

A STEP-BY-STEP STRATEGY IN IDENTIFYING AND SOLVING PROBLEMS USING PROBLEM-SOLVING APPROACH: DELAYED INITIATION OF BREASTFEEDING IN LABOUR ROOM

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Abstract

Vulnerability is a trait that even the most powerful people must deal with. In other words, vulnerability is an issue that requires a solution. Every day, people are confronted with issues. The root of these issues is the same. When a living species has a purpose but doesn't know how to achieve it, a dilemma occurs. When action alone is not enough to get from one circumstance to an intended one, one must revert to reasoning. When an issue is identified, the type of people's background knowledge about the problem has significant consequences for the solution. Difficulty-solving behaviour involves an intrinsic relationship between producing a representation and generating an alternate solution, regardless of the type of problem. Some academics, on the other hand, are more interested in aspects that influence how responders' express problems, while others look for patterns in how respondents apply operators to move from the beginning state to the goal state. The relationship between how individuals comprehend problems and how they derive problem solutions is highlighted in this study, as well as the procedures needed in using this philosophy to develop and alternate solution in the problem particular domain. The problem-solving example comes from a health-care environment in an Obstetrics and Gynaecology unit with a single current issue. We begin by providing a historical overview of problem-solving research. The research on the step-by-step process of producing solutions for problems is then presented. We discuss a variety of elements that influence problem portrayal in the third section. Fourth, we look at how producing a representation and generating a solution interact. Finally, we make some findings and discuss future research directions.

Key words: Problems, solving problem, problem solving skills, nursing, nursing care

Introduction

Enterprises and the multinational health-care sector in the world today aim to safeguard themselves from a variety of threats that could damage and harm them. Cyber security is taught in technology areas. Service quality tries to satisfy disgruntled customers and prevent bad feedback. And marketing divisions seek to identify the many company problems and demands that must be addressed.¹ Where research and other scientific investigations are not possible to apply or it is a practical issue that requires an immediate solution, problem-solving methods assist in identifying ways to solve those problems by generating alternate solutions and applying the best possible solution to solve the problem.^{1, 2, 3}

Problem solving is the mental process of analysing a situation, learning about the possibilities available, and then selecting the alternate that will produce positive outcomes outcome or another goal. Problem solving is described as the process of making decisions in order to solve a problem. An issue is defined as the disparity between the current situation or condition and the intended situation.^{2,3}

Because we all face challenges on a regular basis, everyone may benefit from possessing effective problem-solving skills. Some of these issues are clearly more serious or complicated than others. It would be nice to be able to address all difficulties quickly and efficiently; sadly, there is no single solution to all problems. Understanding the fundamental issues of the problem, rather than the symptoms, is an important part of problem solving. Dealing with a client complaint may be viewed as an issue that must be resolved, and it is almost always a good idea.^{4,5,6}

If the worker tackling the issue can determine what triggered the consumer to complain in the first place, the issue is fixed. A basic life skill is issue solving, which involves identifying a problem and taking steps to address it. In nursing, problem solving refers to discovering better ways to accomplish something in enhancing nursing practise. A nurse in a managerial role in any department must address problems quickly to ensure the smooth operation of the ward and prevent confrontation.^{6,7,8}

Definition

The greatest part you can do is the correct thing, a next greatest part is the bad decision, but worst point you could do is nothing, according to Theodore Roosevelt. "Problem solving is an instructional strategy in which the teacher and the student attempt in a conscious, planned, and purposeful endeavour to arrive at some explanation or solution to any educationally significant obstacle," according to Dewey. "Problem solving," according to Skinner, "is the process of overcoming obstacles that appear to be impeding the achievement of a goal." It is a method of making adjustments in the face of obstacles.⁶

It is impossible to emphasise the value of problem-solving skills in the workplace. Every business and job role has its own set of issues. Every one of your workers, from entry-level hires to senior executives, will experience difficulties that cannot be solved with a quick Google search. That's why, in professions requiring complicated business issues, tight deadlines, and shifting factors, businesses must choose individuals with problem-solving skills.⁷

Skills required in to be effective at problem solving^{7,8,9,10,1}

- **Creativity:** Typically, problems are solved intuitively or logically. When no new knowledge is required, intuition is used. You either know enough to make a rapid judgement and solve the problem, or you use common sense or experience to solve the problem. More complex problems, or challenges you've never encountered before, will almost certainly take a more systematic and logical approach to tackle, and you'll need to utilize creative thinking to solve them. For additional information, see our page on Creative Thinking.

- **Researching Skills:** Defining and solving problems generally necessitates some research, whether it's a quick Google search or a more thorough investigation. For ideas on how to do excellent research, see our Research Methods section.
- **Collaborative Problem Solving:** Many challenges are best described and solved with the help of others. Teamwork may appear to be a 'work thing,' yet it is just as vital at home and at school as it is at work. For additional information, see our page on teamwork.
- **Emotional Intelligence:** It's important to consider how a problem and/or its solution affects you and others. Emotional intelligence, or the capacity to recognize your own and others' emotions, will aid you in finding the best answer. For additional information, visit our Emotional Intelligence pages.
- **Risk Management:** Solving a problem entails some danger, which must be assessed against the risk of not solving the problem. Our Risk Management website may be of use to you.
- **Decision Making:** Problem solving and decision making are closely related abilities, and making a decision is a vital aspect of the problem-solving process because you'll frequently be presented with multiple options and alternatives. For further information.
- **Communication:** Problem solvers should be able to communicate effectively. Employers working in fast-paced situations benefit greatly from the ability to effectively transmit complicated information thoroughly yet succinctly.
- **Analytical thinking:** Analytical thinkers can determine the logical reasons for a problem's occurrence, the issue's long-term consequences, and the effectiveness of several solutions in order to choose the most practical one.
- **Active listening skills:** Active listeners are good problem solvers. They can acquire knowledge from those around them in order to tackle the challenge at hand. They understand the importance of understanding others' experiences and perspectives in order to better understand why the problem arose and how to best address it.

Purposes of problem solving

- To instruct the pupil on how to reason.
- To impart useful information.
- To gain new knowledge.
- To figure out a conundrum.
- To assist in overcoming the challenge.
- To contribute to an individual's and society's advancement.¹⁰

Essential features of a problem

- The problem should be intriguing, relevant, and worthwhile.
- It should be relevant to real life.
- It should be based on the kids' actual needs.
- Students must have a basic understanding of the problem.
- The issue should be well-defined.
- The pupils should figure out the answer to the problem on their own, with the help of the supervising teacher.^{10,11}

Steps in Problem Solving

Problem solving consists of the following steps:

1. The problem must be identified and defined.
2. Data collection in relation to the problem
3. Inference and analysis of available data
4. Identifying potential solutions and choosing the best one.
5. Solution implementation and feedback
6. If necessary, modification of the strategy that focuses on feedback data.^{12,13}

Methods of problem solving^{14,15,16}

1. Inductive method

It is a development method. The pupil is guided to explore truth on his own.

Merits

- It is an approach that is rational. It is founded on firsthand observation, consideration, and experimentation.
- It makes the lecture more engaging by putting the pupils in difficult situations.
- Because the knowledge is gained through practical experience, the method is highly natural.
- Students learn how to solve problems.

Demerits

- The approach is sluggish, lengthy, and time-consuming, and it is ineffective in the case of little children.
- It is not appropriate in a teaching subject where the emphasis is on the teaching of facts.

- It is less useful at this point since some of the extraneous details and explanations might become tedious and monotonous.
- The procedure isn't complete in and of itself.

2. Deductive method

The student moves from general to specific, abstract to concrete, and equations to examples using this strategy.

Merit

- This method is incredibly cost effective, saving both students and teachers time and energy.
- It is ideal for young children who are unable to seek truth for themselves.
- It is used in conjunction with the inductive approach to eliminate gaps, and it is adequate and useful during the practice and review stages.

Demerits

- It fails to generate motivation and make learning attractive.
- It fails to instil self-assurance and initiative in students.
- Because knowledge is not self-required, it is not effectively digested.
- An abstract formula is extremely difficult for a beginner to comprehend.

3. Analytic method

It entails dismantling the situation at hand so that it can be linked to something obvious or already known to us. According to Thorndike, analysis is the highest type of mental performance.

Merit

- It is a perfect strategy for understanding and discovering since it is a logical method that leaves no doubts and convinces the learner.

Demerits

- The steps are developed in a broad manner in this procedure. There are causes and justifications for each move.
- It is a lengthy process; it is difficult to achieve efficiency and speed with this method; it may not be equally applicable to all themes.

4. Synthetic method

It's the process of piecing together known facts to get at a point where unknown facts become evident and true.

Merits

- It is a sensible method with merits. The student understands the importance of following each step in the correct order.
- This strategy allows the student to analyse, judge, and evaluate in order to compare and choose the best option.
- The method fosters initiative and accountability.
- It is established and promoted that the teacher and the student have good and pleasant interactions.

Advantages of problem-solving

- The problem-solving method instils confidence in students not only in the classroom but also in real life situations.
- It provides beneficial opportunities for students' cognitive capacities to develop properly.
- It provides the ability to make critical judgments and fulfils curiosity.
- It aids in the development of good study habits.
- In place of anxiety, learning becomes more enjoyable.
- It assists in learning how to act in new situations.

Disadvantages of problem solving

- Only mental engagement is required for problem solving. There is less physical exercise. There is a dearth of appropriate reference and source books for pupils. It takes students' patience, abilities, and capabilities.
- To provide effective assistance to kids, it requires highly qualified teachers.
- It takes a lot of time and effort from the professors, and covering the specified syllabus is difficult.
- The process of imagining a possible preliminary solution to a hypothesis is particularly difficult with this procedure. Students are more likely to choose the incorrect hypothesis, wasting their time and energy in unproductive and irrelevant activities.

Suggestions of problem solving

- Teachers should be well trained and encouraged to use problem-solving techniques.
- The pupils should be concerned and concerned about the problem selection.

- It should be difficult but not beyond their powers or capabilities.
- They should receive enough training and direction in order to follow the stages involved in problem-solving in a methodical manner.
- Students should never be discouraged for attempting their goals and failing to achieve the desired results with their early efforts.

Sample of Problem Solving

Different problems identified in labour ward (Problem Identification)

Step 1: identification and specification of the problem

(i) Preliminary assessment of Ward situation was done discussing with

1. The ward sister.
2. The staff nurse and peer group members.
3. With doctors.
4. Observation of clinical scenario.
5. Record analysis of patient's rate of infection.
6. Discussion with the concerned lecturer.

(ii): Problems identified in the ward

1. Delay initiation of breastfeeding
2. Improper disposal of syringe and needle in the labour ward.
3. Inadequate maintenance of aseptic technique during delivery process.
4. Improper sterilization of instrument and delivery tray.
5. Non-availability of emergency tray or crash.
6. Non-availability of Pre-operative, Post-operative nursing care protocol.
7. Inadequate time spent by nursing personnel.
8. No written protocol for nursing practice in labour room
9. Inadequate maintenance of thermoregulation of neonates.
10. Shortage of staff.
11. Inadequate supply of equipments.
12. Lack of proper communication between staff and client.

(iii) Ranking of Problem to establish priorities.

Sl. No.	Problems	Interest of the staff	Serious problem needs immediate attention	Modifiability of the problem	Equipment or material availability	Money environment	Time available	Feasibilities to implement	Total	Total Percentage (%)	Rank
1	Delay initiation of breastfeeding	√	√	√	√	X	√	√	106	74.2	1
2	Improper disposal of Bio-medical waste	√	√	√	√	X	X	X	72	50.4	2
3	Non-maintenance of aseptic technique	X	√	√	X	X	√	√	79	55.3	2
4	Improper sterilization technique	X	X	√	X	X	√	√	65	45.5	3
5	Non-availability of emergency tray or crash trolley protocol	√	√	√	√	X	X	X	71	49.7	2
6	Non-availability of Pre-operative, Post-operative nursing care	X	√	X	X	√	X	√	79	55.3	3

Sl. No.	Problems	Interest of the staff	Serious problem need immediate attention	Modifiability of the problem	Equipment or material availability	Money environment	Time available	Feasibilities to implement	Total	Total Percentage (%)	Rank
7	Inadequate time spent by nursing personnel	√	√	√	√	X	√	X	81	56.7	2
8	Lack of proper communication between staff and client.	√	√	√	√	X	X	X	82	57.4	2
9	No written protocol for nursing practice in labour room	X	√	√	X	X	√	√	77	53.9	2
10	Inadequate maintenance of thermoregulation of neonates.	X	X	√	X	X	√	√	72	50.4	3
11	Shortage of staff.	√	√	√	√	X	X	X	76	53.2	2
12	Inadequate supply of equipments.	X	√	X	X	√	X	√	72	50.4	3

As per the above ranking scale first priority of the Problem identified is “delayed ignition of breastfeeding” in labour ward.

Statement of Problem:

Delayed initiation of breastfeeding in labour room of Hospital.

Definition of the Problem

Increasing maternal and neonatal mortality and morbidity rate due to delayed initiation of breastfeeding within first half hour after delivery. (WHO)

Goal:

To initiate early breastfeeding within first half hour after delivery.

Objectives:

- To develop awareness among nursing and paramedical staff in early initiation of breastfeeding
- To ensure the regular supervision, monitoring and evaluation of breastfeeding technique.
- To upgrade the knowledge of nursing and paramedical staff regarding newer trends of breastfeeding.

Step 2: Collection of data in relation to the problem**1. Data collection tools:**

The tool used was observation check-list, and method of data collection was observation. The purpose of data collection was to identify the practice of staff nurses regarding early initiation of breastfeeding.

2. Data collection procedure and techniques:

- Prepare list of nursing staff.
- Identify the persons who present either in morning or evening duty.
- We exclude the members who were in the night duty.
- Explained the purpose of data collection.
- Collect the data from twenty nursing staff who were available in either morning or evening was done. We included a total of 20 members.
- Observation was done for 6 days
- Data were collected as follows:
 - Demographic data
 - Practice of breastfeeding initiation by staff nurses

Step 3: Analysis and inferences**Data analysis and interpretation**

The collected data were organized and analysed in terms of frequency and percentage.

Table 1: Distribution of health care personnel according to demographic characteristics

N =20

Demographic characteristics	Frequency	Percentage (%)
1) Age		
21-25 years	2	10
26-30 years	4	20
31- 35 years	14	70
35 and above	nil	
2) Marital Status		
Married	17	85
Unmarried	3	15
3) Years of experience		
1-5 years	3	15
5-10 years	4	20
10 years and above	13	65
4) Received training on Breastfeeding		
Yes	9	45
No	11	55

Table 1 shows that majority (70%) were in the age group of 31 to 35 years, Majority of the staff nurses (85%) were married. Majority of the staff nurses were having the years of experience between 10 years and above about 55% of staff nurses didn't receive any breastfeeding training.

N=20

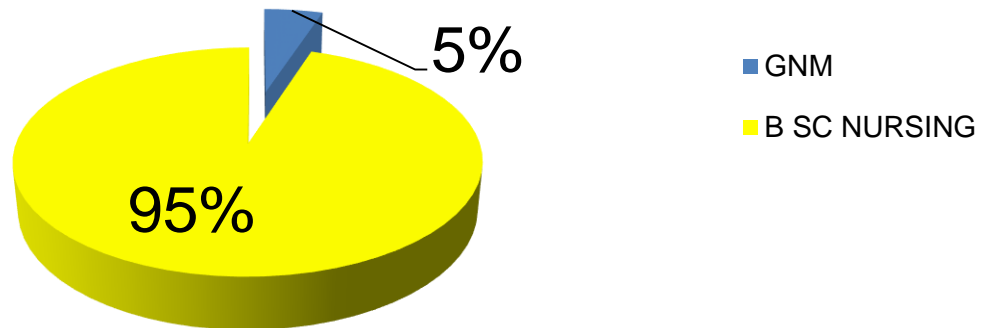


Figure 1: Percentage Distribution of staff nurses according professional qualification

Figure 1 shows that only 5 % of staff nurses were educated up to basic level.

N=20

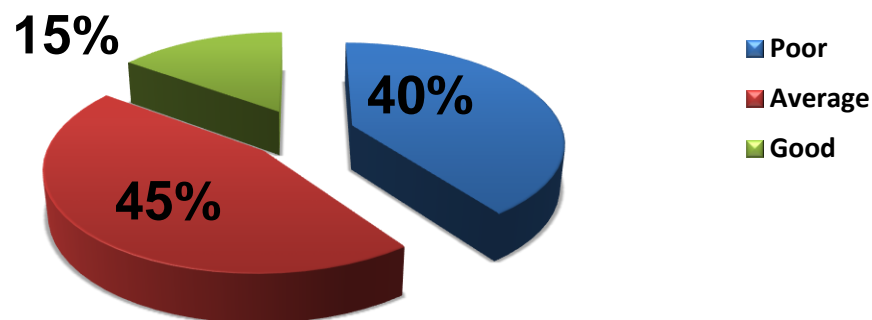


Figure 2: Percentage Distribution of staff nurses according to practice of breastfeeding in labour room

Figure 2 show that only 15 % of staff performed good practice of breastfeeding in labour room whereas about 45 % of staff practiced average in breastfeeding in labour room.

Step 4: identifying probable solutions and selection of the best solution

Situational analysis of identified problems (delayed initiation of breastfeeding)

1) Man power:

- Lack of supervision and monitoring of early initiation of breastfeeding
- Lack of attitude to adopt and teach correct techniques of breastfeeding.
- Lack of continuing education on breastfeeding.
- Inadequate involvement of ward sister in initiating breastfeeding.
- Lack of evaluation of breastfeeding practice.

- No guidance to family member and patient about breastfeeding practice.

2) Material:

- Protocol for correct techniques of breastfeeding
- Charts and posters displayed in labour room regarding advantages and disadvantages of breastfeeding
- Video teaching programme on breastfeeding
- Leaflet and pamphlet on steps of breastfeeding.

Probable alternatives solutions for delayed initiation of breastfeeding:

1. Awareness of the nursing personnel
 - Staff Nurse
 - Doctors
 - Group D staff
 - Family members
2. Supervision, monitoring & evaluation
3. Antenatal counselling on breastfeeding
4. Health educations on breastfeeding
5. Development of action plan for health care team

Plan for long term solutions:

- Awareness generation among Medical and Paramedical staff once in 2 months.
- Daily checking in the ward.
- Staff nurse are initiating breastfeeding within first half an hour after delivery
- Continue nursing education
- Maintenance adequate nurse patient ratio for breastfeeding in labour room
- Involve other health team members (attendants) in early initiation of breastfeeding and exclusive breastfeeding
- Evaluate staff performance regarding

Role of sister in charge as an administrator –

- Send Nursing staff for special training.
- Supervise the staff and Group D once in a week.
- One on duty staff spend 1 hour to teach family members for breastfeeding.

- Ward sister/staff in charge allot at least ½ hrs. Daily to supervise health personnel for early initiation of breastfeeding.
- Conduct audit and rank the practice of breastfeeding technique in different ward in the hospital after audit.
- Reward the ward which ranked one for successive three times.
- Develop protocol for breastfeeding.

Assess weightage of different alternatives solutions

Solution	Applic ation	Time constrains	Fund	Total	Rank
Awareness of the nursing personnel	√	X	X	2	2
Supervision, monitoring & evaluation	X	√	X	2	2
Antenatal counselling on breastfeeding	X	X	√	1	3
Health educations on breastfeeding	X	√	X	2	2
Development of action plan for health care team	√	√	√	3	1

After considering the weightage of alternate solutions we concluded that development of plan of action among the personnel is the best solution for effective.

Step 5: implementation of solution with feedback

Immediate plan for implementation of best solution

Action plan for early initiation of breastfeeding was developed among the personnel working in ward.

- For Hospital Administrators
- For Health Care Team.
- Doctors and Nurses.
- Health Personnel’s’ Initiatives for Family and Community Members

Implementation

- A plan of action was developed.
- Formal permission was sought from sister in charge
- A list was prepared for participants & divided into 2 groups in each shift.

- Total participants were 20.
- Demonstration given was ½ hour in each shift & return demonstration was taken
- No such problem was faced & they actively participated in the demonstration.

Action plan for early initiation of breastfeeding

For Hospital Administrators

- Have a clearly written breastfeeding policy.
- Information, education and communication about the policy to all healthcare staff and the public.
- Policy should be written in local language.
- Display policy in different wards and outdoors, waiting rooms, nurses' station and doctors' rooms etc.
- Implement the newly revised BFHI materials.
- Offer continuing interdisciplinary education based on WHO/UNICEF or other evidence-based courses on breastfeeding and lactation management, as part of induction and in-service education for all relevant health care staff, with particular emphasis on staff in frontline maternity and child care areas.
- Offer skill-based training for all the health team members on breastfeeding.
- Periodic performance evaluation of the staff.
- Assess labour rooms- what are the barriers to breastfeeding initiation? Develop actions plan to address any barriers that are identified.
- Encourage all facilities to keep records on whether or not initiation proceeds in the first hour.
- Carry out monthly rounds on early breastfeeding initiation to consider what can be done programmatically and practically to improve the rates.
- Review the impact of birthing processes on breastfeeding initiation so that disruptive practices can be modified.
- Education of pregnant women and their relatives about the initiation, benefits and management of breastfeeding.
- Help assure support in terms of discussion/ counseling/ referral for breastfeeding to the mother and her family.
- Extend teaching programmes to the community.

- Involve non-governmental organization to co-ordinate with them in advocacy, information sharing and training of health team and other health care providers.
- Encourage the formation of mother support group, where experienced mother can assist in teaching about initiation, technique and attachment during ante natal and post-natal period.
- Discourage commercial baby food within the vicinity of the hospital and give strict notice and warning against the promotion of such.
- Always ensure universal access to breastfeeding-supportive antenatal and postpartum care within the hospital.

For Health Care Team

Doctors and Nurses

- Attend the in-service programmes arranged by the hospital regarding breastfeeding.
- Stress on individual effort to make the policy successful.
- Be prepared to practice the latest technique as given by the programmes.
- Give stress on the importance of breastfeeding during ante natal checkup of the mother.
- Provide appropriate culturally sensitive and supportive labour companionship to mothers.
- Encourage non-pharmacologic measures to help support women through labour.
- Allow delivery to occur in position preferred by the mother.
- Dry the baby quickly, preserving the natural white cream (vernix) that soothes a baby's new skin.
- Place the baby naked skin-to-skin n mother's naked chest, facing her and covering them together.
- Initiate breastfeeding within half an hour or within one hour after delivery if no complication of mother or baby arises.
- Allow the baby to seek the breast. The mother will stimulate the baby with her touch and may help position the baby closer to the nipple. Do not force the baby to the nipple.
- Keep the baby skin-to-skin with the mother until the first feeding is accomplished and as long as she desires thereafter.
- Women who have surgical births should also have their infants' skin-to-skin after delivery.

- Delay intrusive or stressful procedures. The baby should be weighed, measured and given preventive medications after the feed.
- No pre-lacteal liquids or feeds should be given unless there is a clear medical indication.
- Encourage rooming-in of the mother and baby.
- Encourage mother to give breastfeeding on demand.
- Limited use of pacifiers and artificial nipples.
- Encourage mother's relative to help in initiation.
- Fostering of breastfeeding support groups and services.

Health Personnel's' Initiatives for Family and Community Members

- Provide education to families regarding the importance of breastfeeding during pregnancy and soon after birth. Include grandmothers and other influential members in the family.
- Identify the natural community leaders and communicators as persons who can bring this message to every woman and man, young and old, to support mothers in breastfeeding initiation and exclusive breastfeeding.
- Enlist the popular press in bringing the message to the people. Give one coverage per month for breastfeeding.
- Extended care to the home and clinic time to time or whenever necessary to handle any problem faced due to breastfeeding.
- Formation of the mother support group where experienced mother can counsel to the mothers regarding initiation, technique etc. regarding breastfeeding.

Step v i: modification of solution, if necessary, on the basis of feedback data

Policy of delayed initiation of breastfeeding are changed in the ward. According to the policy doctors were also forced to maintain it. The policy document was made available through in Obstetrics and Gynaecology ward.

Conclusion

Problem Solving and decision making are process and interdependent. These are intangible, its effect can only be felt. These are analytical and critical thinking. As a nurse administrator we have done the job of problem solving during our clinical experience which was effective for the ward and also for learning experience.

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