



OBSTETRICIAN'S OPINIONS ABOUT INDEPENDENT NURSE MIDWIFERY PRACTITIONER (INMP) IN A HILLY NORTH-INDIAN STATE: A QUALITATIVE EXPLORATION

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ABSTRACT **INTRODUCTION:** Only 58.1% of Indian mothers had minimum 4 antenatal care visits (NFHS-5). 100% Institutional birth's goal is still underachieved (88.6%). It can only be achieved by increasing accessibility to appropriate midwifery care. INMP addresses all such issues effectively as the evidences from other countries suggest. **METHODS:** The present study was conducted among obstetricians practicing in the 4 selected hospital of two districts of Uttarakhand. Samples were selected purposively through maximum variation technique. Semi-structured, open-ended interview schedule was utilized to collect data. Data saturation was achieved after 14 audio-taped interviews. Lincoln and Guba's framework was utilized to establish level of trustworthiness. Interview verbatim were transcribed and translated. Thematic analysis was done by using RQDA software. **RESULTS:** Participant's mean age was 34.93±6.09 years. Most of them (64%) were unaware about INMP cadre. 4 themes i.e. perception, perceived scope of practice, perceived barriers of INMP & ways to overcome the perceived Barriers of INMP emerged during analysis. 14 subthemes emerged from further thematic analysis. Overall, participants had positive opinions about INMP. **CONCLUSION:** There is acute shortage of skilled healthcare to mothers at the peripheral areas in the state and country as a whole. INMPs can address this key issue effectively.

KEYWORDS : Independent nurse midwifery practitioner, perception, perceived scope of practice, barriers

INTRODUCTION

The history of Midwifery in India is as old as the Vedic era. In ancient times there is literature documentation of women assisting another woman in birthing process. At present, two Indian states i.e. West Bengal and Gujarat started Nurse practitioners in Midwifery course but being a state driven policy it couldn't serve its purpose as much as it would have been. It faced issues like poor support from the policy makers at central levels, frequent changes in the leadership, poor uptake of trained Nurses due to which most NPMs were forced to resume their previous positions.

India has Total fertility rate (TFR) of 2.0 (NFHS-5) and birth rate of 19.5% (SRS-2020). Institutional birth rate of the country is 88.6% which is far away from the goal of 100% coverage. Uttarakhand's institutional birth rate is just 83.2% which is lagging behind the national average. Caesarean section rate has also increased from 17.2% (NFHS-4) to 21.5% (NFHS-5). Studies have found that a caesarean rate of more than 10% isn't effective in reducing maternal and neonatal mortality rates. These increasing rates of LSCS can be reduced by effective screening and proper care of all pregnant mothers and opting for LSCS only when necessary. India's current MMR is 103 which is far above the SDG of reducing MMR to less than 70 by the year 2030. Uttarakhand's neonatal mortality rate (NMR) (32.4%) and infant mortality rate (IMR) (39.1%) are also comparable to national average which are 24.9% and 35.2% respectively. Only 58.1% of Indian mothers had minimum 4 antenatal care visits (NFHS-5). And only 78% mothers received post-natal care within first two days in post-natal period by any of the healthcare personnel. It is a burning fact that out of all deliveries conducted at home only 3.2% were conducted by skilled health personnel and only 79.1% of neonates were examined by some health care personnel within their first two days of life. There are inequalities in the utilization and accessibility of the maternal care services based upon education, socio-economic status, residence and mass media exposure.

These all facts indicate that there is a dire need of Independent Nurse Practitioners in Midwifery for a developing country like India, seeking to reduce its MMR and IMR. As they can improve the accessibility to healthcare services thereby maximizing the healthcare coverage. The ministry of health & family welfare (MoHFW, India) has released 'guidelines on midwifery services in India' in the year 2018, detailing about strategic framework, education and training of nurse practitioners in midwifery (NPM), institutional arrangements and monitoring, evaluation & quality assurance mechanisms. Following

this, the Indian nursing council (INC) has also released 'Guidance note: Planning for midwifery initiative 2019-2020' briefing about establishment of training institutes, selecting and training the midwifery educators, training cascade and plans for strengthening NPM training. As obstetricians and Nurse midwifery practitioners are going to work together in the near future, it is highly important to understand about obstetricians' opinions about INMPs. Hence, to explore this we took up the present study.

METHODS:

Research design: Qualitative Research

Setting: Four hospitals of Dehradun and Haridwar districts of Uttarakhand, North India

Sample and sampling technique: Obstetricians were selected through purposive (maximum variation) sampling technique. Sample size was based upon data saturation which was achieved after 12 interviews. But for being on safer side 2 more interviews were conducted to exclude possibility of any new data. Hence, total number of participants was 14 in this study.

Selection criteria: Registered Obstetricians with minimum six months of clinical experience in Obstetrics and Gynaecology, willing to participate and present during data collection were selected.

Ethical Considerations: Ethical clearance was taken from the institutional ethical committee (IEC) of AIIMS Rishikesh Along with written permission from each selected hospital. Written informed consent was obtained from the participants, individually. Anonymity of the subjects and confidentiality of information was maintained throughout.

Data collection tool and method: A self-structured sociodemographic profile data sheet was given to obtain demographic details of participants. As INMP is very new concept for Indians so a brief and neutral description about it was provided to the participants. Thereafter, participants were interviewed by using semi structured open-ended questionnaire of total five questions in calm & comfortable environment to get their opinions about INMP. The responses were audio-taped. Bracketing was done before collecting data through self and peer review and non-judgmental approach to the participants.

Validity and reliability: The content validity of the data collection tools was obtained from 9 subject experts. For establishing level of

trustworthiness, Lincoln and Guba's criteria was utilized. Credibility (well established research methods were employed, researcher's "reflective commentary" and audio-taping was done to capture information accurately), dependability (peer debriefing/scrutiny), conformability (interview transcriptions were checked by an independent person for objectivity) and transferability (detailed reporting of the research process and thick description of findings) were maintained.

Data analysis & Interpretation: Data was analysed into various steps:

1. Transcription and translation of verbatim into English
2. English transcripts were checked by an independent person for objectivity
3. Coding of data in RQDA software
4. Thematic analysis: Accurate themes and subthemes were picked up by using RQDA software

RESULTS:

Half (50%) of the participants were from 31-40 years' age group. Mean age of the participants was 34.93±6.09 years. Half of them (50%) were having >4 years' experience. About 43% of the participants were currently working in 'Non-Teaching hospital'. Most of them (64%) were unaware about INMP cadre. (Table 1)

Table 1: Sociodemographic variables

Socio-demographic variables	Obstetricians (n=14) f (%)
Age (in years)	
21-30	06 (43)
31-40	07 (50)
41-50	01 (07)
Educational status	
Post-graduate	09 (64)
Super-specialization	05 (36)
Years of experience	
6 months-2 years	03 (21)
2-4 years	04 (29)
>4 years	07 (50)
Currently working in	
Govt.-Teaching Hospital	05 (36)
Private-Teaching Hospital	03 (21)
Non-Teaching hospital	06 (43)
Awareness about INMP cadre	
Yes	05 (36)
No	09 (64)

OBSTETRICIAN'S OPINIONS ABOUT INMP

4 themes and 14 subthemes emerged after coding, categorization and analysis of participant's responses. Participants responded under 3 main themes i.e. perception, perceived scope of practice and barriers of INMP. One additional theme 'ways to overcome the perceived Barriers of INMP' emerged later during analysis. (Table 2).

Theme 1: Perceptions about INMP

Overall, participants had positive Perceptions about INMP. 93% of the obstetricians believed that INMPs are vital at peripheral area as they can maximize healthcare coverage by making the services more accessible in the remote areas where doctors are unavailable. 57% of the obstetricians stated that the concept of INMP will reduce their workload by managing cases at the lower centres. Whereas, 29% obstetricians also pointed out about INMPs' have limited role at higher/tertiary care centres.

Theme 2: Perceived Scope of Practice of INMP

71% of participants believed that INMPs can render antenatal & Intranatal care effectively and independently. Whereas, only 64% of them were positive about INMPs providing postnatal and new-born care. Majority (79%) of the participants agreed that INMPs can do the initial management/stabilization and referral of complicated cases thereby reducing MMR.

Theme 3: Perceived Barriers of INMP

Majority of the obstetricians (79%) talked about 'acceptance/reliability related barriers from public' as public might doubt or not accept/rely in INMPs initially. The patients might prefer doctors over INMPs. 'Obstetrician related Barriers' (64%) were identified as second most common barrier as there might be reliability issues, collaboration

issues and role conflicts among INMPs and Obstetricians initially. INMPs might be threat to some Obstetricians' financial security. 43% of the obstetricians believed that there can be some 'Nurse's related Barriers' as well like hesitancy in taking up a new course, negligence, inadequate knowledge/skills, safety concerns during outreach services. 'Setup, training and infrastructure related barriers' were identified by 36% the participants.

Theme 4: Ways to overcome the Perceived Barriers of INMP

Various ways to overcome the perceived barriers of INMP were identified by the obstetricians. Half of them (50%) emphasized on 'training INMPs effectively in proper infrastructure and supervision'. Proper setup, supervised learning, focusing more on skills can aid in reducing barriers. Making everyone aware about INMP (43%), inspiring budding nurses to take up the course (21%), collaboration with hospitals and Obstetricians (29%), practice policy for INMP (29%) and rendering quality care to the public (14%) can also help in reducing barriers over the time.

Table 2: Obstetrician's opinions about INMP (n=14)

Objective	Theme	Sub-theme
To explore Obstetrician's opinions about INMP	Perceptions about INMP	<ul style="list-style-type: none"> • INMPs can play vital role at periphery (13) ✓ INMPs are essential at peripheral/remote places wherever doctors are unavailable ✓ INMPs can bridge the gap in accessibility of healthcare services ✓ INMPs can ensure maximum healthcare coverage • INMP's can reduce obstetrician's workload (8) • INMPs have limited role at tertiary care centres (4)
	Perceived Scope of Practice of INMP	<ul style="list-style-type: none"> • INMPs' can: ✓ Care for mother during antenatal period (10) ✓ Care for mother during Intranatal period (10) ✓ Give postnatal and new-born care (09) ✓ Screen and handle/refer complicated cases thereby reducing MMR (11)
	Perceived Barriers of INMP	<ul style="list-style-type: none"> • Obstetrician related Barriers (09) ✓ Collaboration issues & Role conflicts between INMPs and Obstetricians initially ✓ Obstetricians might doubt INMP's reliability initially ✓ INMPs might pose threat to Obstetricians' financial security • Nurse's related Barriers (06) ✓ Nurse's hesitancy in taking up a new course ✓ Negligence from Nurse's side ✓ Demonstration of inadequate knowledge/skills by INMP ✓ Safety of INMP while giving outreach services • INMP might face acceptance/reliability related barriers from public initially (11) ✓ People might not accept or rely on INMPs initially ✓ Public might doubt INMP's value initially ✓ Patients might prefer going to a doctor in place of INMP • Setup, training and infrastructure related barriers (05)
	Ways to overcome the Perceived Barriers of INMP	<ul style="list-style-type: none"> • Inspiring Nurses to take up the course (03) • Creating awareness about INMP (06)

	<ul style="list-style-type: none"> • Training INMPs effectively in proper infrastructure and supervision (07) ✓ Effective training in proper setup & infrastructure ✓ Efficient teachers to supervise INMPs & make them learn things properly ✓ Focusing more on skills • Collaborating INMP's services with hospitals and Obstetricians (04) • Regulation & Policy for INMP's practice (04) • Demonstration of quality care by INMPs (02)
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Note: Each subtheme's code frequencies are represented in brackets

DISCUSSION

Countries like U.K, Sweden and Chile are running exclusive Midwifery courses for a period of 3 to 5 years and more weightage is given to clinical skills development and practice. Indian nursing council has also launched an 18 months' nurse practitioner in midwifery (NPM) program and has outlined NPMs scope of practice.15

In the present study half (50%) of the obstetricians were from 31-40 years' age group whereas in another similar study conducted on general doctors, only 30% were from the above age group. In this study, obstetricians felt that 'INMPs can play vital role at periphery with doctor's shortage to ensure maximum healthcare coverage.' But some of Obstetricians felt that 'INMPs have limited role at tertiary care centres.' These findings are in line with what Mahadalkar and De (2016) founded in their study. Many countries of the world follow a mixed model of Midwife-led and medical led care. There are reports of reduction in the MMR at a great extent from all these countries. Majority of the study participants (79%) also believed that INMPs can aid in reducing MMR by stabilizing and referring the cases whenever needed.

Indian nursing council (INC) has delineated about INMPs role in perinatal care and ongoing care of new-borns and clearly stated that INMPs can manage all the normal cases. However, in the present study participants were more inclined towards INMPs role in antenatal & Intranatal care (71%) and less (64%) in postnatal and newborn care. Obstetricians' opinions about INMPs' stabilizing and referring the case beyond its capacity is in line with what INC has recommended.

Present study, also found that collaboration issues between INMPs and Obstetricians will be there initially, similar findings were noted in other study as well (Maillefer, Labrusse, Vonèche, Hohlfield and Stoll, 2015). In the present study, participants' talked about various barriers related to obstetricians (64%), acceptance from public (79%), Nurses' related Barriers (43%) and Setup, training and infrastructure related barriers (36%). Another study (Mayra K et al.) pointed towards regulatory failure leading to under skilled and sub-standard nursing and midwifery taskforce in India. And emphasized upon the need to strengthen regulatory structure and leadership.

Strengths of the study

Being a qualitative study, it provides more in-depth insights about the phenomenon studied. Using computer software (RQDA) for analysing data makes the findings more precise, objective and reliable. For enhancing level of trustworthiness, Lincoln and Guba's criteria was utilized throughout. Objectivity of the findings was cross-checked by independent person.

Limitations

This study has various limitations. Firstly, extraneous variables like participants' previous experiences with nurses which might have influenced their opinions of INMPs was beyond the researchers' scope to control. Secondly, collecting data about a very new concept (INMP) was challenging for the researchers & to ease that we gave pre-validated, brief and neutral description about INMP to the participants before interviewing them. Lastly, being a small scale study, specifically in a hilly state might challenge its generalisability to whole India which has large geographical variations.

sample, adding other healthcare professionals also, making the findings more generalizable. Opinions of doctors/obstetricians practicing in Rural and Urban areas or in Government and private setup can also be compared. The present study pin-pointed potential barriers of INMPs and ways to overcome them effectively. This study recommends need of vigilance from nurses, competency based curriculum for INMPs, 'Proper regulation & Policy for INMP' in order to protect both the public and INMPs while practicing.

CONCLUSION

The present study shows that the obstetricians have favourable opinions about INMPs despite mostly being unaware about INMP cadre. There will be various barriers regarding INMP initially which can be reduced gradually through INMPs' competence, awareness, collaboration and team-approach.

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Recommendations: Similar studies can be conducted on a wider