KNOWLEDGE AND ATTITUDE REGARDING DANCE DURING LABOUR AMONG NURSING STAFFS OF IGIMS, PATNA

Nursing

Dasgupta Rupashree

Associate Professor, College of Nursing, IGIMS, Patna-14

ABSTRACT

A non experimental descriptive research design study was conducted in December 2018 to assess the Knowledge cum Attitude regarding dance during labour among 122 Nursing staffs of IGIMS, Patna selected through Purposive Sampling technique. Midwives model of care was adopted as conceptual framework. Reliability of the tool was 0.76 found to be acceptable.

Results: The major findings of the study showed that maximum Nursing staffs had good Knowledge cum Attitude score (74.6%), (25.4%) had average while none had poor Knowledge cum Attitude score regarding dance during labour. Maximum Nursing staffs "agreed" to all the 18 items out of 20 items, except 2 items: A pregnant women during labour should not dance (33.6%), Dance lowers the rate of foetal malpositioning (40.2%) where maximum Nursing staffs "neither agreed nor disagreed". There was no significant difference between the mean score among the respondents with respect to independent "t" test regarding *Sex, Marital status, Nativity, Employment status* related to Knowledge and Attitude at $p < 0.05$ while no significant difference was found regarding *Age, Religion, professional qualification, parity, mode of Delivery, Place of delivery, Family income (₹) /month, cadre, Job experience (years)* using ANOVA at $p > 0.05$ with respect to Knowledge and Attitude. Hence, Null hypothesis was accepted. No significant association was found between Knowledge cum attitude with demographic variables. Calculated Chi-square (χ^2) value at $p > 0.05$ accepted the null hypothesis.

Conclusion: The study concluded that the Nursing staffs of IGIMS had good Knowledge cum Attitude level regarding dance during labour.

KEYWORDS

Attitude, Dance, Knowledge, Labour

INTRODUCTION

Completion of pregnancy and beginning of labour overlap until pregnancy is left behind and labour strengthens naturally. Over the course of several decades, there has been a shift in the societal attitudes and beliefs towards labour and childbirth. Attitudes and beliefs have changed from a view of childbirth as a normal, healthy physiologic process, to the widespread acceptance of childbirth as a risky, dangerous, or potentially pathological process.[1] The Midwives model of care has been proven to reduce the incidence of birth injury, trauma and caesarean section. [2] The Healthcare providers' role is to protect the mother and baby from numerous dangerous and deadly complications and rescue them both from imminent death.

Childbirth is a significant life event, a rite of passage that has meaningful, spiritual, physical, emotional aspects with deep meaning on many levels for the woman, her baby, her family, and society. There is limited research knowledge available about Labour and Delivery Registered Nurses' (L/D RN) Knowledge, attitudes and beliefs toward dance labour and childbirth.[1]

Background of the study:

Labour and Delivery Registered Nurses (L/D RNs) are the predominant providers of primary, direct, bedside care during childbirth. Despite this fact, there is a significant deficiency of knowledge regarding nurse-sensitive quality indicators during labour and birth. In spite of a lack of defined nurse-sensitive perinatal quality indicators, nurse researchers have provided support for the importance of perinatal nursing care to childbirth outcomes. There has been some research on nursing care during labour/birth; however, it mostly has been descriptive in nature. [1]

Pregnancy is the most critical condition yet a beautiful journey in a woman's life and experience for every mother, however, it's not an easy one.[3, 4] There's only one thing that pregnant women (who are close to their due date) think about — labour. Pregnant women are often advised to stay active through the days leading up to their due date in order to induce labour. [5]

When women are going into labour the last thing that is on their minds is dancing. Dancing is known as a safe and fun way to exercise for the pregnant women's.[5] In case, of any concerns regarding dancing during labour being safe or not, it's considered to be safe as it's an ancient tradition. In many ancient civilisations, especially in some African tribes, pregnant women dance during labour as it is believed that it helps to move the baby through the birth canal.[4]

Dance and maternal movement are powerful tools to use in pregnancy

and birth, because labour is a dance. The baby's and mother's body "combine to create unique circumstances that influence the way baby will actually move during descent". Simple movements enable the birthing mother to move her baby into an optimal position in her birth canal so the baby can move out through her vagina. In labour, movement is vital just like in pregnancy.[6] Dancing, walking, activities with physiotherapy ball and squats, are part of the patient's verticalisation, which greatly favours labour and the technique is grounded in science.[7,8]

The pregnant women in labour want to open the pelvic area and put pressure on the cervix, to ensure dilation. As the uterus is moving the baby down with each rhythmic contraction, the baby is moving in spiral, down the woman's body. When a baby is in optimal foetal position, there is greatest ease of descent for both mother and baby. Most problems in labour can be easily mitigated through maternal movement. The hormones of oxytocin, endorphins and adrenaline are released through dance and movements in birth and pregnancy giving the birthing mother the energy for the physical experience as well as giving her a euphoric emotional feeling. As the labouring mother moves her body, the blood flows and circulates to the uterus and placenta, allowing the baby to receive more oxygen-rich blood and the muscles to relax. This optimal uterine function is connecting the movement of breath pattern with the rhythmic pattern of the uterus. [6]

Dr Fernando Guedes da Cunha a Brazillian Obstetrician dubbed as "Dancing Doctor" believes that dancing has a therapeutic and effective way to relieve pain for women who are in labour as it can be most agonizing experiences a woman can experience, pertinent to mention it's pretty fun, amusing, entertaining and indicative of good bedside manner based on evidence, as dancing encourages the woman to be mobile and upright as she labours. Dance helps to flex muscles during childbirth.[3] A study published in Global Journal of Health science (2014) found that woman who participated in "dance labour" reported less pain. Although most people in the world envisions childbirth as a process that happens in the bed, but the act of remaining upright in labour helps the baby descend and puts more pressure on the cervix to dilate.[9, 10] Many of Dr Fernando's dance routines includes squats, hip movements and shimmies. In his facebook page where his videos are widely posted, he mentioned that, busting a move while in labour "contributes to relaxation and facilitates the birth of the baby." [7]

Need of the study:

Extensive literature is not available regarding the Knowledge cum attitude of the Nursing staffs and dance during labour hence the same has been explored in this study.

Childbirth is one of the most excruciating experiences a woman can endure.[7] Birth is the memory, a framework and visionary inquiry into the depths of our birthing selves to innovate and participate with the process of life. Movement is a basic human right and is vital in the birth process. It's the foetus's positioning that determines the progress of labour- the problem being the angle of the baby's head and not the cervix. Failure to progress is estimated to account for more C – sections. Women are defacto coerced into surgery or other interventions they don't need. Hospital procedures leave little choice for a woman for a natural birth. While technology and outside interventions have become the focus of birth, it hasn't produced better outcomes or better birthing experiences. We must look at the current protocols in hospitals and reframe them so mothers are really able to use the tools they possess to birth their babies in a peaceful and connected way.[6]

Having a satisfying experience to a birthing mother is being an active participant. Having access to this internal knowingness (knowledge), allows birthing mothers to have the tools for a healthy and empowering pregnancy and birthing experience, where mothers can awaken to the intelligence inherent in their own bodies.[6] A simple way mothers can ensure her baby is in the optimal birthing position by the time she goes into labour, and that she could also use this tool to make labour easier.

Dr Regina Kaplan, an Obs-gynaecologist at Ocean and Overlook Medical Centre stated: movement during labour will result in less painful delivery, as it will help shift the pressure of the baby pressing on the maternal skeletal structures and organs. She further said that dancing can help the process of birth as the baby needs to move through the birth canal, so when the mom is moving, she is assisting her baby to move through the birth canal structures as well. There's been a recent surge of videos of women dancing through labour and sharing their beneficial experiences.[7,8,11]

Labour, on average lasts about 8hrs, but studies have shown that dancing, a form of exercise, can result in a shorter and less painful labour. Kegels, a pelvic floor exercise, has also been associated with easier labour other than dancing during labour. A 1998 study published in The New England Journal of Medicine found women who walked or moved around had shorter labours.[7]

Doctors think that being physically active, like dancing or walking, may help start labour. Dancing carefully at the due date won't hurt. James Pivarnik states that as long as the pregnant woman doesn't have any health complications and high risk pregnancy, it's totally fine to try to shake the booty in order to induce labour. While Jessica Shepherd says "that dancing can be considered a form of exercise that can help relax uterine muscle."[12]

Many childbirth educators, midwives, and OB's recommend belly dancing as a prenatal form of exercise which is of low impact, high benefits for mom and baby, and perfectly readies the exact muscles needed to facilitate labour. It can gently guide baby into the optimal birthing position. There is an amazingly rich historical significance of this dance for women as it is said that midwives noticed the natural movements women made during labour, & would mimic their moves back to them in an exaggerated, dance like manner performing hip circles, undulations and figure eights, to encourage the natural progression of labour.[5]

There are educational classes for the mom-to-be in order to learn the right dance steps to induce labour. The instructors believe that "Dilation Gyration" makes the delivery shorter, easier and safer. While Ramos Dr Diana shared that dancing in labour can use gravity to put pressure on the cervix thus dilating faster. Based on recent findings there seems to be plenty proofs of dancing being beneficial to labour keeping in view the individual differences of the pregnant women.[13]

Pevzner Holly in "Move, Mama! 10 Reasons to Walk, Dance, or Whip-and-Nae-Nae During Labour" cited 10 important reasons to move the body during labour. Namely – it quells pain, need fewer medicines, empowering, gravity, speeds dilation, keep bits intact (reduced perineal trauma), everyone does, makes labour shorter, experts totally supports it and actually widening the birth canal.[14]

Childbirth is viewed as a normal life event and from childhood, girls learn how to use the muscles in their hips, abdomen and pelvis; they are loose and flexible. The ancient moves and gentle motions serve to tone the body, strengthen and engage the muscles used during birth, relax the mind and enliven the soul. Movements that form the essence of dancing can bring an array of benefits for women pre-conception, during pregnancy, labour, in the post-natal period and beyond.[15] The essential movements being:[6]

i. Rocking the hips: helps settle baby's head into the pelvic area.
ii. Leaning: helps to move the baby's back to another direction.
iii. Straddling, Squatting: opens pelvic area, gives legs and muscles some rest, puts pressure on the cervix.
iv. Spirals: balances the pressure on all sides of the cervix during dilation.
v. Sitting on all fours rotates the baby back forward, relieving pressure of quick moving labour and relieves strain of back labour.

Essentially labour is a dance between mother and baby aided by the downward force of gravity. It's the journey of the baby as it is the initiator of the labour when both mother and baby are preparing themselves emotionally and physiologically for the great opening and emergence that is coming. During the labour the cocktail of love hormones for the baby, calming, relaxing, soothing, reducing the need for oxygen. The sounds and rhythms of the mother's breathing, the movements of her body, blend into harmony with the rippling muscular contractions of the uterus around the baby's body indicating *"I am ready to be born...to breathe for myself….you can start increasing the oxytocin and let me go."*[16]

A randomised controlled trial study by Abdolahian Somayeh, Ghavi Fatemeh, Abdollahifard Sareh, Sheikhan Fatemeh on effect of dance labour on the management of active phase of labour pain and clients' satisfaction on 60 primiparous women aged 18-35 years old assigned to dance labour and control group, concluded that dance labour which is a complementary treatment with low risk can reduce the intensity of pain and increase mothers satisfaction with care during the active phase of labour.[17]

Regan & Liaschenko (2007) and Sauls (2007) found that individual L/D RN's have specific, strong attitudes and beliefs regarding childbirth and labour support during birth. The Theory of Planned Behaviour supports that these attitudes and beliefs would influence nursing care. The existing nursing research represents a good beginning, but a significant gap remains regarding L/D nursing care and perinatal outcomes. Measuring L/D RN attitudes towards childbirth would illuminate the philosophical basis with which nurses view the labour/birth process, and may provide a connection between nursing care and perinatal outcomes. Future research could explore correlations between individual L/D nurse attitudes and beliefs, and their patient outcomes. Building upon that, studies could be designed to explore which L/D RN attitudes/beliefs are correlated with exemplary perinatal outcomes. Finally, nurses with exemplary patient outcomes could be identified and their nursing care could be studied to see which attitudes/beliefs influence nursing care practices.[1]

Objectives:
1. Assess the Knowledge cum Attitude regarding dance during labour among Nursing staffs of IGIMS.
2. Find out the relationship between Knowledge cum Attitude regarding dance during labour among Nursing staffs of IGIMS
3. Analyse the relationship between Knowledge cum Attitude regarding dance during labour among Nursing staffs of IGIMS with the selected demographic variables.

Hypotheses:
H₁: There will be significant difference in Knowledge cum Attitude regarding dance during labour among Nursing staffs of IGIMS.

H₂: There will be significant relationship between Knowledge cum Attitude regarding dance during labour among Nursing staffs of IGIMS with the selected demographic variables.

Logic diagram: [2]
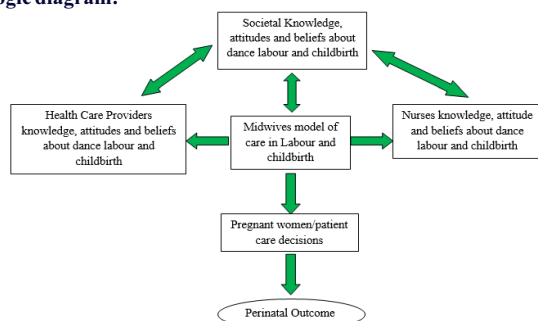
Fig 1: Logic diagram based on Midwives model of care

Research Methodology:
Research approach & Design: Quantitative, non experimental descriptive research design

Variables:
Independent: Dance during labour,
Dependant: Knowledge and Attitude

Description of Tool:
Section I: Consisting of 16 items:- Demographic profile of Nursing staffs consisting of name, age, sex, religion, professional education, marital status, parity, mode and place of delivery, monthly income ( ), nativity, employment status, cadre, job experience (years), heard about dance during labour and source of information.

Section II: Consisting of 20 self structured 5 point Likert rating scale items on Knowledge cum Attitude regarding dance during labour.

The level of Knowledge cum Attitude was classified and scored as:
Poor (0 - 33), Average (34 - 66), Good (67 – 100)

Validity & Reliability of the tool: Validity was done by a Psychiatrist. For the reliability Cronbach's Alpha test was used which was 0.76, found to be acceptable.

RESULT AND DISCUSSION: Maximum 74.6% Nursing staffs' Knowledge cum Attitude regarding dance during labour was good followed by 25.4% as average with none having poor Knowledge cum Attitude.

Table 1: Knowledge cum Attitude of Nursing staffs regarding dance during labour.
N== 122

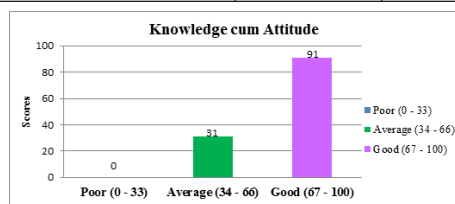| Knowledge cum Attitude score	Frequency	Percent (%)
Poor (0 - 33)	00	0
Average (34 - 66)	31	25.40
Good (67 – 100)	91	74.60
Total	**122**	**100**

Fig 2: Bar diagram showing percentage distribution of Nursing staffs' Knowledge and Attitude regarding dance during labour.

Table 2: Mean & S.D. of Knowledge cum Attitude scores of Nursing staffs regarding dance during labour
N=122

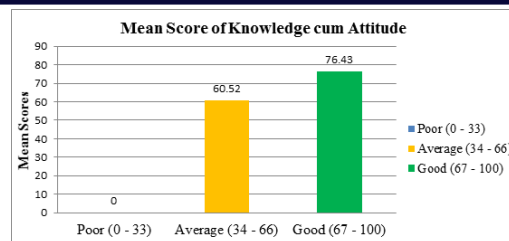| Knowledge cum Attitude score	Mean	SD	Standard Error Mean
Poor (0 - 33)	0	0	0
Average (34 - 66)	60.52	5.77	1.04
Good (67 – 100)	76.43	6.35	0.67
Overall	72.39	9.31	0.84

Fig 3: Pyramid diagram showing mean Knowledge cum Attitude score of Nursing staffs regarding dance during labour.

Table 2 and Fig 3 indicates that there is a significant difference in the poor, average and good Knowledge cum Attitude score of Nursing staffs regarding dance during labour.

DISCUSSION:
Extensive literatures were not available related to the topic Knowledge cum attitude of the Nursing staffs regarding dance during labour.

1. Knowledge cum Attitude of Nursing staffs regarding dance during labour.
The findings of the present study showed that maximum 59% of Nursing staffs between age group 25 – 40 yrs, 66% female, 69% Hindus, 59% Diploma holders, 42% married, 38% parity not applicable, 42% each mode & place of delivery not applicable, 34% having family income (₹)/ month above Rs. 50,000/-, 49% urban, 43% permanent, 71% Nursing officers & 52% having job experience between 1- 15 years, 16% who had heard about dance during labour & 9% Nursing staffs' source of information being mass media; had good Knowledge cum Attitude scores. The overall mean Knowledge cum Attitude scores of the Nursing staffs regarding dance during labour was 72.39 and SD of 9.31. There was no significant difference between the mean score among the respondents with respect to independent "t" test regarding *Sex, Marital status, Nativity, Employment status* related to Knowledge and Attitude at $p > 0.05$ while no significant difference was found regarding *Age, Religion, professional qualification, parity, mode of Delivery, Place of delivery, Family income (₹) /month, cadre, Job experience (years)* using ANOVA at $p > 0.05$ with respect to Knowledge and Attitude. Hence Null hypothesis was accepted. Maximum Nursing staffs "agreed" to all the 18 items out of 20 items except 2 items: A pregnant women during labour should not dance (33.6%), Dance lowers the rate of foetal malpositioning (40.2%) where maximum Nursing staffs "neither agreed nor disagreed".

2. Association between Knowledge cum Attitude of Nursing staffs regarding dance during labour with selected demographic variables: The present study revealed that there was no significant association of Knowledge cum Attitude of Nursing staffs regarding dance during labour with the selected demographic variables as $p > 0.05$ (5%). Hence Null hypothesis was accepted.

Implications:
The findings of the study have valuable implications towards Nursing education, Nursing practice, Nursing administration and Nursing research. The Nurse educators can use the result of the study as an informative illustration for imparting education in an effective way by imparting various informations, assisting the community in developing potentials and utilising the informatics. Nursing practice requires a blend of the most current Knowledge and practice standards with an insightful and human approach to client care, so the researcher's generally integrate findings into practice which should be research based in order to meet the social challenges. The health care administrators should be able to motivate and initiate the health professionals in organising, conducting and participating in various educational programs that would contribute to better health care delivery system. There is a wide scope of conducting research study in depth using different tools in order to assess the effectiveness of dance during labour in real setting on pregnant women at their due date.

CONCLUSION:
The conclusion inferred, was that maximum 74.6 % had good Knowledge cum Attitude score related to dance during labour. There was no significant association found between Knowledge cum Attitude of Nursing staffs regarding dance during labour with the selected demographic variables.

Recommendations: The study can be replicated in the hospital & community settings on the pregnant women at their due date with a larger sample.

Conflict of Interests: The authors declared no conflict of interests.

REFERENCES:

1. Levine, M. S. (2015). Measuring nurse attitudes towards childbirth: a psychometric test of the nurse attitudes and beliefs questionnaire-revised on a national sample of labour/delivery nurses (Doctoral dissertation, University of Colorado at Denver, Anschutz Medical Campus. Health Sciences Library).
2. The Mahagony way birth café. 2011 May 2. Available from: https://themahoganyway birthcafe. wordpress.com/ 2011/05/02/preparing-for-birth-midwife-model-of-care-vs-medical- model-of-care/
3. Doctor dancing with pregnant woman to release stress. News X Bureau. [Updated 2018 Jan 24]. Available from: https://www.newsx.com/lifestyle-and-fashion/viral-video-doctor-dancing-with-pregnant-woman-to-release-stress
4. Watch: Brazilian Doctor dances to Despacito with would-be-moms to reduce pain; video goes viral. [Published 2018 Jan 24]. New Delhi. Available from: http://indianexpress.com/article/trending/viral-videos-trending/watch-brazilian-doctor-dances-to-despacito-with-would-be-moms-to-reduce-pain-video-goes-viral-5035912/
5. Snow Rachel. Dance your baby out: Dance your baby into optimal position for labour and give birth easier. Available from: http://dancingforbirth.com/dance-your-baby-out/
6. Allen Gingi. The dance of labour. 2012 Nov 12. Available from: www.theartofmothering. com available from https://birthways.org/the-dance-of-labour/
7. Baulkman Jaleesa. Doctor helps women through labour by dancing with them in hilarious videos- and research shows it does help. [Published online 2018 Jan 19]. Dailymail.com.
8. Gazet David. Doctor gets pregnant women in labour DANCING and research shows it does help. [Updated 2018 Jan 21].
9. Murphy Carrie. World's best OB dances with his patients while they're in labour. 2017 November 8. Available from: https://www.simplemost.com/brazilian-ob-dances-patients-labour/
10. Tate Carolyn. Obstetrician choreographs labour dance. 2017 Nov 3. Available from: http://www.essentialbaby.com.au/birth/stages-of-labour/obstetrician-choreographs-labour-dance-20171103-gze4i5
11. Doctor dances with women in labour to ease their pain. [Published on 2018 Jan 21]. Available from: https://www.deccanchronicle.com/lifestyle/viral-and-trending/210118/ doctor- dances-with- women-in-labour-to-ease-their-pain.html
12. Fitness trainer Emily Skye tried to induce labour by dancing. instagram.com/ emily skye fit
13. Lewis Rachelle. Dancing Can Be Beneficial For Labour. 2018 March 15. Available from: https://www.babygaga.com/dancing-beneficial-labour/
14. Holly Pevzner. Move, Mama! 10 Reasons to Walk, Dance, or Whip-and-Nae-Nae During Labour. 2018 Jan 17. Available from: https://www.parents.com/ pregnancy/ giving-birth/ labour-and-delivery/move-mama-10-reasons-to-walk-dance-or-whip-and-nae-nae/
15. Birth dancing- gentle movements from ancient wisdom pregnancy, birth and beyond. Available from: http://thebirthlady.com.au/birth-dancing
16. Active Birth Centre- A labour of Love Part 4: The Dance of Labour- Mother and Baby - Active Birth Centre.   Available from: http://www.activebirthcentre.com/birth-2/the-dance-of-labour/
17. Abdolahian Somayeh, Ghavi Fatemeh, Abdollahifard Sareh, Sheikhan Fatemeh. Effect of dance labour on the management of active phase of labour pain and clients' satisfaction: A randomised controlled trial study [Online]. 2014 May [Cited 2014 March 30]. Glob J Health Sci. 6(3): [219- 226].