

Summer Internship Report

at

NHM Punjab

MATERNAL AND CHILD HEALTH

(April 22nd to June 21st, 2024)

A Report

By

SURBHI KUMARI

PGDM (Hospital and Health Management)

2023-2025



International Institute of Health Management Research

New Delhi

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to *Dr. Inderdeep Kaur*, who supervised me throughout my internship at the National Health Mission, Punjab under the Maternal and Child Health division. She provided me with valuable guidance and feedback throughout the two months of my internship. She also encouraged me to explore new areas in the field of public health.

I am also thankful to *Dr. Diksha Sharma, Mrs. Randeep Sidhu, Mr. Varun Gupta*, and *Mr. Randeep* who assisted me in various aspects of my internship. They were always supportive and helpful, and shared their insights and experiences with me. They also helped me to network with other professionals and stakeholders in the health sector.

I am also thankful to *Dr. Preetha GS* under her mentorship this report has been prepared.

This internship has been a great learning opportunity for me, and I appreciate the support and guidance of everyone at the National Health Mission, Punjab. I hope to apply the skills and knowledge I gained from this internship in my future endeavors.

INTERNSHIP CERTIFICATE



CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

.....*Surbhi Kumari*.....

has completed internship under the guidance of *PO - MCH, SHQ*
under National Health Mission for *Laqshya Quality Improvement Scheme*
from date *22nd April '2024* to *21st June '2024*

We found *him*/her sincere, hardworking, dedicated and result oriented.

He/She worked well as a part of the team during *his*/her tenure.

National Health Mission Punjab wish *him*/her all the best for the future endeavors.

Mission Director
National Health Mission , Punjab

FEEDBACK FORM

FEEDBACK FORM

(Organization Supervisor)

Name of the Student: SURBHI KUMARI

Summer Internship Institution: SUB-DIVISIONAL HOSPITAL, KHANNA,
LUDHIANA

Area of Summer Internship: LaBshya = Quality improvement scheme
for Labour Room & Maternity OT.

Attendance: Full

Objectives met: Very Good

Deliverables: Marvellous

Strengths:

~~Comments for Improvement:~~

Hard working, Excellent in work, communication and behaviour
MSBhasin

Signature of the Officer-in-Charge (Internship)

[SMO, Khanna, Ludhiana]

Date: 24-06-2024

Place: Khanna, Ludhiana

ABBREVIATION

NRHM = national rural health mission

MCH = maternal and child health

ASHA = Accredited social health activist

MMR = maternal mortality rate

CS = Cesarean section

LaQshya = Labour Room Quality Improvement Initiative

CEmONC = Comprehensive Emergency Obstetric And Newborn Care

DMO =Duty Medical Officer

MoHFW = Ministry of Health and Family Welfare

RCHO = Reproductive & Child Health Officer

DFPO = District family planning officer

Introduction

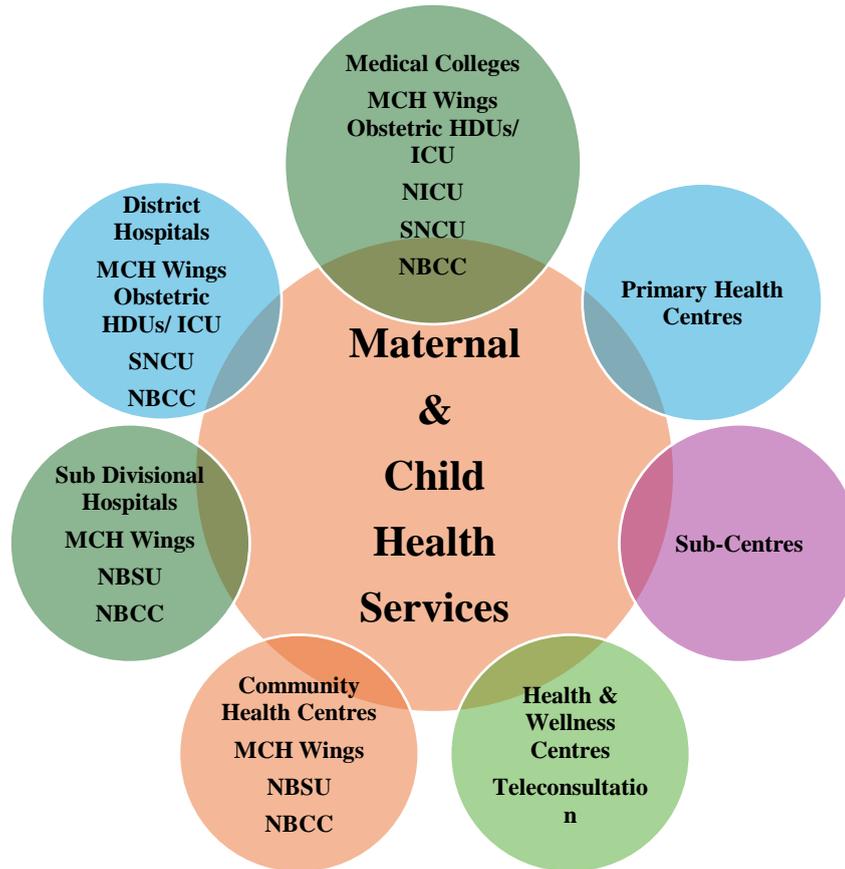
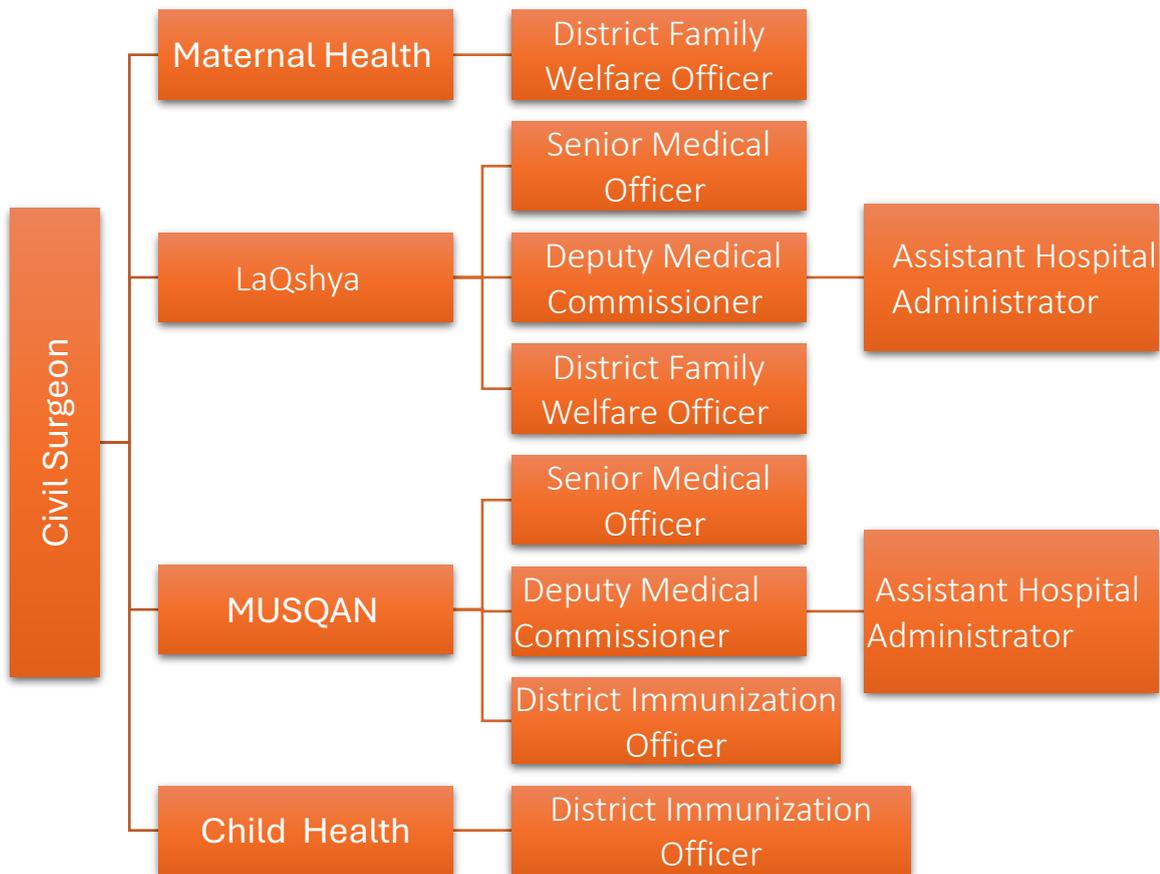


Fig : Infrastructure and Organizational Structure in Districts



Vital Statistics

Indicators	Punjab	India
Maternal Mortality Ratio	105	97
Mothers who had an antenatal check-up in the first trimester	68.5%	70.0%
Mothers who had at least 4 antenatal care visits	58.1%	59.3%
Pregnant women age 15-49 years who are anaemic (<11.0 g/dl)	51.7%	57.2%
Institutional births in public facility (%) (NFHS-5)	53.9%	61.9%
Average out-of-pocket expenditure per delivery in a public health facility (Rs.)	3,745	2,916

I have done an internship for two months at National Health Mission, Punjab under the Maternal and Child Health Division (MCH). The main objective of my internship was to gain practical exposure to the functioning and challenges of the public health system in India, and to apply my academic knowledge and skills to contribute to the MCH program.

Background Note on C-section Rate

There is a growing trend of Cesarean Section (CS) deliveries worldwide, occurring in both public and private healthcare facilities. In some cases, the rates are very low, indicating limited access to comprehensive obstetric care for complicated deliveries. The rise in CS rates is a significant public health issue, sparking global debates due to the potential risks to mothers and newborns, disparities in access, and cost concerns. Health authorities and medical professionals have voiced concerns about the increasing number of cesarean births and the possible negative effects on maternal and infant health. While medically necessary C-sections can prevent maternal and perinatal mortality and morbidity, there is no evidence to support the benefits of C-sections for women and infants who do not need the procedure.

In India, the rate of cesarean deliveries has risen from 17% to 21.5%, according to the NFHS-5 survey. The rates vary significantly, from 5.2% in Nagaland to 60.7% in Telangana, with an increase observed in 31 out of 36 States and Union Territories. States like Telangana, Andhra Pradesh, Tamil Nadu, Sikkim, Punjab, Kerala, Goa, and Jammu and Kashmir report particularly high rates, influenced by both public and private sectors.

In 1985, a WHO panel of reproductive health experts stated that no region should have a CS rate higher than 10-15% of all deliveries. In 2015, the WHO reviewed existing evidence and concluded that CS rates above 10% are not linked to reduced maternal and newborn mortality rates at the population level. The focus should be on ensuring C-sections are available to those in need, rather than targeting a specific rate. A universal classification system for cesarean sections at the hospital level is needed to improve data consistency and management of CS rates.

The MCH Action Plan advocates for a comprehensive and integrated approach to the health of women, newborns, children, and adolescents. It outlines a strategy to ensure that interventions in health, nutrition, and development are implemented fairly across all levels within the state, with the active involvement of all stakeholders and partners.

Objective of C section audit:

- 1) To address the increasing trend of cesarean births, conducting C-section audits at healthcare facilities is an effective nonclinical intervention and a crucial component of the LaQshya initiative.**

- 2) To ensure that cesarean sections are used appropriately and only in medically indicated cases, the operationalization of C-section audits and the implementation of corrective and preventive measures are key process interventions under the LaQshya initiative. These actions help ensure that C-sections are performed only when there are strong clinical reasons.**

Modality of audit:

All high-volume Comprehensive Emergency Obstetric and Newborn Care (CEmONC) delivery points are required to conduct audits using the designated format and share consolidated reports with the next level at the recommended frequency. The state must also submit a consolidated report to the national level on a quarterly basis.

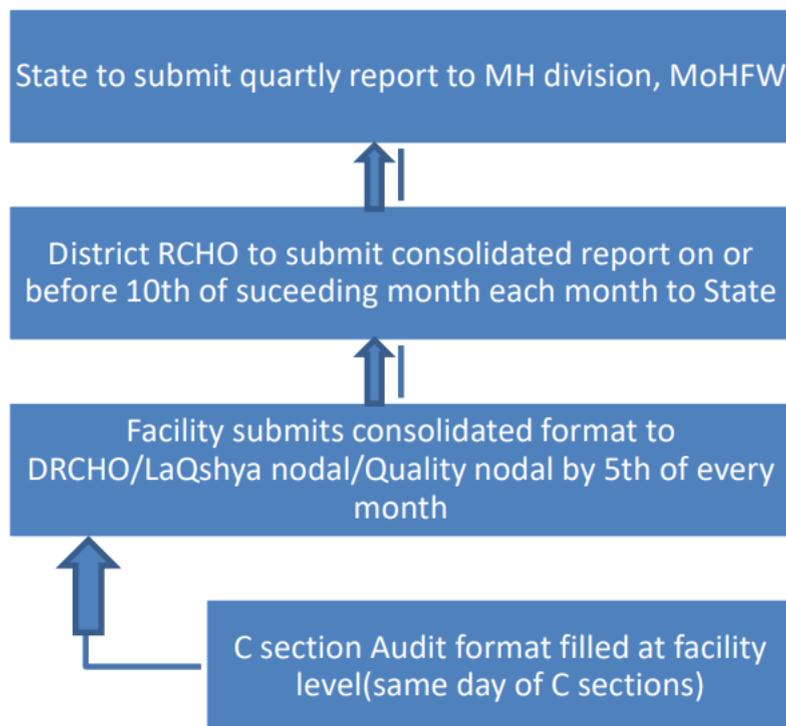
METHODOLOGY:

A google sheet has been created and mailed to all the districts of Punjab, data is collected through google sheet.

The data has been received on CESAREAN SECTION AUDIT DISTRICT ANNUAL REPORT (APRIL 2023 TO MARCH 2024) on yearly basis for the year 2023-2024 from the DFPOs of district hospitals.

For the analysis of this data, methods and tools that are commonly used in statistics and data science are applied.

Microsoft Excel is used to organize, filter and visualize the data in a spreadsheet format. According to which data was prepared and then mean, cumulative percentage, minimum and maximum functions was performed for the year 2023-2024 from district hospitals.



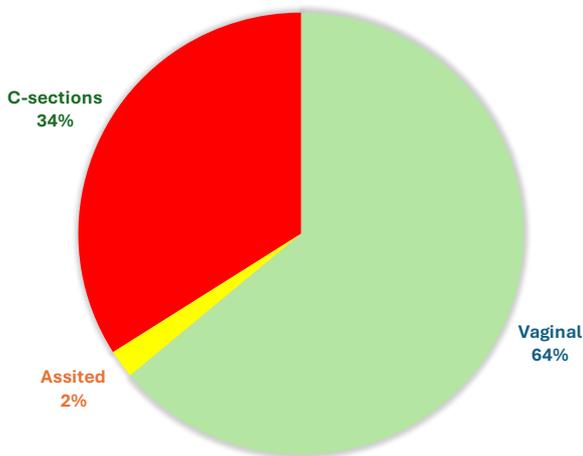
Guidance Note for Conducting Cesarean Section (CS) audit

1. Objective: The audit aims to rationalize the CS rates across all levels of healthcare facilities.
2. Scope: The audit should include all primary CS cases and repeat CS cases.
3. Frequency: The audit should be conducted daily, reviewing CS procedures performed on the same or previous day.
4. Responsibility: The person who performed the C-section should complete the audit form, ideally on the day of the operation. If the operating doctor is unavailable the next day, they should conduct the audit during their next shift.
5. Evaluation: The auditing doctor should provide an opinion on the necessity of each CS.
6. Utilization of Findings: Audit findings should be discussed in monthly LaQshya-quality circle meetings. Participation from all obstetricians, including postgraduate students in MCH and DNB candidates in district hospitals, as well as qualified CEmONC trained doctors and the hospital quality manager/LaQshya nodal officer, is mandatory.
7. Data Reporting and Timelines:
 - A monthly consolidated report of the audit findings (using the enclosed format) should be completed by each facility and sent to the district by the 5th of every month.
 - The district should forward the consolidated report to the state by the 10th of each month.
 - The state should compile the reports and send them to the MH division of the Ministry of Health and Family Welfare (MoHFW) quarterly.
8. Discussion and Action: The findings from the report should be reviewed for necessary actions during monthly Reproductive and Child Health (RCH) review meetings at both district and state levels.

FINDINGS:

**CESAREAN SECTION AUDIT DISTRICT ANNUAL REPORT
(APRIL 2023 TO MARCH 2024)**

Distribution of type of Deliveries opted across state of Punjab n =146058

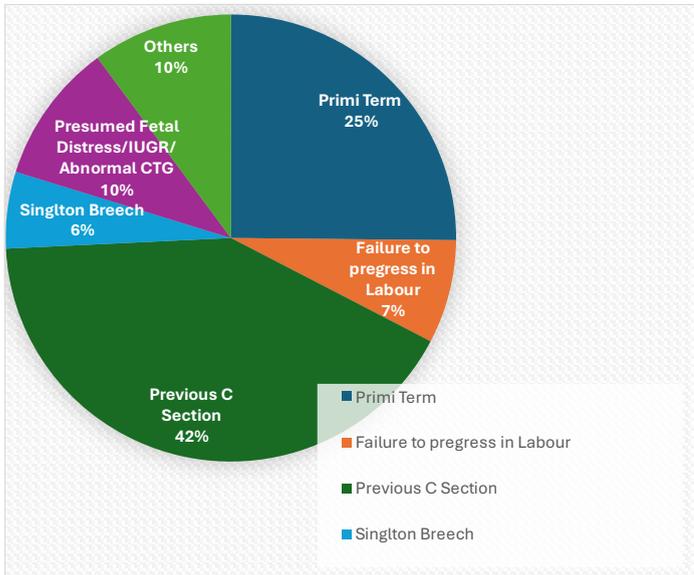


Indicator	Number	Percentage
Vaginal	93352	63.91 %
Assisted	3047	2.09 %
C-sections	49659	34 %

Total Number of deliveries across districts of Punjab

S.NO	District	Number of deliveries			
		Vaginal	Assited	C-sections (A)	Total (B)
1	Amritsar	12534	474	5432	18144
2	Barnala	2614	352	2021	4987
3	Bathinda	5460	403	2853	8716
4	Faridkot	2517	1	1069	3587
5	Fatehgarh Sahib	1758	0	871	2629
6	Fazilka	4217	25	676	4918
7	Ferozepur	3212	0	740	3952
8	Gurdaspur	4445	0	3279	7724
9	Hoshiarpur	4510	331	3880	9367
10	Jalandhar	4702	101	3133	7936
11	Kapurthala	2838	0	2556	5394
12	Ludhiana	6945	0	2206	9151
13	Malerkotla	1182	0	489	1671
14	Mansa	3076	645	2072	5148
15	Moga	1833	0	1542	3375
16	Muktsar	4569	0	910	5479
17	Pathankot	1680	0	1892	3572
18	Patiala	7118	0	5315	12433
19	Rupnagar	1201	369	820	2390
20	SAS Nagar	6281	72	2453	8806
21	Sangrur	3551	188	3739	7757
22	SBS Nagar	2022	0	1110	3132
23	Tarn Taran	4562	0	108	4670

INDICATION OF C- SECTION ACROSS PUNJAB STATE

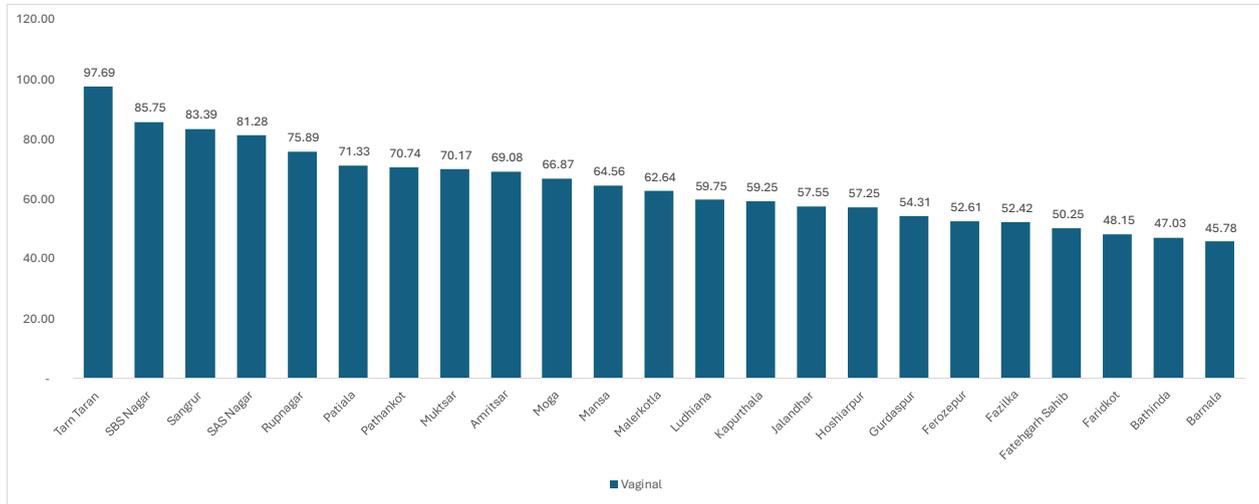


INDICATOR	NUMBER	PERCENT AGE
Pre Term	12906	25.01
Failure to progress in Labour	3843	7.37
Previous C Section	21338	41.83
Singleton Breech	2844	5.45
Presumed Fetal Distress/IUGR/Abnormal CTG	5198	10.11
Others	5173	10.22

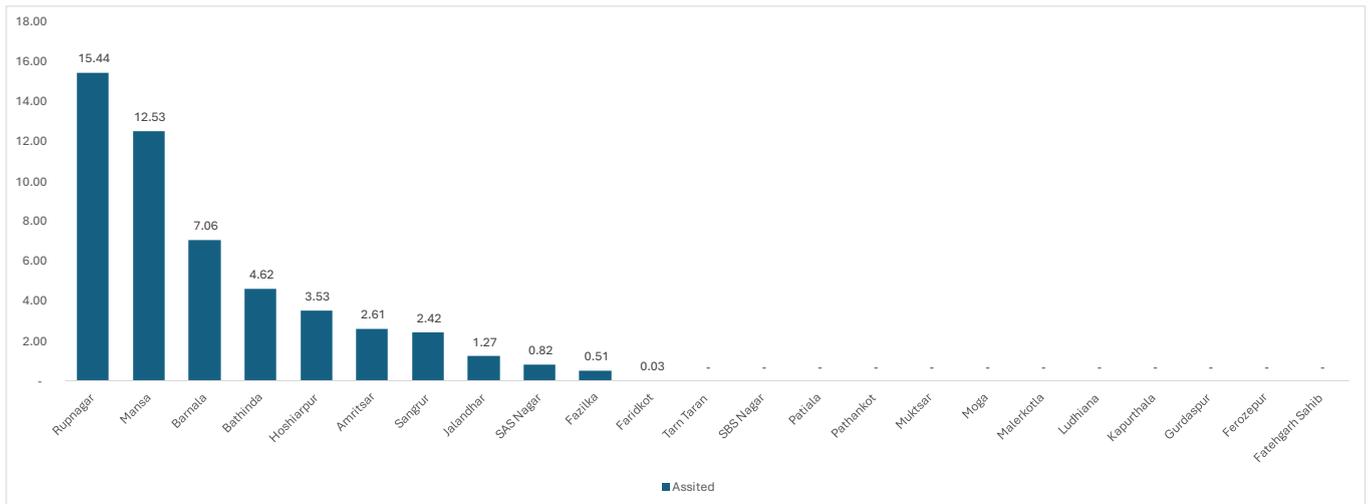
S.NO	District	INDICATION OF C-SECTION					
		Pre Term	Failure to progress in Labour	Previous C Section	Singleton Breech	Presumed Fetal Distress/IUGR/Abnormal CTG	Others
1	Amritsar	1293	271	2310	272	810	447
2	Barnala	54	99	837	151	174	397
3	Bathinda	1073	196	1349	194	306	516
4	Faridkot	341	120	624	87	133	78
5	Fatehgarh Sahib						
6	Fazilka	82	73	370	56	17	5
7	Ferozepur						
8	Gurdaspur	368	266	2032	49	55	79
9	Hoshiarpur	783	314	1908	270	463	569
10	Jalandhar	782	420	1354	217	360	0
11	Kapurthala	425	38	808	34	66	25
12	Ludhiana	308	128	1058	160	394	158
13	Malerkotla	36	92	312	12	26	11
14	Mansa	1986	134	434	156	144	60
15	Moga	591	95	659	120	223	357
16	Muktsar	788	190	319	83	100	53
17	Pathankot	780	326	798	75	221	472
18	Patiala	845	438	2145	332	750	1157
19	Rupnagar	346	78	382	49	160	151
20	SAS Nagar	667	134	1203	134	316	22
21	Sangrur	712	276	1763	241	303	507
22	SBS Nagar	384	39	480	63	91	100
23	Tarn Taran	0	0	0	0	0	0

INDICATION
OF
C-SECTION

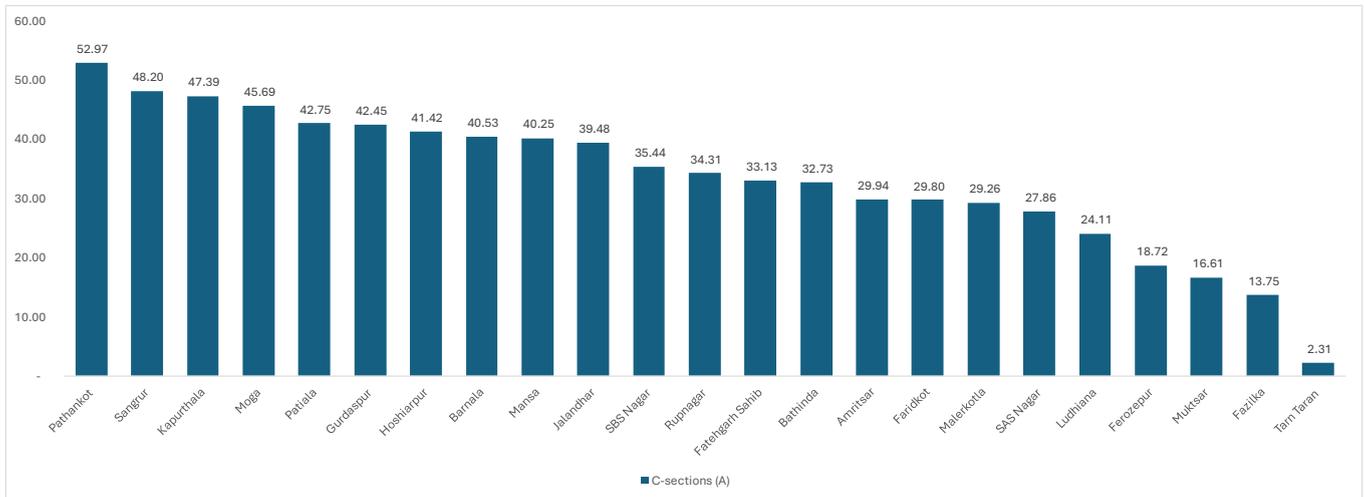
PERCENTAGE OF VAGINAL DELIVERIES ACROSS DISTRICTS OF PUNJAB



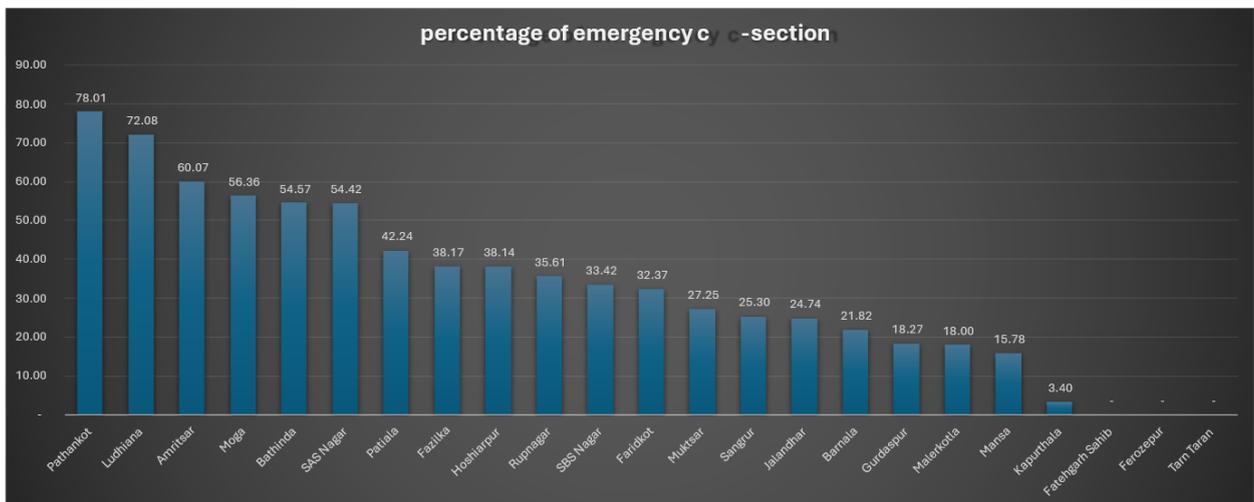
PERCENTAGE OF ASSISTED DELIVERIES ACROSS DISTRICTS OF PUNJAB



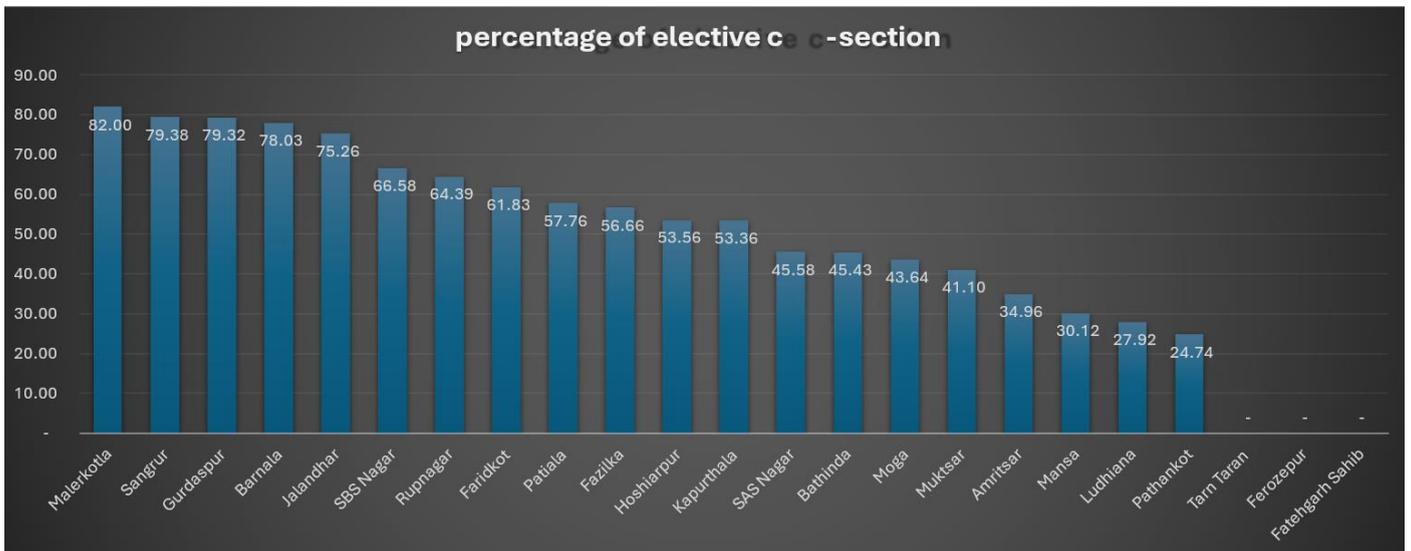
PERCENTAGE OF C-SECTION DELIVERIES ACROSS DISTRICTS OF PUNJAB



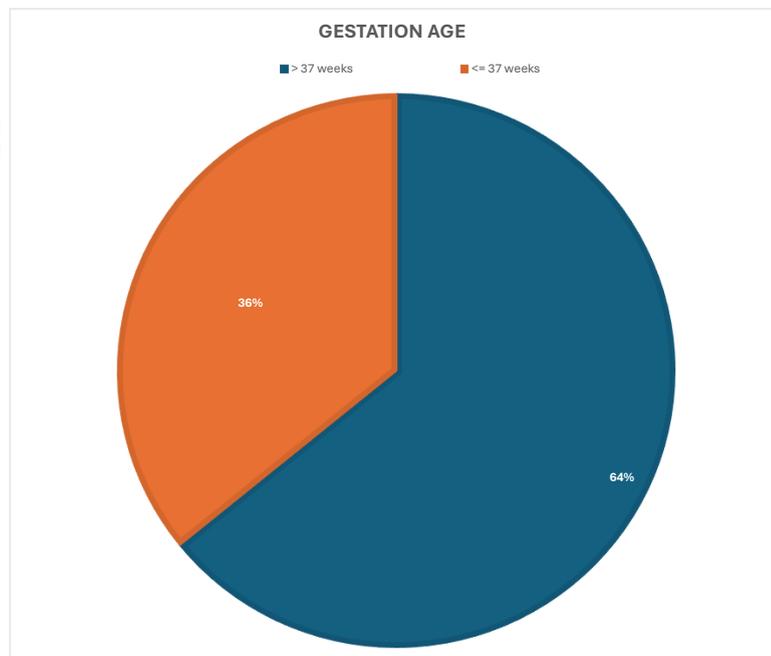
Percentage of emergency c - section out of total c-section



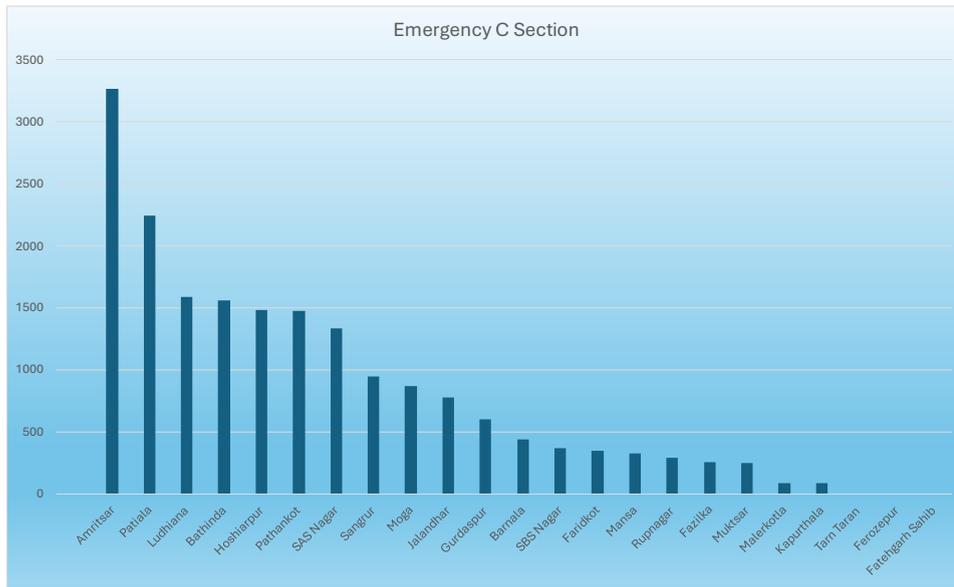
Percentage of elective c-section out of total c-section



GESTATION AGE IN THE PUNJAB STATE

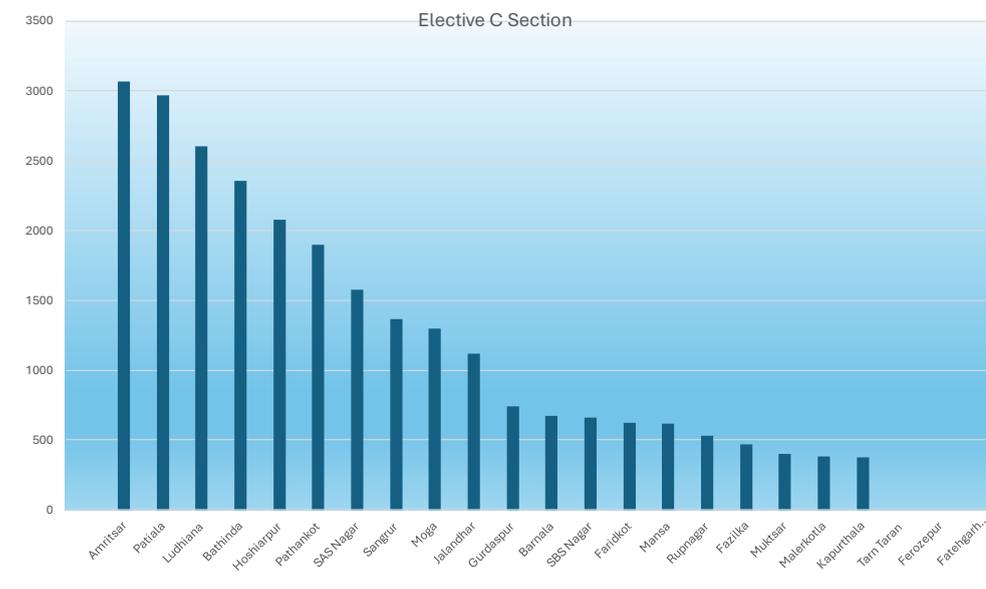


Emergency C - Section across district of punjab



District	Emergency C Section
Amritsar	3263
Patiala	2245
Ludhiana	1590
Bathinda	1557
Hoshiarpur	1480
Pathankot	1476
SAS Nagar	1335
Sangrur	946
Moga	869
Jalandhar	775
Gurdaspur	599
Barnala	441
SBS Nagar	371
Faridkot	346
Mansa	327
Rupnagar	292
Fazilka	258
Muktsar	248
Malerkotla	88
Kapurthala	87
Tarn Taran	0
Ferozepur	0
Fatehgarh Sahib	0

Elective c-section across districts of punjab



S.NO	District	Elective C Section
1	Amritsar	3070
2	Patiala	2968
3	Ludhiana	2601
4	Bathinda	2358
5	Hoshiarpur	2078
6	Pathankot	1899
7	SAS Nagar	1577
8	Sangrur	1364
9	Moga	1296
10	Jalandhar	1118
11	Gurdaspur	739
12	Barnala	673
13	SBS Nagar	661
14	Faridkot	624
15	Mansa	616
16	Rupnagar	528
17	Fazilka	468
18	Muktsar	401
19	Malerkotla	383
20	Kapurthala	374
21	Tarn Taran	0
22	Ferozepur	0
23	Fatehgarh Sahib	0

DISCUSSION:

The analysis shows that, the number of vaginal deliveries conducted across the districts of Punjab was 63.91% of the total deliveries, followed by c-section which was 34% and assisted that comprises of 2.09% of the total deliveries. Which clearly shows that the percentage of C-section deliveries were maximum in many districts, which is not a good indication. and is one of the main reasons for maternal deaths.

From the data we also interpreted that the main reason for C-section deliveries was firstly previous C-section =41.89%, followed by PRE-TERM which was =25.01%.

Maximum vaginal deliveries were conducted in Tarn Taran i.e. =97.69%

Maximum percentage of assisted deliveries across the districts of Punjab was conducted in ROPNAGAR,

Maximum percentage of C-section deliveries in PATHANKOT.

It was also observed that the percentage of gestation age > 37 weeks =36%

And the gestation age <37 weeks =64%

LIMITATION:

A possible limitation of this analysis is that it only covers the year 2024 and does not compare it with previous years. Therefore, it is unclear whether there is any increase or decrease in number of C-section. Moreover, the report shows a high proportion of CESAREAN deliveries which reduces the clarity and specificity of the data. This makes it challenging to identify the risk factors, preventable causes, and potential interventions that could reduce the number of cesarean deliveries in Punjab.

REFERENCE:

<https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=822&lid=218>

https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCH_MH_Guidelines/LaQshya-Guidelines.pdf

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/C-section_document_Low_Res_5th_Jan.pdf

MATERNAL DEATH REVIEW SUMMARY

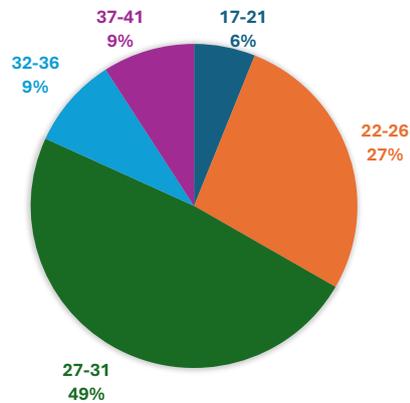
1ST MAY to 31ST MAY

District wise maternal death (1st may to 31st may)

S.No	District	Number of Maternal Death	Name & Date of Maternal Death	
1	Ferozepur	4	<u>Rajwinder Kaur</u>	02-05-2024
			<u>Seeta</u>	10-05-2024
			<u>Manjeet Kaur</u>	14-05-2024
			<u>Malti</u>	15-05-2024
2	Jalandhar	3	<u>Jyoti</u>	03-05-2024
			<u>Sunil Kumari</u>	06-05-2024
			<u>Devika</u>	14-05-2024
3	Muktsar	2	<u>Mandep Kaur</u>	04-05-2024
			<u>Iqbal Kaur</u>	13-05-2024
4	Tarn Taran	1	<u>Gurjit Kaur</u>	07-05-2024
5	Gudaspur	3	<u>Manpreet Kaur</u>	08-05-2024
			<u>Anu</u>	11-05-2024
			<u>Nisha</u>	12-05-2024
6	Ludhiana	1	<u>Harpreet Kaur</u>	13-05-2024

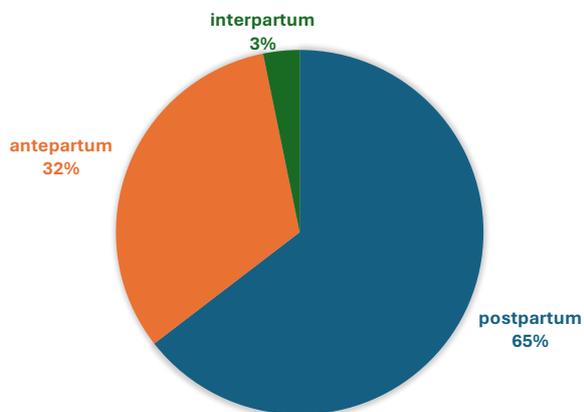
S.No	District	Number of Maternal Death	Name & Date of Maternal Death	
1	Sangrur	3	<u>Manjeet Kaur</u>	16-05-2024
			<u>Kamalpreet Kaur</u>	23-05-2024
			<u>Prabhjot Kaur</u>	26-05-2024
2	Mohali	3	<u>Neha Chauhan</u>	17-05-2024
			<u>Rangeeta Kumari</u>	24-05-2024
			<u>Neha</u>	27-05-2024
3	Tarn Taran	1	<u>Sandeep Kaur</u>	17-05-2024
4	Fazilka	1	<u>Seeta Rani</u>	18-05-2024
5	Patiala	2	<u>Ramandeep Kaur</u>	18-05-2024
			<u>Simran Kaur</u>	28-05-2024
6	Muktsar	1	<u>Karamjit Kaur</u>	19-05-2024
7	Hoshiarpur	1	<u>Mamta</u>	21-05-2024
8	Ludhiana	5	<u>Rajvir Kaur</u>	22-05-2024
			<u>Seeta Kashyap</u>	22-05-2024
			<u>Anita Devi</u>	23-05-2024
			<u>Palvi</u>	24-05-2024
			<u>Jaspreet Kaur</u>	30-05-2024
9	Jalandhar	1	<u>Rekha Rani</u>	23-05-2024
10	Gurdaspur	1	<u>Geeta</u>	27-05-2024

Age wise distribution of maternal deaths n=33



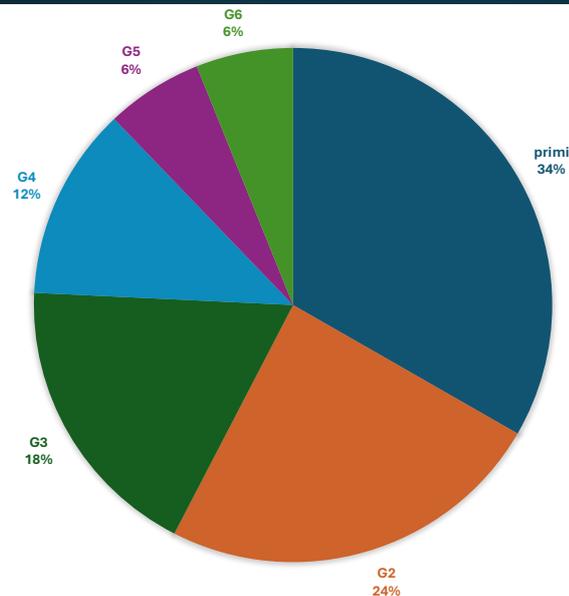
Age range	Percentage of maternal death
17-21	6%
22-26	27%
27-31	49%
32-36	9%
37-41	9%

Time of maternal death n=33



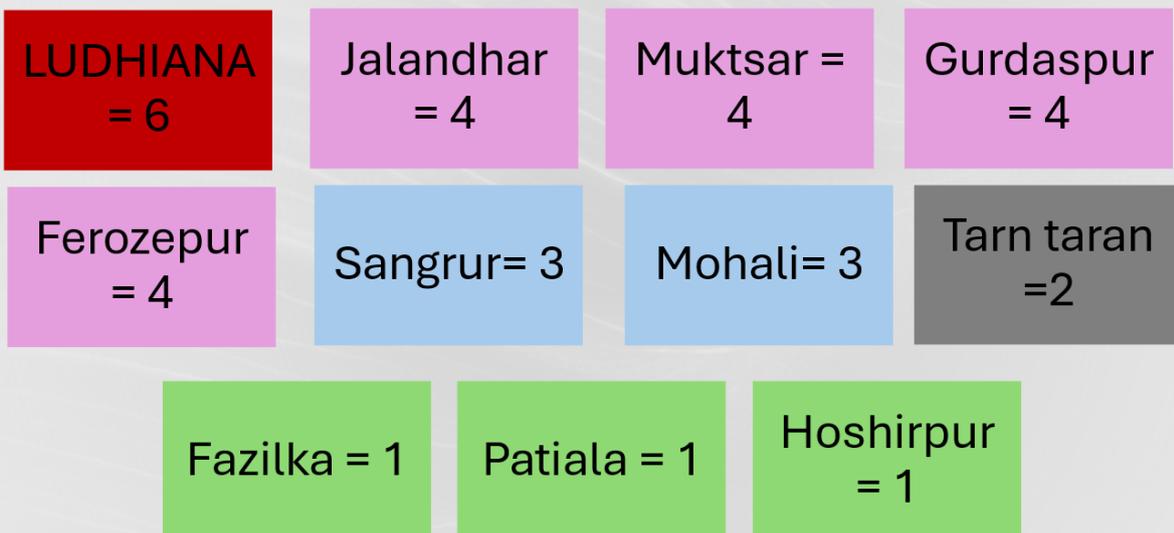
Time of maternal death	Number of maternal death	Percentage of maternal death
Postpartum	20	60.6%
Antepartum	10	30.3%
interpartum	1	3%

GRAVIDA wise distribution of maternal deaths n=33



gravida	PERCENTAGE
primi	33.3
G2	24.2
G3	18.2
G4	12.1
G5	6.1
G6	6.1

NUMBER OF DEATHS DISTRICT WISE (n=33)



Maternal deaths along with respective gravida

NAME	AGE	Gravida
Rajwinder kaur	28	G3P2L2
Seeta	27	primi gravida
Manjit kaur	28	primi gravida
Malti	38	G6P5L5
Jyoti	25	G4P1L1A2
Sunil kumari	35	G4P3L3
Devika	27	G3P2L2
Mandeep kaur		primi gravida
Iqbal kaur	29	G2P1L1
Gurjit kaur	28	G5P4L4
Manpreet kaur	17	Primi Gravida
Anu	32	G2A1
Nisha	23	G2P1L1
harpreet kaur	37	G3P2L2
prabhjot kaur	23	primi gravida
manjeet kaur	27	G2
kamalpreet kaur	30	P5L5

rangeeta kumari	28	primi gravida
neha chauhan	27	G2P1L1
neha	21	G2P1L1
geeta	27	G2P1L1
seeta rani	29	G5P4L4
ramandeep kaur	22	primi gravida
simran kaur	26	G2P2L3
karamjit kaur	25	G4P2A1L2
mamta	30	G3P1L1A1
Rajvir Kaur	34	G3P2
Seeta Kashyap	23	primi gravida
Anita Devi	28	G3P1L1A1
Palvi	28	primi gravida
Jaspreet Kaur	25	primi gravida
rekha rani	34	primi gravida
sandeep kaur	26	g4p3l1s3

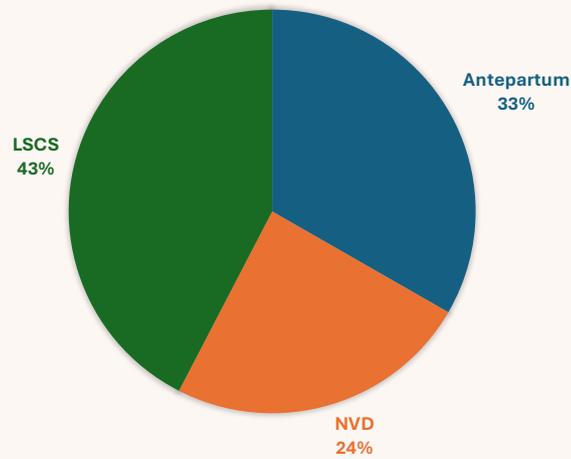
HRP associated with maternal deaths

Number of HRP associated with anaemia=18

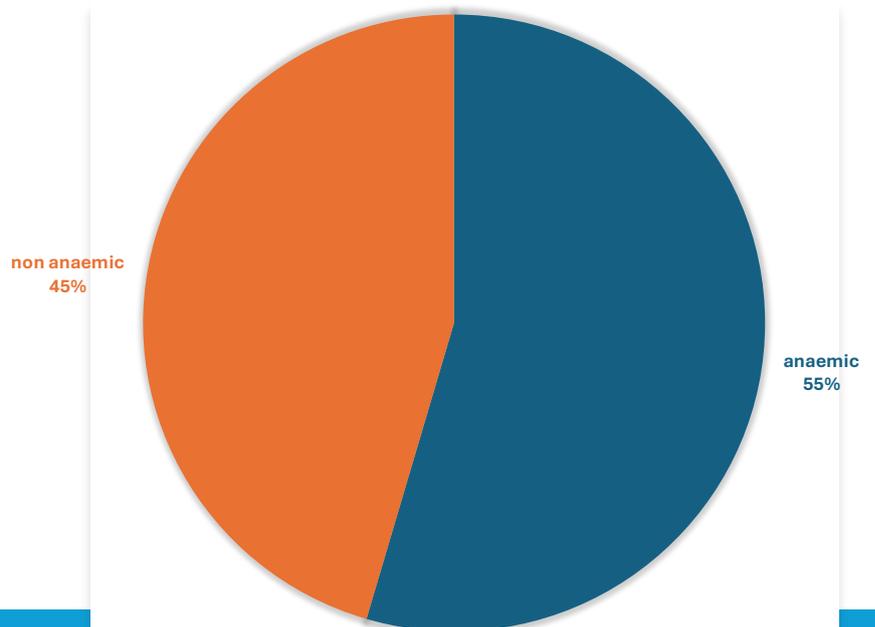
Number of HRP associated with Hypertension =6

Others = 15

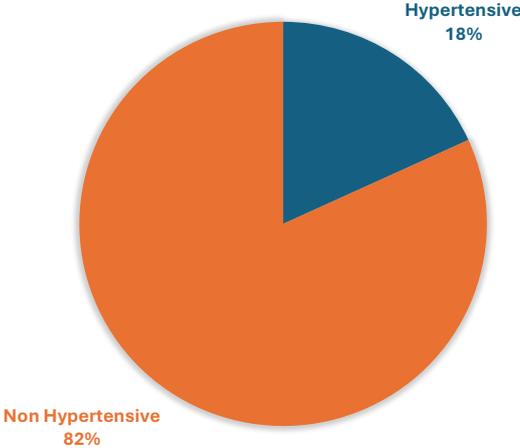
Mode of delivery during maternal death n=33



Percentage of HRP associated with anaemia

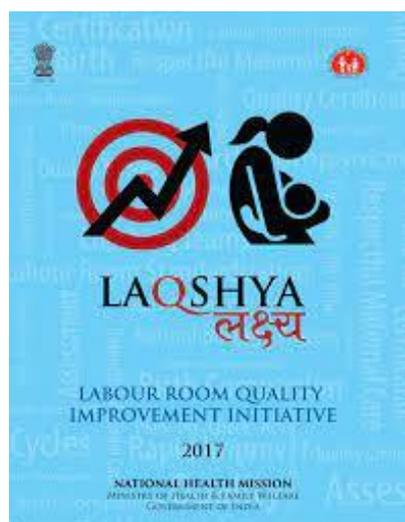


Percentage of HRP associated with hypertension



Labour Room Quality Improvement Initiative

LaQshya



- LaQshya is an initiative to improve the quality of care (QoC) in the Labour Rooms (LRs), Operation theatres (OTs) and other mother and child services areas in public health facilities across the country
- Organization and standardization of *Labour rooms, OTs and Obstetric HDUs/ICUs* as per national guidelines and standards
- Structured *Quality Improvement efforts/processes* to improve adherence to critical practices around childbirth
- Improved client satisfaction - “*Respectful Maternity Care*” (RMC).
- *The program aims to reduce complications and deaths of mothers and babies around the period of childbirth which contributes to the highest proportion of maternal and newborn deaths.*

National Quality Assurance Standards		Version-2
Checklist for Labour Room		3
 LAQSHYA लक्ष्य		 NGAS
Assessment Summary		
Name of the Hospital	SDH KHANNA	Date of Assessment
Names of Assessors		Names of Assesseees
Type of Assessment (Internal/Peer/External)		Action plan Submission Date
Labour room Score Card		
Area of Concern wise Score		Labour Room Score
A	Service Provision	100%
B	Patient Rights	95%
C	Inputs	85%
D	Support Services	95%
E	Clinical Services	92%
F	Infection Control	93%
G	Quality Management	81%
H	Outcome	88%
		90%

Labour room (LaQshya)

Checklist score=90%

MAJOR GAPS:

- 1) Necessary information regarding services provided is not displayed
- 2) Lack of availability of staff nurse as the amount of patients is large.
- 3) Name of doctors and nurses on duty not displayed and updated.
- 4) Not adequate space as per patient or workload.
- 5) Physical condition of building not good.
- 6) Lack of availability of security guards.
- 7) No security arrangement in labour rooms
- 8) Low availability of linen, sterile drape for newborn.
- 9) Identification tags for mother and baby.
- 10) Non availability of elbow operated taps.

National Quality Assurance Standards			Version-2
Checklist for Maternity Operation Theatre			9
Assessment Summary			
Name of the Hospital	SDH KHANNA	Date of Assessment	21-06-2024
Names of Assessors	SURBHI KUMARI	Names of Assesses	
Type of Assessment (Internal/External)		Action plan Submission Date	
Operation Theatre Score Card			
Area of Concern wise Score			Operation Theatre Score
A	Service Provision	83%	93%
B	Patient Rights	100%	
C	Inputs	85%	
D	Support Services	96%	
E	Clinical Services	99%	
F	Infection Control	97%	
G	Quality	78%	
H	Outcome	92%	

Maternity OT (LaQshya)

Checklist score=93%

MAJOR GAPS:

- 1) No ICU/HDU services in the facility.
- 2) Low availability of OT Technicians.
- 3) Lack of nurses as the patient count is high.
- 4) No SNCU, SHIFTING NEWBORN TO SNCU, although NBSU is present.



IMAGE GALLERY:

