and informed by the nurse. For the purpose of the study the monthly income was classified as (a) 6000-10000 rupees, (b) 10001-15000 rupees and (c) 15001 rupees and above

1.5.1.5. **Designation:** the designation held in the hospital as reported by the nurse. For the purpose of the study the designation was classified as (a) nurse – junior and (b) nurse-senior

1.5.1.6. **Professional Experience:** the professional experience in the postnatal ward as reported by the nurse. For the purpose of the study professional experience is classified as (a) 2-5 years, (b) 6-10 years and (c) 10 years and above

1.5.2. **Postnatal Mother:**

1.5.2.1. **Age:** the chronological age as reported by the mother. For the purpose of the study the age was classified as (a) 24-28 years, (b) 29-33 years and (c) 34-38 years.

1.5.2.2. **Education:** the education acquired by the mother. For the purpose of the study the education was classified as a) Primary school, b) Higher secondary c) PUC d) Graduate and above.

1.5.2.3. **Gravida:** the pregnancy status reported by mother. For the purpose of the study the Gravida was classified as (a) Primi Gravida (b) Multi Gravida (c) grand multi.

1.5.2.4. **Care Taker:** the caretaker present along with mother as reported by the mother. For the purpose of the study the caretaker was classified as a) Parents b) Mother-in-law c) Relatives and d) Friends

1.5.2.5. **Information about Postnatal Care:** the different modes where the mother gets prior knowledge about postnatal care. For the purpose of the study the information about postnatal care was classified as a) Parents b) Relatives c) Friends and d) Media

1.5.2.6. **Co-Morbidity:** the co-morbidity is the medical and pregnancy induced illness present and reported by the mother. For the purpose of the study the co-morbidity classified as a) Gestational diabetes mellitus, b) Pregnancy induced hypertension c) Anemia and d) Normal pregnancy – no co morbidity
1.6. **HYPOTHESIS**

**Hypothesis 1: H_1**
There will be significant difference in the outcome of postnatal nursing problems after implementation of CPNS by nurses in study group than the routine postnatal nursing care in control group.

**Hypothesis 2: H_2**
There will be significant difference in the satisfaction of CPNS Implementation by nurses among postnatal mother in study group than the postnatal mother who availed routine postnatal nursing care in control group.

**Hypothesis 3: H_3**
There will be significant difference between the outcome of postnatal nursing problems and satisfaction level among postnatal mothers after implementation of CPNS in study group

**Hypothesis 4: H_4**
There will be significant correlation between the outcome of postnatal nursing problems and satisfaction level among postnatal mothers after implementation of CPNS in study group

**Hypothesis 5: H_5**
There will be association with selected demographic variables of postnatal mothers and the outcome of postnatal nursing problems in study and control group.

**Hypothesis 6: H_6**
There will be association with satisfaction level of CPNS implementation among postnatal mothers with their selected demographic variables in study and control group.

1.7. **ASSUMPTIONS:**

1. Systematic implementation of nursing care prevents actual and potential illness.
2. Implementation of Comprehensive postnatal nursing strategies will reduce postnatal nursing problems.
3. Comprehensive postnatal nursing strategies provide quality postnatal care.