Women's Perception of Nursing Supportive Behaviors during Labor

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Abstract

*Labor support has important implications for the promotion of positive outcomes for mothers and infants. It impacts the physiological and psychological outcomes of the childbirth experience in a positive manner. **Objectives**: the purpose of this study was to explore women's perception of nursing supportive behaviors during labor. **Setting:** postpartum unit at Damanhur National Medical Institute affiliated to the Ministry of Health. **Subjects:** A convenience sample of 320 postnatal women. **Tools:** Two tools were used: **Tool I:** Socio-demographic data and reproductive history structured interview schedule. **Tool II:** The Bryanton Adaptation of the Nursing Support in Labor Questionnaire (BANSILQ). **Results:** The study results revealed that the most helpful supportive behaviors during labor were the emotional support followed by the tangible support and the least perceived dimension was the informational support. A sizeable proportion of the study subjects (69.1%) obtained satisfactory total score according to their perception of nursing supportive behaviors during labor. Women's perception of nursing supportive behaviors during labor was influenced by their occupation, current residence, the place of follow up and the source of knowledge. **Conclusion:** Nursing supportive behaviors during labor appear to have a more positive effect on women's perception of the childbirth experience **Recommendations:** Medical and midwifery schools should be encouraged to include nursing supportive behaviors during labor within their curriculum.*

<u>**Keywords:**</u> women's perception, nursing supportive behaviors.

Introduction

The birth of a child is a wonderful, life-changing time for the mother and her family (Lunda, Minnie & Benadé, 2018). It is a personal and individual journey that is different for every woman. Vivid and detailed memories of the journey often lead to a permanent perception of the birth experience (Blamer, 1999).

Perception of birth experience has a powerful effect on women with a potential long-term positive or negative impact (Blamer, 1999)**.** A woman who is able to cope with stresses of labor tends to feel more satisfied with her birthing experience (Bryanton, Fraser-Davey & Sullivan, 1994).

Positive childbirth experience helps a woman to develop a positive attitude towards motherhood, which promotes the transition into maternal role. It can also enhance rich and successful family relations, encourage self-esteem, improve self-confidence (Atiya, 2016) and ensure positive expectations of future childbirths (Jafari, Mohebbi & Mazloomzadeh, 2017).

Childbirth is described as a multifaceted experience. Many factors contributing to each woman's experience or her sense of security and perceived control are recognized. These factors are: personal support, nursing care, possible previous experience of deliveries and level of labor pain, intrapartum analgesia, information given and involvement in decision-making

(Atiya, 2016; Chance, Jones & Gardner, 2018).

Labor support is defined as the intentional human interaction between intrapartum nurse and a laboring woman that assists with coping during labor and birth (Adams, Stark & Low, 2016). It can be classified as emotional, physical, informational support and advocacy (Bahri, Vafaee-Najar, Ebrahimipour, Askai & Bashiri, 2014).

Researches indicate that labor support is associated with positive birth outcomes. These outcomes include: decreasing length of labor, increasing effectiveness of pushing, limiting use of analgesia and anesthesia and minimizing operative birth. In addition that, it increases maternal satisfaction and empowerment, decreases newborn complications associated with elective inductions of labor and operative births as well as enhances bonding and breastfeeding (Adams et al., 2016). Another important positive outcome is that it reduces mistreatment during childbirth and promotes respectful maternity care because a labor companion can act as an advocate for the woman and potentially safeguard against mistreatment (World Health Organization (WHO), 2016).

Nurses who care for childbearing women have complex roles, including maternal/fetal assessment, proficiency in technical skills, and a high level of interpersonal skills. They are also responsible for making sure that the medical as well as the emotional needs of the women are adequately met (Carlton, Callister, Christiaens & Walker, 2009). The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) asserts that continuous labor support from intrapartum nurses is critical to achieve improved birth outcomes in partnership with the laboring woman (Chance et al., 2018). These nurses have a unique opportunity to positively affect a laboring woman's comfort and labor progress through the use of labor support behaviors (Iliadou, 2012).

Despite the fact that labor support may be the best evidence-based practice (EBP), it is not commonly implemented in all maternity settings. While nurses' intentions may be to provide the best labor support, many factors interfere with their capacities to give this proof-based standard of care. Such factors as numerous responsibilities, shortage of staff, conflicts in organizations, subjective norms, education, personal beliefs, collaboration and teamwork (Simek, 2010).

Factors that nurses perceive helpful to overcome these challenges involve having a positive working environment which includes: availability of equipment and supplies; having a good rapport with physicians and other nurses on the unit; and availability of other team members for consultation. Additionally, time related to having only one patient which is another factor that facilitates provision of care (Stevenson-Gale, 1996).

Significance of the study:

Labor and delivery process are an exciting, anxiety-provoking, but rewarding time for the woman and her family. This is the time where mothers expect more comprehensive care from nurses (Afaya et al., 2017). Labor support is viewed as an affordable intervention that responds to the basic emotional and physical needs of a woman during a painful and vulnerable moment of her life (Maputle, 2018).

Although evidence exists for the efficacy of support in labor and delivery, little is known about the women's perception of supportive care provided by labor and delivery nurses in hospitals (Stevenson-Gale, 1996). Therefore, this study was conducted to determine women's perception of nursing supportive behaviors during labor in an attempt to provide sound research findings concerning this unique issue for every laboring woman. If perceived positively, nurses will have responsibility to enhance such behaviors by providing individualized care in order to

shape a positive and satisfying birth experience.

Aims of the Study

The present study aimed to explore women's perception of nursing supportive behaviors during labor.

Research Question

What is the women's perception of nursing supportive behaviors during labor?

Materials and Method

Materials

Design: An exploratory descriptive research design was utilized.

Settings: This study was conducted at the postpartum unit at Damanhur National Medical institute affiliated to the ministry of health.

Subjects: The study included 320 postnatal women who fulfil the following inclusion criteria:

- Age from 20-34 years.
- Have experienced normal pregnancy and labor.
- Have delivered a healthy infant of 37 or more week's gestation.
- Willing to participate in the study.

Tools: Two tools were used to collect data of the study:

Tool I: Socio-demographic data and reproductive history structured interview schedule :

This tool was developed and used by the researcher to collect the basic data about the study subjects. It included three parts:

a) Socio-demographic data
b) Reproductive history
c) Recent labor characteristics

Tool II: the Bryanton Adaptation of the Nursing Support in Labour Questionnaire (BANSILQ):

This tool was originally developed by Kintz (1987), and revised by Bryanton et al. (1994). It was adapted by the researcher to elicit the perception of postpartum women about the helpful supportive nursing behaviors during

labor. It is composed of 25-items divided into 3 sections specifically: Emotional support (7 items), Informational support (8 items) and tangible support (10 items).

The subject's response to each item varied according to a 3-point likert- like scale. Namely, not helpful (1), helpful (2) or very helpful (3). The total score ranged between (25 and 75). Thus, each subject's perceived labor support level was ranked as follows:

- Good = 59 - 75.
- Satisfactory = 42 - < 59.
- Poor = 25 - < 42.

Method

The study was executed according to the following steps:

1-Approvals:

-Approval of ethical committee, Faculty of Nursing, Alexandria University was obtained.
-An official letter from the Faculty of Nursing, Alexandria University was directed to the responsible authority of the study setting to take their permission to collect data after explaining the purpose of the study.

2-Tools development:

-**Tool (I)** was developed by the researcher after extensive review of recent and relevant literature.

-**Tool (II)** was adopted, then adapted and translated into Arabic language to suit the Egyptian culture.

-Tools were tested for content validity by a jury of five experts in the field.

-Tools reliability was tested using Cronbach Alpha Coefficient test (internal consistency).Its result was satisfactory (0.929). It was carried out on thirty postpartum women.

3-Pilot study:

A pilot study was carried out on 32 women (10% of the sample size) who were excluded from the main study sample; they were chosen randomly from the previously mentioned setting.

The main purposes of the pilot study were to:

-Ascertain the clarity, relevance and the applicability of the tools.

-Detect any problem peculiar to the statements such as sequence and clarity that might interfere with the process of data collection.

-Estimate the time needed to complete the sheet.

The pilot study revealed that:

-The tools were clear, relevant and applicable and no changes were made.

-No problem that interfered with the process of data collection was detected.

-Each interview took approximately fifteen minutes.

4-Consent:

-Each labouring woman was individually interviewed by the researcher within 24 hours after delivery and informed about the aim of the study in order to obtain her informed consent to participate in the study. Again, each of those who agreed to take part in the study was assured about confidentiality, privacy and right to withdraw from the study at any time.

5-Collection of data:

Data was collected using the study tools. Each subject was individually interviewed within 24hours after delivery. The duration of each interview ranged between 15-20 minutes. Two days /week were specified for data collection over a period of four months started from the beginning of September till the end of December, 2019.An average of 5-7 interviews per day were performed

Ethical considerations:

For each recruited subject the following issues were considered:

- Securing the subject's informed written consent after explanation the aim of the study and the right to withdraw at any time
- keeping the subject's privacy
- Assuring the subjects of their confidentiality

Statistical Analysis

Statistical analysis was done by the researcher after collection of data by using Statistical Package for Social Sciences (SPSS version 19) program. The collected data was categorized, coded, computerized, tabulated and analyzed using numbers, percentage, arithmetic mean, standard deviation, Chi square test.

Women's perception of nursing supportive behaviors during labor was then explored.

Results

Table (1): Illustrates the number and percent distribution of the study subjects according to their socio-demographic characteristics. The table shows that the age of nearly three-quarters (72.19%) of the study subjects ranged between 20 to less than 30 years. And those who were 30-34 years constituted more than one quarter (27.81%) of the study sample. It was found that more than two- fifths (42.81%) of the study subjects had secondary or equal level of education. While more than one- fifth (22.81% & 20.94%) of them were either illiterate or just able to read and write or had primary level of education respectively. However, 13.44% of them had University or higher level of education. The majority (83.13%) of the study subjects were housewives, while, 16.87% of them were working. As regard to current residence, it was noticed that more than three-fifths (63.44%) of the study subjects were urban dwellers, while more than one- third (36.56%) of them were rural citizens.

Table (2) elaborates the number and percent distribution of the study subjects according to history of their current pregnancy. The table shows that more than three-fifths (62.50%) of the study subjects were between 37-39 weeks of gestation. While less than two-fifths (37.50%) were between 39-42weeks of gestation. The mean duration of current pregnancy was 39.22 ± 1.60 weeks. All (100%) of the subjects had antenatal visits during pregnancy. The place of antenatal follow up was checked out and it was found that more than three-quarters (79.38%) of the subjects went to private clinic, while more than two-fifths (46.56%) of them went to health

care unit. On the other hand, less than one-fifth (17%) of the subjects went to hospital and only 5.94% went to MCH center. The majority of the study subjects (94.37%) stated that they had four or more visits, while, a minority (5.63%) of them had less than four visits. The mean number of antenatal visits was 6.45 ± 2.01 .The majority of the study subjects (90.63%) indicated that they were in their first trimester, while only 8.44% were in the second trimester and 0.93% of them were in the third trimester.

The table also shows that about three- quarters (74.69%) of the study subjects received health education about labor, while just more than one- quarter (25.31%) didn't receive such education. Concerning the source of information of the study subjects, the table shows that doctors were apparently the main source of information for more than three-fifths (65.27%) of them .Nurses were the second source of information (28.45%) and the least source (12.13%) was" mothers and sisters" as pointed out by the respondents.

Table (3) in this table, the emotional supportive behaviors during labor as perceived by the respondents were explored. It was found that the most frequently reported response as very helpful (48.12%) was that the nurse " Made me feel cared about as an individual" followed by the statement" Treated me with respect" (43.75%). On the other hand, statements which denoted "helpful emotional support" to the respondents as they perceived them were" Accepted what I said/did without judging"(69.37%) followed by the statement of" Provided a sense of security"(62.18%).

However, the table also reveals that women perceived some emotional supportive behaviors statements as "not helpful".e.g. more than one- fifth (21.56%) indicated that "Nurses Provided distractions by talking" as not helpful. Also, the statement of "Spent time in room" was pointed out by 20.31% of the respondents as such.

In general, the table illustrates that the total and the average women's response to emotional supportive behaviors of nurses during labor was helpful in 57.54% and 57.50% of women respectively. Moreover, the total and average response to emotional support statements which were perceived by the respondents as very helpful constituted 29.87% & 30.00% respectively.

The table also shows the informational supportive behaviors during labor (as perceived by the respondents). It was found that the most frequently reported response (45.00%) as "very helpful" was that the nurse "Instructed me in breathing/relaxing" followed by the statement:" Kept me informed about my progress "(31.25%). On the other hand, statements which denoted "helpful" informational support to the respondents as they perceived them were:" Praised me & Kept me informed about my progress "(63.44%) followed by the statement of" Included me in making decisions "(59.06%).

However, the table also reveals that women perceived some informational supportive behaviors statements as "not helpful". e.g. more than three- fifths (62.81%) indicated that "Encouraged my partner's involvement" as not helpful. Also, the statement of "Supported the way partner and I worked together" was pointed out by 51.88% of the respondents as such.

In general, the table illustrates that the total and the average women's response to informational supportive behaviors of nurses during labor was helpful in 50.82% and 50.94% of women respectively. Moreover, the total and average response to informational support statements which were perceived by women as very helpful constituted 17.85%&17.81% respectively.

The table also shows the tangible (physical) supportive behaviors during labor (as perceived by the respondents). It was found that the most frequently reported response (53.12%) as very helpful was that the nurse "Assisted me in breathing/relaxing" followed by the statement:" Gave me pain medication "(52.81%). On the other hand, statements which denoted "helpful" tangible support to the respondents as they perceived them were:" Tried to carry out my wishes & touched me "(67.81%) followed by the statement of" Attempted to lessen demands on me "(63.44%).

However, the table also reveals that the respondents perceived some tangible supportive behaviors statements as "not helpful".e.g. more than four- fifths (83.44%) indicated that "Provided for my partner's physical needs" as not helpful. Also, the statement of "Communicated my needs/wishes together" was pointed out by 30.94% of the respondents as such.

In general, the table illustrates that the total and the average of women's response to tangible behaviors of nurses during labor was helpful in 51.47% and 51.56% of women respectively. Moreover, the total and average response to tangible support statements which were perceived by women as very helpful constituted 27.34%&27.50% respectively.

Graph (1) Illustrates descriptive analysis of the study subjects according to their perception of nursing supportive behaviors. It can be observed that the mean percent score of both emotional and tangible support are relatively similar, where the mean percent score was 58.64 ±18.38 &53.08 ± 18.38 respectively. Meanwhile, the mean percent score of the study subjects for the informational support was 43.26 ±16.71. Moreover, the mean percent score of the study subjects for the overall support was 51.49 ± 16.30.

Graph (2) clarifies the total score of the study subjects according to their perception of nursing supportive behaviors during labor. Obviously, the majority (69.1%) of the study subjects obtained satisfactory total score while those who obtained good total score constituted 17.5% and only 13.4% of women obtained poor total score .

Table (4) displays the relationship between the study subjects' perception of labor support and their socio-demographic data. A statistically significant correlation was detected among study subjects in relation to occupation and current residence Where (p=0.003& 0.002), respectively.

According to **table (5)** illustrates the relationship between the study subjects' perception of labour support and history of their current pregnancy. A statistically significant difference was detected among the study subjects in relation to some of their current pregnancy history as place of follow up, (hospital p= 0.015), (private clinic=0.011), (health care unit p=<0.001) and for the source of knowledge, (others p=0.001) where (p≤0.001).

Discussion

Labor Support is one of the key factors in reducing maternal and neonatal mortality rates and fulfilling the Millennium Development Goals. It may enhance physiological labor processes, as well as women's feelings of control and confidence in their own strength and ability to give birth. It has also an important role in promoting maternal satisfaction.

The results of the present study apparently reveal that the most helpful supportive behaviors during labor as perceived by the participants were the emotional support followed by the tangible support and the least perceived dimension was the informational support (Table 3). Emotional support is generally intended to ease women's anxiety, discomfort, loneliness and exhaustion.

In general the findings of this study demonstrate that the total and average women's response to all the three supportive behaviors during labor were considered helpful in most of the instances (table 3).

A high degree of consistency exists between the results of the current study and the studies carried out by other researchers. The same sequence of nursing supportive behavior during labor was also recognized by more than one study: the first study of Nikula, Laukkala and Pölkki (2015), about " Mothers' perceptions of labor support". The study results revealed that mothers perceived emotional support to be the most important followed by tangible and finally informational support .

The second study was that of Corbett and Callister (2000), on" Nursing support during labor", they found that the emotional support was the most helpful supportive behavior during labor as perceived by the participants followed by tangible then informational support.

Although family and friends provide much of the support for women during labor, women always appreciate supportive behaviors from nurses. Such behaviors as emotional support, physical comfort measures, offering of information and advocacy. These behaviors were found to be helpful in providing a positive and satisfying perception of childbirth experience.

However, there are several other studies in which mothers perceived supportive nursing behaviors during labor differently. They had positive birth experiences and they perceived the emotional, tangible, and informational labor support they received as most beneficial, but in different sequence from the current study, as in a study of Nancy and Cutinho (2017), about " Perception of nursing support during labor among the postnatal women of selected hospital at Mangaluru".They reported that there was a higher need for tangible support followed by emotional support and finally informational support.

Also, the study of Panda, D'Sa and Rao (2016), on" Supportive needs of Indian women in early labor" . They found a higher need for support among women for informational followed by emotional support then physical support.

Another study done by Bahri et al. (2014) in Iran, indicated that the majority of women reported that they are satisfied with physical support then the instructions/information provided by the health personnel, and finally the emotional support.

Again, the study of Buasomboon (2007), titled" Nursing behaviors during labor perceived by nurses and parturients in Nakhonpathom hospital "they found that women perceived higher need for emotional support followed by informational support and the least need for physical support .

Furthermore, the study done by Teshome, Abdella and Kumbi (2007), on" Parturients' need of continuous labor support in labor wards" in Ethiopia, the study revealed that more than one -half of the study participants need to have emotional support then informational and physical supports.

Finally, the study conducted by Sauls (2004), titled "Adolescents' perception of support during labor", the purpose of this study was to identify the nursing behaviors that adolescents perceive as being helpful during labor. The researcher found that adolescents perceived emotional support behaviors as being the most helpful while informational support, which includes such behaviors as ''taught me how to breathe and relax during labor pains'' and ''explained hospital routines and procedures'' was second in importance. Tangible support, such as ''assisted me inbreathing/relaxing'' and ''made me physically comfortable,'' was the least important.

Actually, in spite of these variations in the sequence of nursing supportive behaviors, each of these behaviors has been identified in the literature as "helpful" to laboring women.

On the other hand, the current finding does not fit with the study of Tumblin and Simkin (2001) on "Pregnant women's perceptions of their nurse's role during labor and delivery". They found that women perceived inadequate physical, emotional, and informational support than they expected.

Another contradiction of results was found in relation to supportive nursing behaviors and care service. In the study conducted by Gashaye, Tsegaye, Shiferaw, Worku and Abebe (2019), titled "Client satisfaction with existing labor and delivery care and associated factors among mothers who gave birth in university of gondar teaching hospital ;North west Ethiopia: institution based cross-sectional study" . They concluded that mothers perceive supportive care given by the hospital staff from entry to the labor unit to discharge was inadequate.

Furthermore, the present finding is not in line with Mohammad, Alafi, Mohammad, Gamble and Creedy (2014) who conducted a descriptive study in Jordan. They found that the majority of women perceived inadequate support from health care providers especially in management of labor pain.

Discrepancy between the results of these studies and the current study may be related

to the difference in aim, research methodology, sample size and settings.

The findings of the present study showed that a sizeable proportion of the study subjects (69.1%) of the study subjects obtained satisfactory total score according to their perception of nursing supportive behaviors during labor (instead of obtaining good total score), while those who obtained good total score constituted 17.5% (figure 2). This result might be linked to two main factors. The first is the enormous responsibilities of the nurses towards their patients and the second is the actual shortage of nursing staff in health care institutions in general which imposes great burden on nurses. Other factors include: conflicts in organizations, subjective norms, education, personal beliefs, collaboration and teamwork. However, while nurses' intentions may be to provide the best labor support, such factors can negatively interfere with their capacities to do so. This finding is congruent with the study of Oluyemisi, Oyadiran, Ijedimma, Akinlabi and Adewale (2014) on "Perception of pregnant women towards midwives: attitude and practice during child delivery in health institutions in Ogbomoso, South-West, Nigeria". They found that the respondents perceived satisfactory attitude and practice from midwives during delivery.

This present study result is also supported by the previously mentioned studies of Nancy and Cutinho (2017) and Buasomboon (2007), their results found that the overall nursing support perceived by the postnatal mothers was considered satisfactory.

Another similarity of result is found in the study of Eustace and Lugina (2007), about" Mothers' perceptions of midwives' labor and delivery support". They found that mothers had a positive perception of midwifery intervention related to the provision of effective caring and supportive care during labor and delivery across different birth settings.

Many other studies reported similar results as: the study of Bulto, Demissie, Tasu and Demisse (2020), Othman et al. (2020) and Mocumbi et al. (2019). The first found that a sizable proportion of mothers perceived current labor and delivery care services as satisfactory.

The second showed that participants obtained a satisfactory score regarding their perception of nurses' caring behaviors during the antenatal, childbirth and postnatal periods.The third found that most mothers perceived satisfactory care during childbirth due to the interaction with the healthcare providers, the cleanliness of the facility and the assistance to feed their baby.

Perceptions of being in control during childbirth have been recognized by many other studies as the strongest component of women's satisfaction with birth experiences. e.g. the study carried out by Asres (2018) on " Satisfaction and associated factors among mothers delivered at asrade zewude memorial primary hospital, a cross sectional study". Which revealed that the majority of the study participants perceived intrapartum care services as beneficial.

The current finding also corresponds with the study of Getenet, Roba, Endale, Mamo and Darghawth (2018), titled "Women's satisfaction with intrapartum care and its predictors at harar hospitals, Eastern Ethiopia: a cross-sectional study" the study results revealed that the majority of women were satisfied with intrapartum care provided in the facilities by nurses.

The same result also coincides with the study of Panth and Kafle (2018), about "Maternal satisfaction on delivery service among postnatal mothers in a government hospital, Mid-Western Nepal". The study shows that the majority of the mothers were satisfied with the delivery service.

In accordance with that, the study of Jha, Larsson, Christensson and Skoog Svanberg (2017) about " Satisfaction with childbirth services provided in public health facilities: results from a cross- sectional survey among postnatal women in Chattisgarh, India" they reported that most women perceived satisfactory childbirth services from nurses.

On the other hand, disparity of results is found in relation to supportive nursing behaviors during labor compared to the current study results as follows: the study of Colley, Kao, Gau and Cheng (2018), titled "Women's perception of support and control during childbirth in the Gambia, a quantitative study on dignified facility-based intrapartum care", they found that women's perceptions of support and control were low.

Another dissimilarity exists between the current study and the study of Kamil, Al Asadi, Al Yaseen and Agha (2018), titled" Women's satisfaction with intrapartum services in Basrah-Iraq". They found that nearly one half of the studied women were dissatisfied with the hospital-based intra partum service, 12.6% were very dissatisfied and 35.3% were dissatisfied to some extent.

The current finding is not also in harmony with the study done by Demas et al. (2017) about " Women's satisfaction with intrapartum care in St Paul's hospital millennium medical college Addis Ababa Ethiopia: a cross sectional study" in which the women's overall satisfaction with intrapartum care was low. Only 19% of the women were satisfied with the intrapartum care they received.

This finding also does not match with the study conducted by Kifle et al. (2017) on" Predictors of women's satisfaction with hospital-based intrapartum care in Asmara public hospitals, Eritrea". They found that only small proportion of the participants perceived intrapartum services as satisfactory.

Additionally, the present finding is not in line with the study done by Shabila, Ahmed and Yasin (2015), titled " Assessment of women's perspectives and experiences of childbirth and postnatal care using Q-methodology" they found that there was poor perception of the childbirth experience with lack of appropriate interpersonal and supportive care provided to them.

Furthermore, the study of Mohammad et al. (2014) in Jordan, the aim of this study was to" determine the prevalence and factors associated with satisfaction during labor and birth among Jordanian women using a descriptive cross-sectional design". Their results revealed that only 17.8% of women were satisfied with intrapartum care.

A statistically significant correlation was found between occupation and current residence of the study participants and their perception of labor support (table 4). Whereas the highest percent of women who perceived good labor support were housewive urban dwellers. This result may be explained in the light that housewive women, even those who are urban dwellers, usually have limited information resources regarding delivery services. The housewive participants of this study were probably more sensitive to nursing supportive behaviors during labor than working women. In fact working condition increases socialization that may help in getting others experiences, information and help express feelings and encourages her to look for information from formal and informal resources. This is in line with the study of Hailemariam, Genetu and Sahile (2020), titled "Mother's satisfaction towards childbirth care at public health centers in Bench-Maji Zone, Ethiopia: a facility-based cross-sectional study". Their result revealed that mothers' educational status, residency, occupation, measures taken to assure privacy, and ante natal care (ANC) attendance were significantly associated with mothers' satisfaction with the provided overall delivery service .

This result is also consistent with the study of Menhart and Prosen (2017) on "Women's satisfaction with the childbirth experience: a descriptive research". Their result showed that a statistically significant difference was observed between satisfaction and respondents' residential environment, occupation, professional communication, and level of anexity of birthing mothers.

In addition, the study of Conde, Figueiredo, Costa, Pacheco and Pais (2008), about" Perception of the childbirth experience: continuity and changes over the postpartum period". They found significant difference between occupation and perception of the

childbirth experience since unemployed women perceived satisfactory childbirth experience.

However, the current finding does not match with other two studies. The first study was the previously mentioned study of Nancy and Cutinho (2017), they found that there was no association of perception of nursing support with age, educational states, monthly income, occupation, geographical distribution, period of gestation and parity of postnatal women. The second study done by Sachsanidis (2018), about "Evaluating women's satisfaction with health services received during childbirth: a study of hospitals in Athens, Greece", their result revealed that no significant relationship was observed between women's occupation and satisfaction with health services received during childbirth.

When other items of current pregnancy history were explored, it was found that a statistical significant correlation between the study subjects' perception of labor supportive nursing behaviors and their current pregnancy history as the source of information (as mother and sister) (table 5) .It was observed that the majority of women who rely on information from mothers and sisters perceived poor labor support while the majority of women who depended on information from professional health care givers (doctors and nurses)perceived good labor support . This is justified in the light that women who trust and depend only on their relatives (as mothers and sisters) as a primary source of information and who do not have reliable and formal sources as doctors and nurses, usually have unreliable expectations about labor as well as poor perception of labor support. This finding is in line with the study of Martin, Bulmer and Pettker (2013), on" Childbirth expectations and sources of information among low- and moderate-income nulliparous pregnant women", they found that no one participated in childbirth education classes, they depended on informal sources of information such as family, friends, the Internet, and television.

The current study results is in disharmony with the study of Grimes, Forster and Newton (2014), titled" Sources of information used by women during pregnancy to meet their information needs". They concluded that discussion with nurses is an important source of information for women during pregnancy, birth and the postpartum.

A statistically significant correlation was observed between the study subjects' perception of labor support and the place of follow up during pregnancy especially the health care unit (Table 5). This may be explained by the fact that in health care units' women can receive their immunization, have their ultrasonography done with low fees and at the same time can freely discuss their concerns with doctors and nurses.

Women across cultures expect safe childbirth through supportive nursing care regardless of their obstetric care differences. This supportive nursing care may be physical, emotional and informational behaviors. Advocacy of such behavior is of great and significant importance to laboring women. The current study suggests that supportive care during labor is very influential on shaping childbirth experience.

Conclusion

Based upon the findings of the current study, it could be concluded that nursing supportive behaviors during labor appear to have a positive effect on women's perception of the childbirth experience as measured by (BANSILQ).

Recommendations

In line with the findings of the study, the following recommendations are made:

- Nursing supportive behaviours during labor should be emphasized by decision makers at Ministry of Health and Population, as well as by leaders of the profession in the country especially to those in teaching hospitals.
- Medical and midwifery schools should be encouraged to include nursing supportive behaviours during labor within their curriculum.

- Workshops on benefits of nursing supportive behaviours during labor should be encouraged.
- Further researches are recommended: Replication of the present study at different settings and among larger samples for better generalization.

Table (1):   Number and percent distribution of the study subjects according to their socio-demographic characteristics:

Socio-demographic characteristics	Study subjects	
	No. (n=320)	%
Age (years)		
20-< 30	231	72.19
30- 34	89	27.81
Min. – Max.	17.0 – 34.0	
Mean ± SD.	26.07 ± 4.77	
Level of education		
Illiterate / read and write	73	22.81
Primary	67	20.94
Secondary or equal	137	42.81
University or higher	43	13.44
Occupation		
Housewife	266	83.13
Working	54	16.87
Current residence		
Urban	203	63.44
Rural	117	36.56

Table (2):   Number and percent distribution of the study subjects according to history of their current pregnancy:

History of current pregnancy	Study subjects	
	No. (n=320)	%
Duration of current pregnancy		
37-39weeks	200	62.50
40-42weeks	120	37.50
Mean ± SD.	39.22 ± 1.60	
Did you have antenatal follow up visits during pregnancy?		
Yes	320	100.00
Place of follow up*		
Hospital	57	17.81
Private clinic	254	79.38
MCH center	19	5.94
Health care unit	149	46.56
How many antenatal visits did you have during pregnancy?		
<4	18	5.63
≥4	302	94.37
Mean ± SD.	6.45 ± 2.01	

Duration of gestation during initial antenatal visit		
First trimester	290	90.63
Second trimester	27	8.44
Third trimester	3	0.93
Did you receive health education about labor?		
No	81	25.31
Yes	239	74.69
If yes, what is the source of your information? *	**(n=239)**	
-Doctor	156	65.27
-Nurse	68	28.45
-Others	29	12.13
• Mother	19	7.95
• Sister	10	4.18

*more than one answer (Total isn't exclusive)

The second tool: The Bryanton Adaptation of the Nursing Support in Labor Questionnaire (BANSILQ)

Table (3): Number and percent distribution of the study subjects according to their perception of nursing supportive behaviors during labor:

Q	Nursing supportive behaviors during labor	Women's responses(n=320)					
		Not helpful		Helpful		Very helpful	
		No.	%	No.	%	No.	%
	Emotional support						
1	Answered my questions truthfully	42	13.13	177	55.31	101	31.56
2	Made me feel cared about as an individual	12	3.75	154	48.13	154	48.12
3	Treated me with respect	16	5.00	164	51.25	140	43.75
4	Spent time in room	65	20.31	198	61.88	57	17.81
5	Accepted what I said/did without judging	43	13.44	222	69.37	55	17.19
6	Provided a sense of security	35	10.94	199	62.18	86	26.88
7	Provided distractions by talking	69	21.56	175	54.69	76	23.75
	Total responses	**282**	**12.59**	**1289**	**57.54**	**669**	**29.87**
	Average responses	**40**	**12.50**	**184**	**57.50**	**96**	**30.00**
	Informational support						
8	Familiarized me with my surroundings	97	30.31	174	54.38	49	15.31
9	Instructed me in breathing/relaxing	34	10.62	142	44.38	144	45.00
10	Encouraged my partner's involvement	201	62.81	80	25.00	39	12.19
11	Praised me	63	19.69	203	63.44	54	16.87
12	Supported the way partner and I worked together	166	51.88	138	43.12	16	5.00
13	Explained hospital routines	125	39.06	172	53.75	23	7.19
14	Included me in making decisions	99	30.94	189	59.06	32	10.00
15	Kept me informed about my progress	17	5.31	203	63.44	100	31.25
	Total responses	**802**	**31.33**	**1301**	**50.82**	**457**	**17.85**
	Average responses	**100**	**31.25**	**163**	**50.94**	**57**	**17.81**
	Tangible support (physical support)						
16	Appeared calm and confident giving care	10	3.12	175	54.69	135	42.19
17	Assisted me in breathing/relaxing	19	5.94	131	40.94	170	53.12
18	Tried to carry out my wishes	44	13.75	217	67.81	59	18.44
19	Attempted to lessen demands on me	82	25.62	203	63.44	35	10.94
20	Touched me	26	8.13	217	67.81	77	24.06
21	Made me physically comfortable	60	18.75	193	60.31	67	20.94
22	Recognized when I was anxious, listened	55	17.19	171	53.44	94	29.37
23	Gave me pain medication	16	5.00	135	42.19	169	52.81
24	Communicated my needs/wishes	99	30.94	167	52.19	54	16.87
25	Provided for my partner's physical needs	267	83.44	38	11.87	15	4.69
	Total responses	**678**	**21.19**	**1647**	**51.47**	**875**	**27.34**
	Average responses	**67**	**20.94**	**165**	**51.56**	**88**	**27.50**
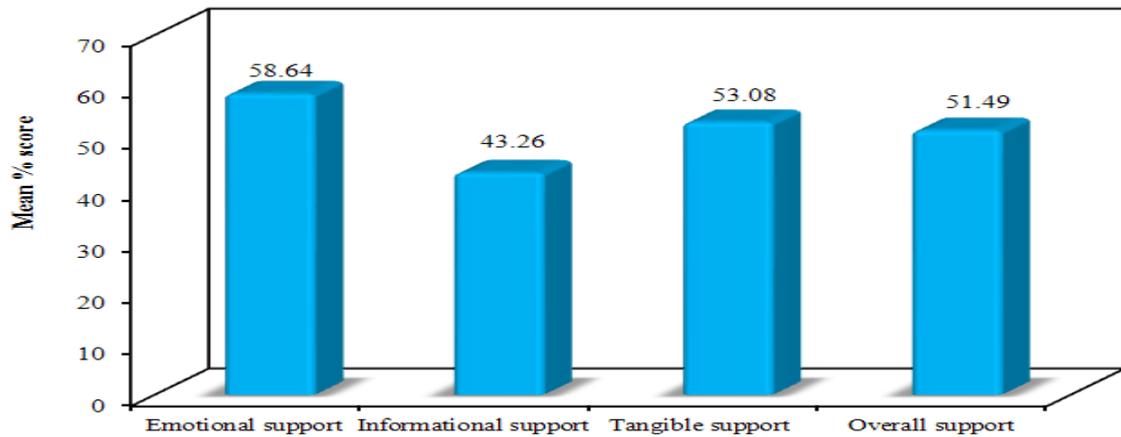
Graph (1): Descriptive analysis of the study subjects according to their perception of nursing supportive behaviors
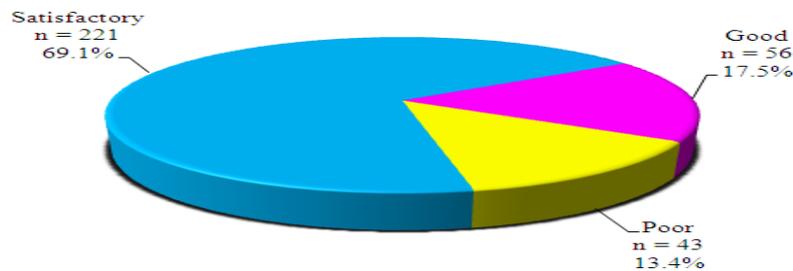
Graph (2): Total score of the study subjects according to their perception of nursing supportive behaviors during labor

Table (4): Relationship between the study subjects' perception of labor support and their socio-demographic data

Socio-demographic data	The Bryanton Adaptation of the nursing support in labor questionnaire						χ^2	P
	Poor (n = 43)		Satisfactory (n = 221)		Good (n = 56)			
	No.	%	No.	%	No.	%		
Age (years)								
20- < 30	31	72.09	154	69.68	46	82.14	3.455	0.178
30- 34	12	27.91	67	30.32	10	17.86		
Level of education								
Illiterate / read and write	10	23.26	51	23.08	12	21.43		
Primary	12	27.91	42	19.00	13	23.21	11.542	0.073
Secondary or equal	21	48.84	97	43.89	19	33.93		
University or higher	0	0.00	31	14.03	12	21.43		
Occupation								
Housewife	43	100.00	181	81.90	42	75.00	11.601*	0.003*
Working	0	0.00	40	18.10	14	25.00		
Current residence								
Urban	37	86.05	136	61.54	30	53.57	12.170*	0.002*
Rural	6	13.95	85	38.46	26	46.43		

χ^2: **Chi square test**

p: p value for association between different categories

*: Statistically significant at $p \leq 0.05$

Table (5):   **Relationship between the study subjects' perception of labor support and history of their current pregnancy:**

History of their current pregnancy	The Bryanton adaptation of the nursing support in labor questionnaire						χ^2	P
	Poor (n = 43)		Satisfactory (n = 221)		Good (n = 56)			
	No.	%	No.	%	No.	%		
Duration of current pregnancy								
37-39weeks	27	62.8	132	59.7	41	73.2	3.469	0.177
40-42weeks	16	37.2	89	40.3	15	26.8		
Did you have antenatal follow up visits during pregnancy?								
Yes	43	100.00	221	100.00	56	100.00	–	–
Place of follow up*								
Hospital	1	2.33	46	20.81	10	17.86	8.405*	0.015*
Private clinic	41	95.35	173	78.28	40	71.43	9.024*	0.011*
MCH center	1	2.33	15	6.79	3	5.36	0.948	0.666
Health care unit	29	67.44	87	39.37	33	58.93	15.575*	<0.001*
How many antenatal visits did you have during pregnancy?								
<4	1	2.33	16	7.24	1	1.79	2.816	^{MC}p= 0.264
≥4	42	97.67	205	92.76	55	98.21		
Duration of gestation during initial antenatal visit								
First trimester	41	95.35	200	90.50	49	87.50		
Second trimester	2	4.65	20	9.05	5	8.93	4.577	^{MC}p= 0.276
Third trimester	0	0.00	1	0.45	2	3.57		
Did you receive health education about labor?								
No	13	30.23	54	24.43	14	25.00	0.644	0.725
Yes	30	69.77	167	75.57	42	75.00		
If yes, what is the source of your information?*								
Doctor	17	56.67	114	68.26	25	59.52	2.252	0.324
Nurse	3	10.00	51	30.54	14	33.33	5.867	0.053
Others	**10**	**33.33**	**15**	**8.98**	**4**	**9.52**	**14.470***	**0.001***
Mother	7	70.00	11	73.33	1	25.00	3.110	^{MC}p=0.197
Sister	3	30.00	4	26.67	3	75.00		

χ^2: **Chi square test**   MC: **Monte Carlo**

p: p value for association between different categories

*: Statistically significant at p ≤ 0.05

References

- Adams, E.D., Stark, M.A., & Low, L.K. (2016). A Nurse's Guide to Supporting Physiologic Birth. *Nursing for women's health, 20*(1), 76-85.
- Afaya, A., Yakong, V.N., Afaya, R.A., Salia, S.M., Adatara, P., Kuug, A.K., & Nyande, F.K. (2017). A Qualitative Study on Women's Experiences of Intrapartum Nursing Care at Tamale Teaching Hospital (TTH), Ghana. *Journal of caring sciences, 6*(4), 303-314.
- Asres, G.D. (2018). Satisfaction and associated factors among mothers delivered at Asrade Zewude memorial primary hospital, Bure, west Gojjam, Amhara, Ethiopia: a cross sectional study. *Primary Health Care: Open Access, 8*(2), 1-6.
- Atiya, K.M. (2016). Maternal satisfaction regarding quality of nursing care during labor and delivery in Sulaimani teaching hospital. *International Journal of Nursing and Midwifery, 8*(3), 18-27.
- Bahri, N., Vafaee-Najar, A., Ebrahimipour, H., Askai, F., & Bashiri, K. (2014). Quality of labor support during labor. *Journal of Patient Safety & Quality Improvement, 2*(1), 58-64.
- Blamer, K. (1999). *A comparative study of women's perceptions of vaginal and*

cesarean births (Master Thesis). Grand Valley State University.

- Bryanton, J., Fraser-Davey, H., & Sullivan, P. (1994). Women's perceptions of nursing support during labor. *Journal of obstetric, gynecologic, and neonatal nursing, 23*(8), 638-644.

- Buasomboon, L. (2007). A Study of Nursing Behaviours During Labour Perceived by Nurses and Parturients of Nursing Support in Nakhonpathom Hospital. *Medical Journal, 26*(1), 93-109.

- Bulto, G.A., Demissie, D.B., Tasu, T.L., & Demisse, G.A. (2020). Mother's satisfaction with the existing labor and delivery care services at public health facilities in West Shewa zone, Oromia region, Ethiopia. *BMC pregnancy and childbirth, 20*(1), 303.

- Carlton, T., Callister, L.C., Christiaens, G., & Walker, D. (2009). Labor and delivery nurses' perceptions of caring for childbearing women in nurse-managed birthing units. *MCN. The American journal of maternal child nursing, 34*(1), 50-56.

- Chance, K.D., Jones, S.J., & Gardner, C.L. (2018). Intrapartum Nurse Perception of Labor Support After Implementation of the Coping With Labor Algorithm. *The Journal of perinatal education, 27*(3), 152-162.

- Colley, S., Kao, C.H., Gau, M., & Cheng, S.F. (2018). Women's perception of support and control during childbirth in The Gambia, a quantitative study on dignified facility-based intrapartum care. *BMC pregnancy and childbirth, 18*(1), 413.

- Conde, A.A., Figueiredo, B., Costa, R., Pacheco, A., & Pais, Á. (2008). Perception of the childbirth experience: continuity and changes over the postpartum period. *Journal of Reproductive and Infant Psychology, 26*(2), 139-154.

- Corbett, C.A., & Callister, L.C. (2000). Nursing support during labor. *Clinical nursing research, 9*(1), 70-83.

- Demas, T., Getinet, T., Bekele, D., Gishu, T., Birara, M., & Abeje, Y. (2017). Women's satisfaction with intrapartum care in St Paul's Hospital Millennium Medical College Addis Ababa Ethiopia: a cross sectional study. *BMC pregnancy and childbirth, 17*(1), 253.

- Eustace, R.W., & Lugina, H.I. (2007). Mothers' perceptions of midwives' labour and delivery support. *African Journal of Midwifery and Women's Health, 1*(1), 5-9.

- Gashaye, K.T., Tsegaye, A.T., Shiferaw, G., Worku, A.G., & Abebe, S.M. (2019). Client satisfaction with existing labor and delivery care and associated factors among mothers who gave birth in university of Gondar teaching hospital; Northwest Ethiopia: Institution based cross-sectional study. *PloS one, 14*(2), e0210693.

- Getenet, A.B., Roba, K.T., Endale, B.S., Mamo, A.M., & Darghawth, R. (2018). Women's satisfaction with intrapartum care and its predictors at harar hospitals, eastern ethiopia: a cross-sectional study. *Nursing: Research and Reviews, 9*, 1-11.

- Grimes, H.A., Forster, D.A., & Newton, M.S. (2014). Sources of information used by women during pregnancy to meet their information needs. *Midwifery, 30*(1), e26-e33.

- Hailemariam, S., Genetu, A., & Sahile, E. (2020). Mother's Satisfaction towards Childbirth Care at Public Health Centers in Bench-Maji Zone, Ethiopia: A Facility-Based Cross-Sectional Study. *International journal of reproductive medicine, 2020*, 6746459.

- Iliadou, M. (2012). Supporting women in labour. *Health science journal, 6*(3), 385.

- Jafari, E., Mohebbi, P., & Mazloomzadeh, S. (2017). Factors Related to Women's Childbirth Satisfaction in Physiologic and Routine Childbirth Groups. *Iranian journal of nursing and midwifery research, 22*(3), 219-224.

- Jha, P., Larsson, M., Christensson, K., & Skoog Svanberg, A. (2017). Satisfaction with childbirth services provided in public health facilities: results from a cross- sectional survey among postnatal women in Chhattisgarh, India. *Global health action, 10*(1), 1386932.
- Kamil, S., Al Asadi, J., Al Yaseen, A., & Agha, S. (2018). Women's satisfaction with intrapartum services in Basrah-Iraq. *Advance Research Journal of Multidisciplinary Discoveries, 23*, 1-5.
- Kifle, M.M., Ghirmai, F.A., Berhe, S.A., Tesfay, W.S., Weldegebriel, Y.T., & Gebrehiwet, Z.T. (2017). Predictors of Women's Satisfaction with Hospital-Based Intrapartum Care in Asmara Public Hospitals, Eritrea. *Obstetrics and gynecology international, 2017*, 3717408.
- Lunda, P., Minnie, C.S., & Benadé, P. (2018). Women's experiences of continuous support during childbirth: a meta-synthesis. *BMC pregnancy and childbirth, 18*(1), 167.
- Maputle, M.S. (2018). Support provided by midwives to women during labour in a public hospital, Limpopo Province, South Africa: a participant observation study. *BMC pregnancy and childbirth, 18*(1), 210.
- Martin, D.K., Bulmer, S.M., & Pettker, C.M. (2013). Childbirth expectations and sources of information among low- and moderate-income nulliparous pregnant women. *The Journal of perinatal education, 22*(2), 103-112.
- Menhart, L., & Prosen, M. (2017). Women's satisfaction with the childbirth experience: a descriptive research. *Obzornik zdravstvene nege, 51*(4), 298-311.
- Mocumbi, S., Högberg, U., Lampa, E., Sacoor, C., Valá, A., Bergström, A., . . . & Sevene, E. (2019). Mothers' satisfaction with care during facility-based childbirth: a cross-sectional survey in southern Mozambique. *BMC pregnancy and childbirth, 19*(1), 303.
- Mohammad, K.I., Alafi, K.K., Mohammad, A.I., Gamble, J., & Creedy, D. (2014). Jordanian women's dissatisfaction with childbirth care. *International nursing review, 61*(2), 278-284.
- Nancy, T.S., & Cutinho, S.P. (2017). A Study Perception of nursing support during labor among the postnatal women of selected hospital at Mangaluru. *Indian journal of applied research, 7*(11), 74-75.
- Nikula, P., Laukkala, H., & Pölkki, T. (2015). Mothers' Perceptions of Labor Support. *MCN. The American journal of maternal child nursing, 40*(6), 373-380.
- Oluyemisi, A.F., Oyadiran, G.O., Ijedimma, M.O., Akinlabi, B.O., & Adewale, A.J. (2014). Perception of pregnant women towards midwives: attitude and practice during child delivery in health institutions in Ogbomoso, South-West, Nigeria. *Epidemiology, Biostatistics and Public Health, 11*(2), e8937-e8937.
- Othman, F., Liu, Y., Zhang, X., Wang, P., Deng, L., & Cheng, X. (2020). Perinatal women's satisfaction with nurses caring behaviours in teaching hospitals in China. *Scandinavian journal of caring sciences, 34*(2), 390-400.
- Panda, S., D'Sa, J., & Rao, A.C. (2016). Support needs of Indian women in early labour. *Journal of Woman's Reproductive Health, 1*(2), 15-24.
- Panth, A., & Kafle, P. (2018). Maternal Satisfaction on Delivery Service among Postnatal Mothers in a Government Hospital, Mid-Western Nepal. *Obstetrics and gynecology international, 2018*, 4530161.
- Sachsanidis, P.I. (2018). Evaluating Women's Satisfaction With Health Services Received During Childbirth: A Study of Hospitals in Athens, Greece. *Journal of Clinical Gynecology and Obstetrics, 7*(1), 1-12.
- Sauls, D.J. (2004). Adolescents' perception of support during labor. *The Journal of perinatal education, 13*(4), 36-42.
- Shabila, N.P., Ahmed, H.M., & Yasin, M.Y. (2015). Assessment of women's

perspectives and experiences of childbirth and postnatal care using Q-methodology. *Eastern Mediterranean health journal, 21*(9), 647-654.

- Simek, A. (2010). *Turning stumbling blocks to steppings stones: Implementing evidence into intrapartum nursing* (PhD Thesis). The College of St. Scholastica.

- Stevenson-Gale, J.C. (1996). *Nursing support in labour and delivery* (Master Thesis). University of Ottawa.

- Teshome, M., Abdella, A., & Kumbi, S. (2007). Parturients' need of continuous labor support in labor wards. *Ethiopian Journal of Health Development, 21*(1), 35-39.

- Tumblin, A., & Simkin, P. (2001). Pregnant women's perceptions of their nurse's role during labor and delivery. *Birth, 28*(1), 52-56.

- World Health Organization (WHO). (2016). *Companion of choice during labour and childbirth for improved quality of care: evidence-to-action* brief. Geneva, Switzerland: WHO.