Introduction

Decision making is an integral part of nursing practice. It is a complex process that may be defined as a series of decisions, including observations made in a patient situation, evaluation of data observed, and actions taken to achieve the desired outcomes ***(Marija & Mirko, 2003).***

In fact, decision-making is a cognitive process in which one selects a choice among many. It is considered a psychological construct because even though it is not physically tangible, the results can be observed if a decision has been done. It is basically an activity which calls for a subsequent action to be done. Health practices involve the skillful planning and execution of decision-making strategies ***(Gunnarsson & Warren Stomberg, 2008).***

Moreover, decision-making is the process choosing between alternative courses of action; it is also an essential element in handling change, working with conflict, managing resources and evaluating care and performance ***(George & Jones, 2000).***

However, decision-making is a core issue for midwifery practice as it affects the nurses' performance in the context of a set of needs, and values they seek, the decision making process must be regarded as a continuous process integrated in the interaction with the environment. From a normative perspective,

the analysis of individual decisions is concerned with the logic of decision making, and the invariant choice it leads to. Also decision making is a reasoning or emotional process which can be rational or irrational, based on explicit assumptions or tacit assumptions ***(Daniel & Amos, 2000).***

According to analytical decision-making theory, human decision making is based on a certain systematic process and decisions are reached via analyses of the situation. Information-processing theory is based on studies of human problem solving. This theory is defined in healthcare as a hypothetical deductive process of determining the patient's problems using diagnostic reasoning. Cognitive psychologists describe the various modes of human thought, ranging from highly intuitive to highly analytical cognition, using information processing, decision theory, and intuition ***(Marija & Mirko, 2003).***

Decision making is an essential component of professional nursing practice.Spur of the moment decision making is one of the descison making models that used by nurse midwifery especialy in emergancy situation, therefore it is essential to enhance nurses's clinical decision making abilities. Further more, there are many factors contributing the decision making process as experience, knowledge, creative thinking ability, education, self concept, work environment and situational stressors ***(Facione & Facione, 2007).***

Clinical decision making is situated judgment that includes critical & reflective thinking then making action, and appling it through scientific and practical reason. The daily assignment required individual nurses to describe how the clinical decision making contributed to their development as a professional nurse or as a practitioner nurse caring for assigned patient. Personal awareness of thoughts and behaviors necessary for critical thinking and humanistic nursing in the spur of the moment clinical decision making ***(Eleanor,2004).***

The spur of the moment decision making are highly complex, and expert nursing care, that including resolution of ethical dilemmas and predictions based on inadequate or ambiguous data with the intention of applications the intuitive processes ***(Rew & Barrow 2007).***

Obstetric and gynecological nurses are often described as containing the value pertaining to both art of performing the nursing skills and science of nursing together information from range of resources, research, existing knowledge and clinical observation, and may add to this a more psychological or intuitive impression. It has been argued that, as the judgement and decision- making becomes more urgent ***(Maureen & Raynor, 2005).***

Morover, decision making is the most important skill a nurse executive brings to the role. Unfortunately, many charge nurses continue to use a haphazard and undisciplined approach

to problem solving by their decision making. The chief nursing officer and the charge nurse as well must use a well defined and effective decision-making process and apply the spur-or-moment decision making to remain successful ***(Thomas, 2003).***

Justification of the Study:

Decisions making empower and support the obstetric and gynecological nurses to develop the confidence to become accountable, reflective, and autonomous-practitioners. The complexity of clinical decision-making is a well-reported phenomenon. A review of the literature has shown that study in the clinical decision in the obstetric and gynecological nursing in Egypt is extremely limited, and has largely been informed by studies examining clinical decision making in nursing. Problems in nurse decision making may be related to inability of nurse to process large amount of information at the same time. This leads nurse to over simplification and errors, but there is also evidence that increased information, and even understanding of that information can fail to alter behavior ***(Hamm, 2000).***

There is a gap between the evidence and the reality of practice on the international level, need improve the decision making aspect for provision of high quality obstetric and gynecological nursing care ***(Raynor et al., 2005).***

Aim of the Study

This study aims to evaluate the ability of the obstetric and gynecological staff nurses to apply spur of the moment decision-making model in the clinical area through:

- Assessing the nurse knowledge about spur of the moment decision making model.
- Applying spur of the moment decision making model by obstetric and gynecological staff nurses.
- Evaluate of decision making process on the outcome of nurses performance

Research Hypothesis:

Application of spur of the moment decision making model will improve nursing staff performance.

Decision Making

Decision making is critical to nursing practice. Gathering, organizing, and priortizing data are major compnent of the process. Continued research in this area can foster the development of decision making skills in novice nurses and cultive high clinical decision making ability in expert nurses ***(Mary , 2010).***

Related Concepts to Decision Making

Decision making is a complex cognitive process often define as choosing a particular course of action over another. it is a purposeful selection from among a set of alternatives in the light of given objective. Furthermore, a person must weight the positives and negatives of each option, and consider all the alternatives to make a good decision. Finally, effective decision making, a person must be able to forecast the outcome of each option as well, and based on all these items, determine which option is the best for that particular situation ***(Pritchard, 2006).***

However, decision making is a process in which one selects a choice from among many. It is considered a psychological construct because even though it is not physically tangible, the results can be observed if a decision has been done. It is basically an activity which calls for a subsequent action to be done. Health practices involve the skillful planning and execution of decision-making strategies. It is concerned

with creating important decisions that affect the long-term goals of an organization ***(Draper, 2000).***

Clinical decision making, is the ability to sift and synthesize information, make decisions and appropriately implement these decisions in the clinical environment. clinical decision making is an essential component of professional nursing practice. One of the goals of the nursing profession therefore should be to enhance the clinical decision making abilities of nurses ***(Reilly, 2005).***

Decision making process is scientific process that begins with a problem or situation associated with inconsistencies that need resolving. Decisions can, however, be made in the absence of any problem and may involve choosing from number of alternative options, courses or action. Decision making can be viewed in terms of the recognition-primed decision (RPD) model. As long there are no major uncertainties in any complication, seen almost immediately ***(Edwards & Elwyn, 2002).*** Therefore, decision- making process can be summarized in general terms as defining the problem, listing objectives, identifying alternatives and their consequences, and selecting the best alternative(s) ***(Thomas, 2003).***

Theoretical Approaches to Decision Making Theory

The theoretical approaches to decision theory can be broadly categorised as taking three approaches; normative, prescriptive and descriptive . *Normative theory* describes what people ought to do if they want to be rational decision makers. This approach is dominated by scientific inquiry to illustrate how rational thinking is achieved. In contrast to the empirical normative approach, rational normative theory emphasises the authority of human reason and conscience. Human beings are motivated by their own desires and goals, and their decisions are infleunced by social phenomena and institutions ***(Mautner, 2000) (Maureen et al., 2005)..***

Prescriptive theory assumes that human beings can make poor decisions and therefore proposes that decision aids are necessary to assist the decision process. This is in order to make decisions seem more objective and scientific. Therefore, human beings requests information concerning the benefits, the clinical risks, any costs and what the actual procedure involves to be satisfied with the outcome of decision taken ***(Nassar et al., 2007; Wong et al.,2006).***

Descriptive approach to decision making, is concerned with cognitive phenomena and how humans actually think and process information. Decision making using this approach is understood to be a sophisticated cognitive activity, sensitive to

how complex a task is, the pressure of time, how the task is framed and what reference points are used in order to make the decision .It is this descriptive approach to decision theory that is emerging as an important discourse in midwifery practice ***(Lichenstein & Slovic, 2006).***

Decision Making Steps

The process of decision making can be best understood in the below diagram:

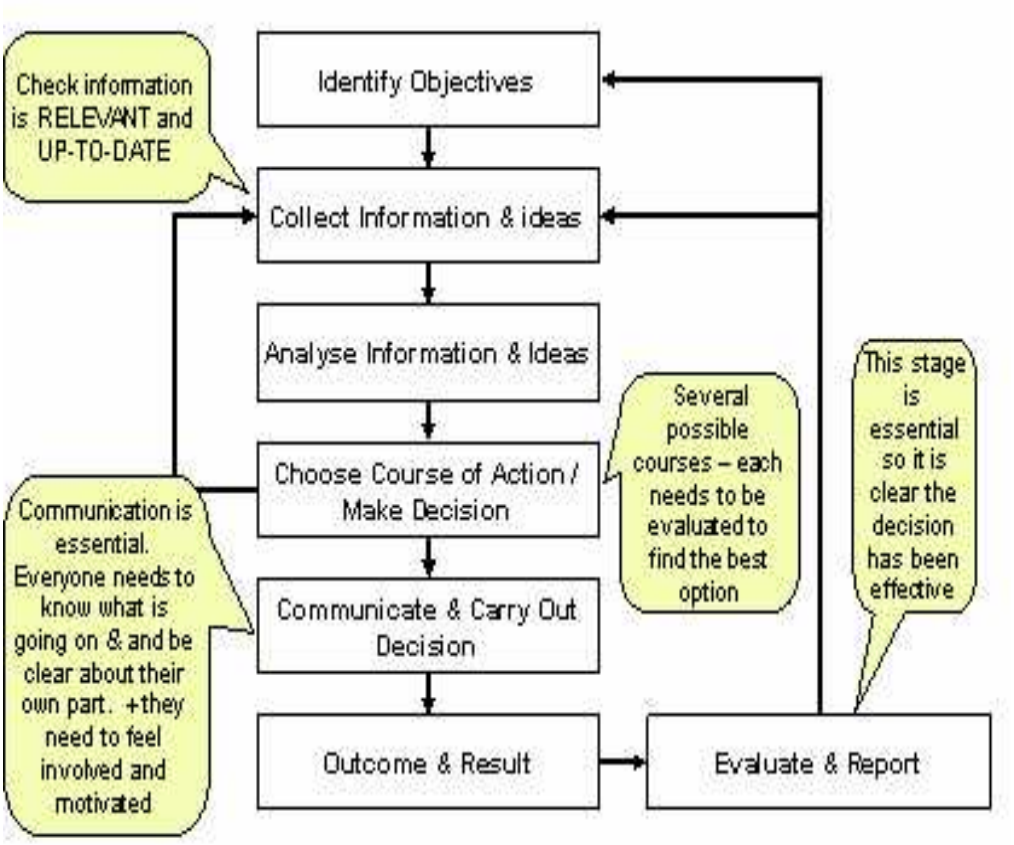

Figure (1): Decision making process adopted from ***Thomas, (2003)*** The Art of Decision-Making. JONA. 33 (6): pp 343-349.

Information in decision making appears to be processed using two different modes of thinking: analytic and experiential. The analytic mode is conscious, deliberative, reason-based, verbal and relatively slow, and it is this mode of thinking that we as midwives tend to consider in our attempts to inform choices. The experiential mode is intuitive, automatic, associative and fast. It is based on affective (emotional) feelings, and one of its primary functions is to highlight information important enough to warrant considerations. When information is provided without consideration for emotional meaning, it cannot be given appropriate attention in decision making ***(Hibbard & Peters, 2003).***

Decision making involves the analysis of a finite set of alternatives described in terms of some evaluative criteria. These criteria may be benefit or cost in nature. Then the problem might be to rank these alternatives in terms of how attractive they are to the decision maker(s) when all the criteria are considered simultaneously. Another goal might be to just find the best alternative or to determine the relative total priority of each alternative (for instance, if alternatives represent projects competing for funds) when all the criteria are considered simultaneously. Solving such problems is the focus of multi-criteria decision analysis (MCDA) also known as multi-criteria decision making (MCDM) ***(Triantaphyllou, 2000).***

Decision analysis provides aformal analytic framework that is increasingly being applied to the problem of selecting an action in clinical situations in which the optimal choice is not intuitively clear or the judgements differ. Decision analysis combines probabilities of the potential outcomes with the values that these outcomes can have for an individual or groups ***(Bordley, 2001)*** **.**

Decision Making and Information Technology

The Internet can be used as a powerful tool to facilitate the generation, synthesis, dissemination and exchange of research evidence, systematic and up-to-date reviews (and where possible, meta-analyses) of the benefits and risks of health care interventions. the implementation of healthcare information technology (IT) projects has demonstrated varying levels of success, these systems and applications are vital to improving patient care and fiscal management of healthcare services.1 Facilities that use a broader range of IT applications have been shown to perform significantly better on quality indicators such as readmission rate and iatrogenic infection rate ***(Scott & Elizabeth, 2009).***

Clinical practice guidelines have evolved during the past twenty years from recommendations based largely on expert judgment to recommendations grounded primarily in evidence. Expert consensus comes into play in guideline development

only when evidence is lacking. Advances in communications and information technology have made such developments of the scientific basis for health care a truly global enterprise, but its application must remain local. Consumers' use of evidence-based information to choose providers, make treatment decisions, and play a more active role represents the ultimate local application of scientific information ***(AHRQ's, 2003).***

The Internet is introducing new ways for humans to interact with machines and to communicate with each other. In health care the Internet is providing unprecedented opportunities to access information, improve decisions, and enhance communication among decision-makers and the people affected by their decisions. However, the Internet is also creating many new problems. Seeking information on the Internet is often time-consuming. Internet users, regardless of their role, background or knowledge, can experience confusion and anxiety because of the virtually unlimited amount of information available, information that is often poorly organized and of highly variable quality and relevance ***(Jadad, 2000).***

The Internet fosters the use of evidence by providers and consumers at the point of care. Some tools, called Internet Web site "calculators," are designed to match unique patient information with an underlying evidence-based knowledge repository and sources of potential feedback. The Internet has

also been used to provide easy access to large generic collections of links to evidence-based resources and organizations that promote evidence-based decision-making which is asystematic approach to problem solving for health care providers, characterized by the use of the best evidence currently avilable for clinical decision -making in order to provide the most consistent and best possible care to patient ***(Parvikoff et al., 2005).***

The Internet is being used by governments and professional organizations to facilitate dissemination of and access to specialized evidence-based guidelines. Good examples are the National Guideline Clearinghouse,an Internet-based public resource that offers access to evidence-based clinical practice guidelines and allows comparisons of recommendations produced by different organizations in North America ***(National Guideline Clearinghouse, 2000).***

Individual Factors Affecting the Decision Making

Numerous factors influence clinical decision making process. These factors incrude individual variables, such as experience and knowledge, creative thinking ability, education, and self concept, as we, as environmentar and situational stressors. These factors may serve to enhance or impede clinical decision making ***(Reilly, 2005).***

Experience and knowledge are two of the major factors affecting decision making. Decision making within practice disciplines and evedence based practice, such as nursing, involves more than the application of theoretical knowledge.A deep understanding of the situation is required if treatment approaches are to address the experience of illness as it relates to a particular patient. This understanding evolves from knowledge and experience as professional nurses have the responsibility to participate in the promotion of evidence based practice ***(Hastings-Tolsma, 2003)***

Preference Construction To understand the complexity of decision making, preference construction is used to cope cognitively with information. This theory posits that when people are faced with a situation that is complex and unknown, they are likely to not have fixed ideas, but will 'think up' or construct an answer for a moment in time ***(Hibbard & Peters, 2003).***

The use of positive affect (feelings, emotions). A growing body of research indicates that the use of such positive affect can influence everyday thought processes and do so on a regular basis .For example the presence of positive feelings may cue positive material in memory, making access to such thoughts easier and thus making it more likely that positive material will "come to mind". Positively remembered material is organised and accessible, and particularly important in that it has been found to improve both efficiency and thoroughness in decision making ***(Isen, 2001).***

Two key ideas found within the theoretical approaches are reducing cognitive effort, and making information contextually relevant to individual women. The challenge for midwives is not merely to communicate accurate information to women, but to understand how to present and target that information so that it is usable which consider strategy that might assist midwives facilitate the decision process ***(Hibbard & Peters, 2003).***

Clinical decision-making is a basic social process involving some individual and environmental variabres. precise review of these variables suggest the existence of interactive relations among the variables. Although feering competent is important for making decision, self-confidence is a basic requisite for making effective clinical decisions. organizational structure, supportive or unsupportive management and nursing education also have facilitating or inhibiting effects in this process. Effective clinical decision-making is one of the most important components of professional nursing practice. It consists of gathering, processing and prioritizing critical patient information to choose and implement nursing actions and evaluate the results. Decision making is the crinical function that differentiates nursing professionar staff from technical ancillary staff ***(White, 2003).***