EVIDENCED BASED PRACTICE IN THE FIELD OF COMMUNITY HEALTH NURSING

Abstract

Now, in this era, the clinical practice is based on evidence. Evidence based practice is important because it aims to provide effective care which indirectly improving the patient's outcomes. This paper explores about the evidence-based care providing to the patient at community level. The community health nurse now expected to apply most recent and pertinent research regarding client's care. This chapter explores about evidence-based practice in community label, it's critical thinking, some crucial phases, it's challenges in practice, accessing robust evidence in in practical field, what constitutes good evidence and its approaches such as nurse-family partnership (NFP) programme. The NFP describes it's goal, evidences of it's effectiveness and some studies based upon this. Evidence based practice provides a framework which based upon patient's choices and wishes. Community health nurse nurses practise can create therapeutic relationship. When a patient receives care from nurses that is based on evidenced, safe, transparent and routinely assessed in collaboration with the patient, the treatment is more likely to be effective.

Key word: Evidence-based, care, community health nurse, nurse-family relationship

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I. INTRODUCTION

For the new students in the community health nursing, having many questions in their minds such as, “can they really do something to make a difference in the lives of clients”? Students may often feel shocked and discouraged by the crushing poverty and overwhelming sense of helplessness many of client’s experience, and by the continual recurrence of substance abuse, domestic violence, job failure, and criminal activity. For the first time, community health nurse students may truly confront the inequalities and injustices of our health care system. Student will face many ethical dilemmas in community health nursing. student may ask, “Why should community health nurse students bother to make home visits to pregnant teens? Why should student offer smoking cessation classes at the local homeless shelter? Why should student teach clients about the importance of taking their antituberculosis medications? Will it really matter?’’

This paper gives an information about the evidenced-based care for clients at community level. The community health nurse is expected to apply the most recent and pertinent research regarding patient care. The outcomes of patients are being improved by scientifically sound and well-thought-out decisions, which also lower the risks of interventions that unintentionally hurt patients while raising standards and promoting consistency of care. The nursing profession has moved away from providing ritualistic and ineffective practise thanks in large part to the implementation of evidence-based practise. This chapter explains about the current research as it relates to and impacts community health nursing practice. The steps of the research process are identified and discussed, and evidence-based practice (EBP) is emphasized. This chapter provides information about the construction of clinical questions and incorporating client considerations and clinical guidelines, and helpful resources for analysis and finding of research studies.

II. EVIDENCED BASED PRACTICE

A British epidemiologist, Dr. Archie Cochrane, was regarded as the force behind evidenced based clinical practices in Medicines. Now a days, there is ample evidence of the need for a shift to evidence-based practice (EVP) in health care system. The different institute of medicine has been studying the issues of health care qualities and effectiveness over the past decade and has called for wide spread and systematic changes through their reports. A new health care system for the twenty-first century is mentioned in Building a Safer Health System (2000), Priority Areas for National Action, and Transforming Health Care Quality. These facts highlight the reality that, "billions in research to find appropriate treatment," and more than a trillion dollars are spent on health care each year, yet that knowledge and capability are repeatedly not translated into the clinical area. In response, the Canadian and American governments established EBP centres under the federal Agency for Healthcare Research and Quality (AHRQ). Nursing schools like Arizona State University, University of Texas Health Science Center at San Antonio, Case Western Reserve, and University of Rochester have also built centres for EBP. According to Melnynk and Fineout-Overholt (2005), said that EVP in nursing means just that-using evidenced along with judgement and patient’s wishes, in making decisions about how to care for patients.

Porter O'Grady (2006), for instance, discovers similarities between EBP and critical thinking

- Looking into an issue
- Talking about a reason or objective
- Making assumptions about the issue based on an analysis of the issue and its components
- Defining the issue in terms of key ideas or metrics
- Accessing information, sources, data, and proof to clarify the issue
- Accessing information, sources, statistics, and other materials to help illustrate the issue
- Utilising analysis, interpretation, definition, planning, and documentation to direct subsequent responses to the problem
- Addressing the issue while adhering to norms and guidelines and "assessing process, impact, and result"
- assessing, modifying, extrapolating, and applying to
- a larger problem set (representing a successful
- (Process of solving problems)

Five crucial phases are followed by evidence-based practise

- Recognising the need for new data to address a specific clinical query.
- Choosing an appropriate set of evidence to address this issue.
- Evaluating this data critically for validity, dependability, and clinical applicability.
- Combining patient preferences with the greatest and most pertinent data to inform treatment decision-making.
- Evaluate the success of the intervention and give it some thought. As a result of the evaluation of the intervention, fresh questions are typically developed and the process is reopened. Throughout nursing school, these analytical abilities are regularly emphasised, and they support ongoing professional development.

1. **The challenges in practice:** Clinical judgments made in community practise are not always supported by the most recent, reliable research. Application of evidence-based practise is hampered by a perception of not having enough time to gather information and a lack of training and experience in this area (Hanafin et al, 2014, Thompson et al, 2005). 82 primary care nurses who took part in the study said they used 67 different sources of information to help them make clinical decisions (Thompson et al, 2005). However, only 23% of the participants' consultations were followed by observations of them looking for information. When this occurred, talking to others involved almost always asking for guidance.

   Having limited real-time access to evidence resources can be a major barrier to providing evidence-based care for community nurses who work alone and are obliged to make clinical decisions with patients in their homes. It is quite quick to call competent peers or hunt for readily available local guidance. On the other hand, these methods limit our understanding of what constitutes strong evidence to particular viewpoints and may reject more recent discoveries. The "Royal Marsden Hospital Manual of Clinical Nursing Procedures" is one source that is frequently cited in clinical practise. This provides readers with information that is clear and easy to understand. When determining the best practises

for patients managing various ailments at home, it is not always the best source of evidence because it has a hospital-based cancer care focus.

2. **Accessing Robust Evidence:** Community nurses require solutions for rational patient care choices. Knowing where to find a wide variety of community nursing resources is essential in this process. Available resources include printed journals, books, online databases, and evidence reviews, among many more types. In truth, the breadth and variety of the evidence can be perplexing in and of itself. When assembling comprehensive evidence, start with easily accessible and frequently updated online resources like NICE Clinical Knowledge Summaries, NICE Pathways, and Bandolier evidence evaluations. The University of York Centre for Reviews and Dissemination database and the Cochrane database both offer systematic reviews of important topics based on evidence. Peer-reviewed publications that are well-written and informative can be a useful tool for spotting contemporary issues and highlighting the key works in the field. Start with easily accessible and regularly updated online resources like NICE Clinical Knowledge Summaries, NICE Pathways, and Bandolier evidence evaluations when gathering complete evidence. These can be viewed online through platforms like RCN membership library services or Open Athens. Google Scholar can also be used as a database. However, it is not advised to do a literature search on Google Scholar alone because the results and article access would be limited. NHS librarians in our area are competent about conducting literature searches and can provide advice. NHS libraries also frequently offer a literature search service and will supply copies of papers that are hard to find. For busy practitioners, this greatly increases the time efficiency of the literature search process.

3. **What constitutes good evidence?**

Numerous organisations, including the National Institute for Health and Care Excellence (NICE), have produced evidence-based assessments with a hierarchy that favours reliable, "objective" research. Large-scale randomised controlled trials or systematic reviews utilising meta-analysis are frequently preferred over descriptive studies or exploratory qualitative research. For a variety of reasons, there aren't many randomised controlled trials looking at patient care in their homes. It is unable to control factors in patients' homes, there is a lack of funding and interest in research, and it is preferred to study the impact of therapies in hospital settings, among other obstacles.

The evidence base that community nurses can employ is usually made up of a blend of qualitative and small-scale quantitative studies, professional opinion, and translating the results of studies carried out in hospitals. Because it minimises the significance of randomised controlled trials, using a wide variety of evidence sources has advantages for patient care (Mantzoukas, 2008). Although helpful, the results of randomised controlled studies do not easily apply themselves to the delivery of care to patients in their homes, where unpredictable psychosocial factors and "living life" can interfere. When practise relates to processes or patients views and preferences, qualitative studies offer more valuable insights. Evidence-based practise must be centred on patient choices and wishes, resources that are available, and practitioners' clinical assessments of specific situations (Jacobs et al., 2012). Here, the art and science of nursing—the ability to communicate and develop therapeutic relationships—interact significantly with one another to determine the best clinical interventions. In actual fact, there are frequently a number of caregiving

approaches, each with benefits and drawbacks. But in reality If the patient is making an informed decision and the nursing care is evidence-based, safe, transparent, and regularly reviewed with the patient's agreement, the treatment is likely to be clinically effective. As a result, team discussions on care promote ongoing experiential learning.

Today, community health nursing research validates that nursing care does matter and that really can make a difference in the lives of your clients. For example, nurse– family partnership programs

III. NURSE-FAMILY PARTNERSHIP PROGRAMME

A non-profit organisation named Nurse Family Partnership operates in the US. It is a community health effort that enhances the lives of at-risk mothers who are expecting their first child and is supported by research. It was started at the late year of1970s. NFP began as a controlled, randomised experiment. It was carried out in a low-income, mostly white neighbourhood in Elmira, New York.

1. **Goals:** NFP nurses collaborate with families and mothers to accomplish three main objectives, which include enhancing:

   - The results of pregnancy through assisting pregnant women in enhancing their prenatal health.
   - Helping parents provide high-quality care for their kids will benefit their long-term health and development.
   - Women have improved in health and independence by receiving support in identifying and accomplishing personal objectives, including the scheduling of subsequent pregnancies.

2. **Evidence of effectiveness:** The following conclusions are made in connection to intervention objectives, like

   - Improve pre-natal out comes

     - For mothers who smoke, premature births are reduced by 79%.
     - An overall 18% decrease in premature births
     - Reduced pregnancy-related hypertension by 35%

   - Improve child health and development

     - Reduced child abuse and neglect by 48%
     - 56% fewer people visiting emergency rooms due to accidents and poisonings
     - Reduction of 50% in language delays
     - Decrease of behavioural and intellectual issues by 67%
     - 59% fewer children were arrested by the time they turned 15 years old.

   - Improve family economic self-sufficiency and future planning

     - 82% more months working with patients

- In very closely spaced (>6 months) subsequent pregnancies, there was a 31% drop.
- A 72% drop in mother-related convictions

The following are the cost/benefits to the society:

Every dollar invested in NFP saves $5.70 in future costs, most notably in government spending, for the highest-risk families enrolled. For instance, there was an 8.5% cost reduction due to a decrease in medical enrolment and an increase in self-sufficiency among enrolled families.Following are some studies, which gives information about Nurse-Family Partnership programmes.

3. **Nurse family partnership (NFP) related study-1:** A programme of intensive pre-natal and post-natal home visit done by registered nurse. It is directed towards first-time mothers with limited incomes. Prenatal visits should continue through the age of two years.25-30 home visits over 17 months generally. Which based on research, conducted by Ted R Miller, in USA. The effects of NFP on their lives and the lives of their offspring are predicted in this article. The Nurse-Family Partnership (NFP) programme focuses on offering intensive prenatal and postnatal home visits by registered nurses to low-income first-time mothers. 177,517 pregnant women registered for NFP programmes through 2013. Problem incidence without intervention is frequently included in the outcome estimations. The following additional baseline values were utilised to calculate NFP savings:

- I. The percentage of single women who report smoking during the third trimester is 20.6% on average nationwide.
- Rate of repeat teen births in the country
- Pregnancy-induced hypertension (PIH) in first-time low-income babies, (22%)
- A national rate of 0.41% for new-born mortality
- Rates of child abuse in the country for low-income families
- Children aged 0 to 2 treated for injuries nationally each year (17.4%)
- Annual percentages of youth arrested nationally in 2009 (5.3%)

A semi-rural hamlet in Elmira, New York, where 300 women participated in a random control study. Approximately there was 90% women were white, 60% were un-married with the average age was 19years. This study assessed the program's effectiveness as it was put into practise by the county health department on a significant scale in a low-income neighbourhood, demonstrating the program's viability in actual implementation scenarios. This study found the followings:

- **The effects of the nurse visitation on the first-born children of the women aged 15 to 19**

  - At the age of 15, there were 48% fewer cases of child abuse and neglect that were officially recorded.
  - At age 19, there was a 43% lower chance of being arrested and a 58% lower chance of being convicted.

- 66% fewer lifetime convictions and 57% fewer lifetime arrests

- **Effects on nurse-visited women with children aged 15 years or older**

  - Over the course of 15 years, welfare use decreased by 20%.
  - less subsequent births by 19%
  - 61% decrease in self-reported arrests.
  - Self-reported convictions decreased by 72%

4. **NFP related study-2:** In Memphis, Tennessee, a randomised control experiment was conducted with a sample of 742 women. 98% of the population was single and the average age was 18, with 92% of the population being African-American. Homes with incomes at or below the poverty line accounted for 85% of the population.

   Effects on the Women Who Had Nurse Visits' First-Born Children At two years old
   There are 23% fewer medical visits for children who are injured or swallow something.
   78% fewer days spent in the hospital due to accidents or ingestion

   Effects on the First-born children of Nurse visited Women at the age 12years
   There was less likely to have used cigarettes, alcohol or marijuana

5. **NFP related study-3:** A 490-woman sample was used in a randomised controlled trial study conducted in Denver, Colorado. Most of these women had poor incomes, were Mexican Americans (46%), Whites (36%), Blacks (15%), and 84% were single with an average age of 20. This study explains the effects on child outcomes, such as behavioural and emotional outcomes, cognitive and educational outcomes. Regardless of whether or how they actually engaged in this programme, this study evaluated the outcomes for all women and kids assigned to the nurse visited group. Assessments were used to determine the behavioural, emotional, cognitive, and educational results of children. The programme was reviewed as it was widely implemented in a low-income neighbourhood, providing proof of its efficacy under actual implementation conditions.

6. **NFP Related Study-4:** The VoorZorg programme, also known as Nurse Family Partnership, is a home visitation programme that was the subject of a randomised control trial investigation by a Dutch nurse. The study is being conducted with 460 women. This study discusses the risks of following the NFP program's protocol while giving first-time mothers 40–60 home visits from a qualified, specialised nurse during pregnancy and the first two years of the child's life. This study describes the risks associated with providing first-time moms with 40–60 home visits from a trained, specialised nurse during pregnancy and the first two years of the child's life, while also adhering to the protocol for the NFP programme. In accordance with the guidelines for the NFP programme, this study highlights the dangers of making 40–60 home visits for first-time mothers throughout pregnancy and the first two years of the child's life. The main finding of this study on evaluating child maltreatment was that there was a 42% decrease in Child Protection Services over the first three years of children's lives. The secondary outcomes relating to child development and the home environment at the kid's age of two were likewise generally favourable, according to this study.

7. **Case study-5**: 645 young girls who were expecting their first child participated in a large, multisite, randomised control trial with the implementation of Nurse Family Partnership in the United Kingdom. This study found primary out-comes:

    - 56% Smoking in late pregnancy
    - 66% subsequent pregnancy within 24 months
    - Birth weight about 3200gms on average
    - 81% of children had at least one hospital admission during their first two year of life
      The maternal life course and a sizable number of secondary outcomes related to child development and health are also measured in this study.

8. **Case study-6:** Home visitation programme for families called the Nurse-Family Partnership runs from the time of conception until the child is two years old. It concentrates on first-time mothers who are on a modest income. By assisting mothers with improving their prenatal health, supporting parents with early child care, and supporting mothers with subsequent pregnancy planning, education, and work in ways that are consistent with the parent's values and aspirations, the nurse hopes to improve the outcomes of pregnancy, child health and development, and maternal life course.

9. **Model improvement Research:** In this study the following steps conducted the model improvement research:

    - The researcher starts by trying to understand programme challenges (which might entail reviewing implementation data, holding focus groups and key informant interviews with stakeholders [nurses, supervisors, clients, agency administrators], and reviewing the scientific literature to inform potential solutions) before moving on to potential solutions.
    - Formative Development of Innovations (includes synthesize of data, develop preliminary modification, align with current practice, theory and nurse education models, review with stakeholders, iterative refinement according to stakeholders' input)
    - Rigorous Testing of Innovations (for quasi-experimental experimental trails)
    - Translating Learning into NFP Practice (includes site development and support, training integration, NFP data collection considerations)
    - According to the evidence, it is better and doesn't cost more to implement. Here are some recent researches that were conducted with the goal of improving models:

    Increasing participants retention and completed home visits:Significant differences in family retention were found between sites, and nurses in US community replication sites were not as successful at keeping families together as they had been in the first trials. Researchers found that there was a significant difference in retention between locations and that nurses did not sustain families in community replication sites in the US as well as they did in the original trials. The researchers created a strategy to more explicitly control the frequency and nature of family visits. The programme guidelines, nurse education, and site consultation were subsequently changed by the researchers to encourage more adaptable collaboration between nurses and families in order to fit families' needs with regard to visit frequency, content, and location. Initially, a 16-site quasi-experimental pilot research and later a 26-site randomised trial were used to examine this adjustment.

Improving nurses observation of caregiver-child interaction and promotion of parenting*:* The researchers discovered that nurses in the community replication sites did not spend as much time as they did in the initial trials aiding parents in delivering competent care for their children during home visits. Researchers found that the original instrument nurses used to examine aspects of caregiver-child interaction was difficult to learn and that it provided insufficient clinical direction for the programme through surveys and interviews with nurses and supervisors. Research To address these issues, the Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE) observation instrument and therapeutic approaches were developed as part of Dr. Donelan McCall's study programme.

Improving nurse's resources in addressing intimate partner violence: Researchers found that the Nurse-Family Partnership's (NFP) impacts on state-verified rates of child abuse and neglect through the age of 15 years were less pronounced in families with moderate to high levels of intimate partner violence in the NFP's initial trial (IPV). Although there was some indication in the third experiment that NFP decreased IPV, this conclusion has not been supported. According to nurses in many sites, there were also no evidence-based tactics for preventing and addressing IPV, and the programme did not sufficiently assist them to tackle this issue. Dr. MacMillan and Jack developed a new intervention for NFP nurses to utilise in the setting of emerging IPV in order to be consistent with NFP's use of operating procedures and theories. The Centres for Disease Control and Prevention has funded a 15-site randomised controlled experiment to assess this programme as a result.

Improving NFP nurses resources for improving pregnancy planning*:* Despite the fact that the NFP has consistently delayed subsequent pregnancies, an outcome of significant public health. There is still room for improvement, according on the analysis of NFP nurses' records. Thanks to an innovation in the NFP programme being coordinated by Dr. Melnick, Teresa Gipson, and Marni Storey, nurses are equipped to deliver hormonal contraception to NFP mothers during home visits. If effective, the researcher will broaden the scope of nurse's responsibilities to include providing chemical contraception, which may be have difficulties in some situations. Favorable laws encourage NFP and its developments, as demonstrated by California's recent legislation allowing nurses to provide hormonal contraception.

Development of a system for classifying families risks and strength: The number of families, that NFP must supervise not more than 25 families, which was the number authorised in the initial trails. Researchers advised nurses to keep to the regular visit schedule with high-risk families and make fewer visits to individuals with less complex requirements because nurses in the first two trials showed they could not handle all of their caseloads with the required number of visits. In order to increase the effectiveness and efficiency of the programme, we are collaborating with five NFI sites to create a more exact classification system for families risks and strengths. This system will give nurses and supervisors more precise instructions on how to adjust the frequency of visits.

Improving nurses resources in addressing maternal depression and anxiety*:* Researchers realised that community nurses needed additional support in addressing parent mental health, so they developed a number of mental health screening tools for NFP nurses to utilise. Then, these instruments were evaluated in Los Angeles County and New York City. Many nurses believed that they had a better understanding of mental illnesses as a result of this training, despite the fact that they reported that there were few mental health

services available and that their patients only occasionally used them. Dr. Beeber is developing mental health instruments that are in line with the NFP paradigm and are simple for nurses to use.

Adapting the NFP to indigenous cultures and serving multifarious women*:* Alaska Natives, American Indians, and Australian Aboriginal and Torres Strait Islander populations are served by the researchers working with indigenous health services. The researchers are answering two important questions by doing this. What would be required to implement this programme to assist indigenous women who have had prior deliveries in order to satisfy the needs and ambitions of these more culturally different communities and what would be required to embrace this program's basic elements? The NFP programme materials' appearance and feel must be changed, and possible deeper modifications to the program's content and nurses' roles must also be made. These changes are necessary to foster collaborations with families and communities. Because women who have had past pregnancies and other children frequently face particular obstacles and objectives that must be addressed in the expanding NFP programme materials, the modifications necessary to assist multiparous women are considerable. The provision of services to multiparous women marks such a substantial divergence from the current NFP programme that multiparous indigenous women find it to be quite beneficial. Researchers may potentially think about using this knowledge to serve multiparous women in various cultures if servicing these groups of multiparous women appears to be successful.

IV. CONCLUSION

Evidence-based practise is a framework that incorporates patient choices and wishes, resources available, and practitioners' clinical assessments of specific situations. Here, community health nurses can practise creating therapeutic relationships and effective communication. Better clinical judgments and patient outcomes result from evidence-based health care that is delivered in a compassionate environment. Nurses and other clinicians may take control of their practises and revolutionise healthcare by developing the knowledge and skills required for the EBP process. EBP mentors, collaborations across academic and clinical settings, EBP champions, clearly articulated research, time and resources, and administrative support are essential components of a best practise culture. In actuality, there are frequently multiple approaches to carrying out every form of treatment, each having their benefits and drawbacks. When a patient receives care from nurses that is based on evidenced, safe, transparent, and routinely assessed in collaboration with the patient, the treatment is more likely to be effective. The teamwork that results from reflecting on care encourages ongoing experience learning.