



Summer Training Report

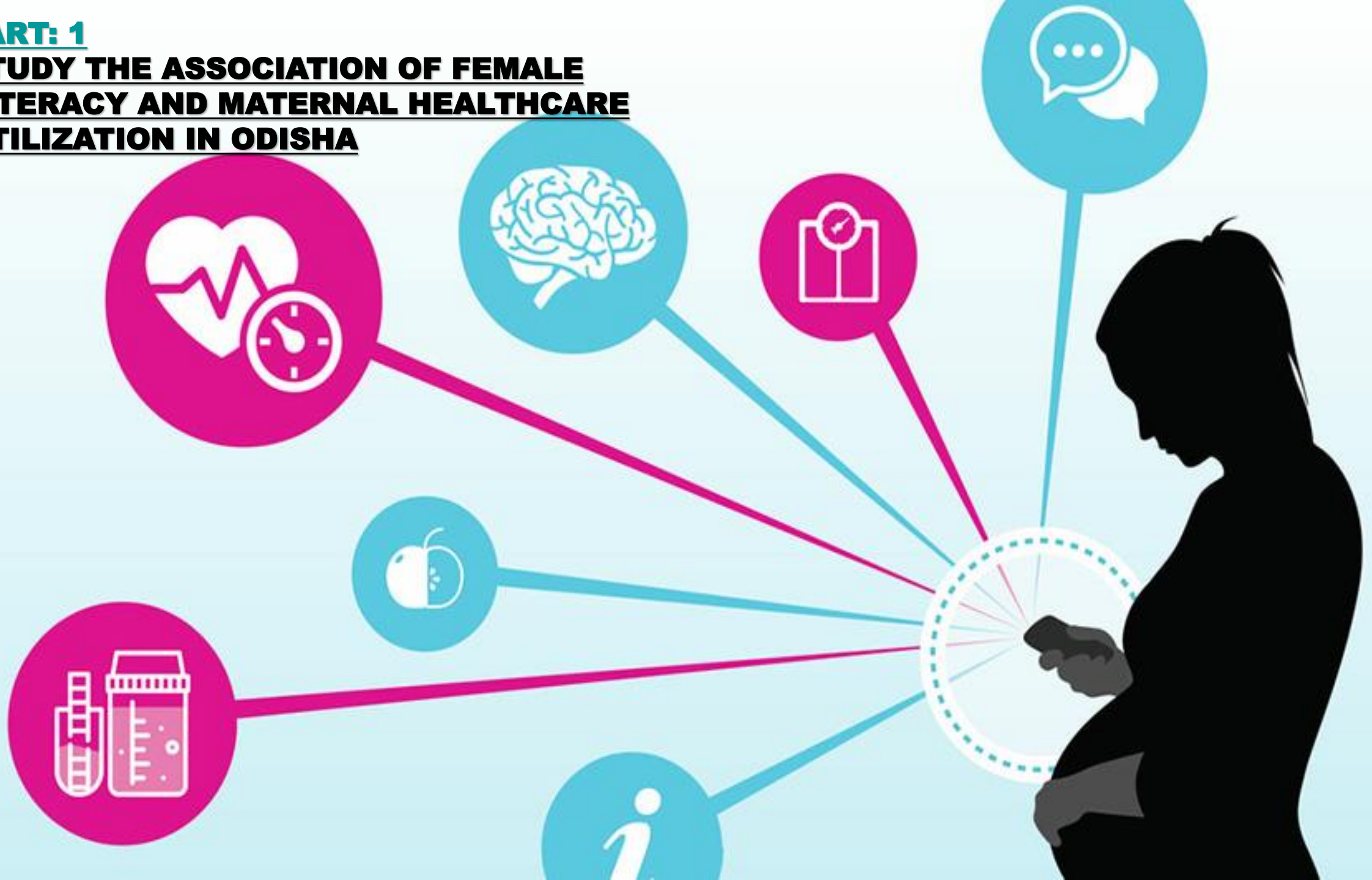
By
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MBA (Hospital and Health Management) 2019-21

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PART: 1

STUDY THE ASSOCIATION OF FEMALE LITERACY AND MATERNAL HEALTHCARE UTILIZATION IN ODISHA



INTRODUCTION

- The well-being of mothers both physically and emotionally during pregnancy, childbirth and the post-natal, refers to maternal health.
- Excessive blood loss infection, high blood pressure, abortion done in unsafe environment without the supervision of a skilled professional, obstructed labor and some of the indirect caused such as anemia malaria, heart disease lead to maternal injuries or even death.
- Most of these reasons are completely preventable if they are managed by a professional working in a supportive environment at the right time. The global agenda is to reduce preventable maternal deaths.
- And while this remains our top priority, survival of the mother during childbirth should not be restricted to maintaining good maternal health. Efforts should also be made into reducing the injuries resulting from childbirth.

➤ According to WHO, Maternal Mortality can be defined as.

‘Maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes’.

The SDG’s replaced the MDG’s which began as an initiative to end poverty. Off the 17 Goals Globally, first target of SDG 3 of is ‘by 2023, reduce the global maternal mortality ration to less than 70 per 100’000 live births (*UNDP, 2011*)



RESEARCH QUESTION

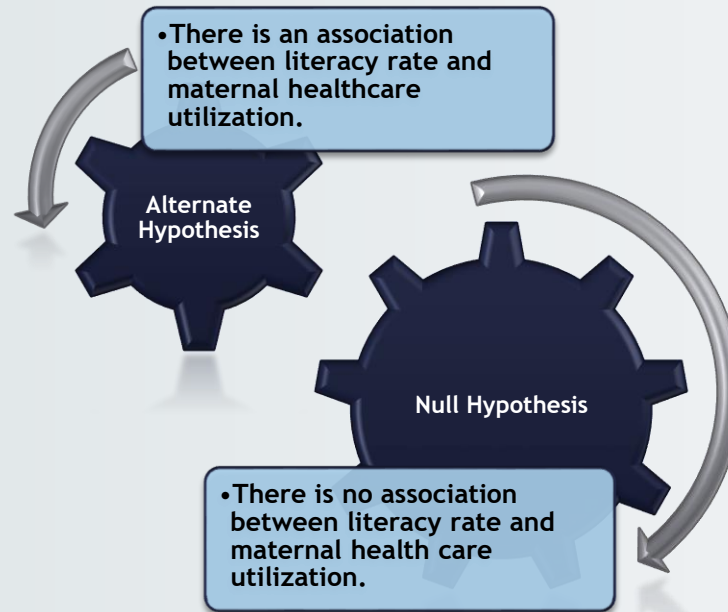
Does literacy rate influence the maternal health care utilization in Odisha?

OBJECTIVE



To find out association between maternal health care utilization and literacy rate in Odisha.

HYPOTHESIS



BACKGROUND

- As per the SRS bulletin 2015-17, the maternal mortality rate of India is 122 per 100,000 live births with a Confidence Interval of 95%.
- Four percent of these deaths are observed amongst adolescents between the age group of 15-19 years.
- India has seen a tremendous decline in maternal mortality in the recent years, however it is still far from reaching its SDG target.
- The Government of India has initiated various schemes aimed towards improving maternal and child healthcare and reduce mortality. The programs are as follows,



**Janani Suraksha
Yojana**



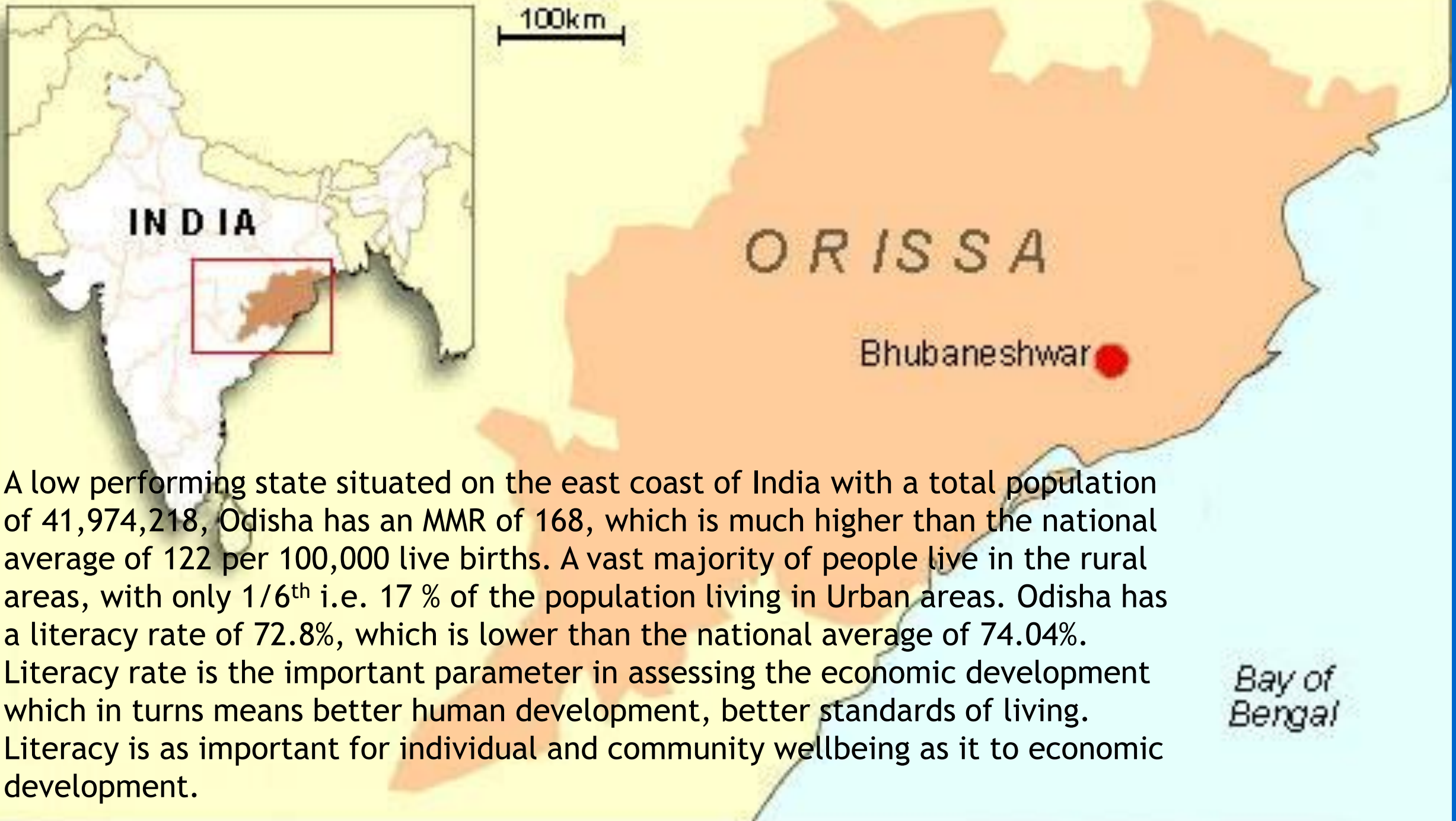
**Janani Shishu
Suraksha Karyakram**



**Pradhan Mantri
Surakshit Matritva
Abhiyan**



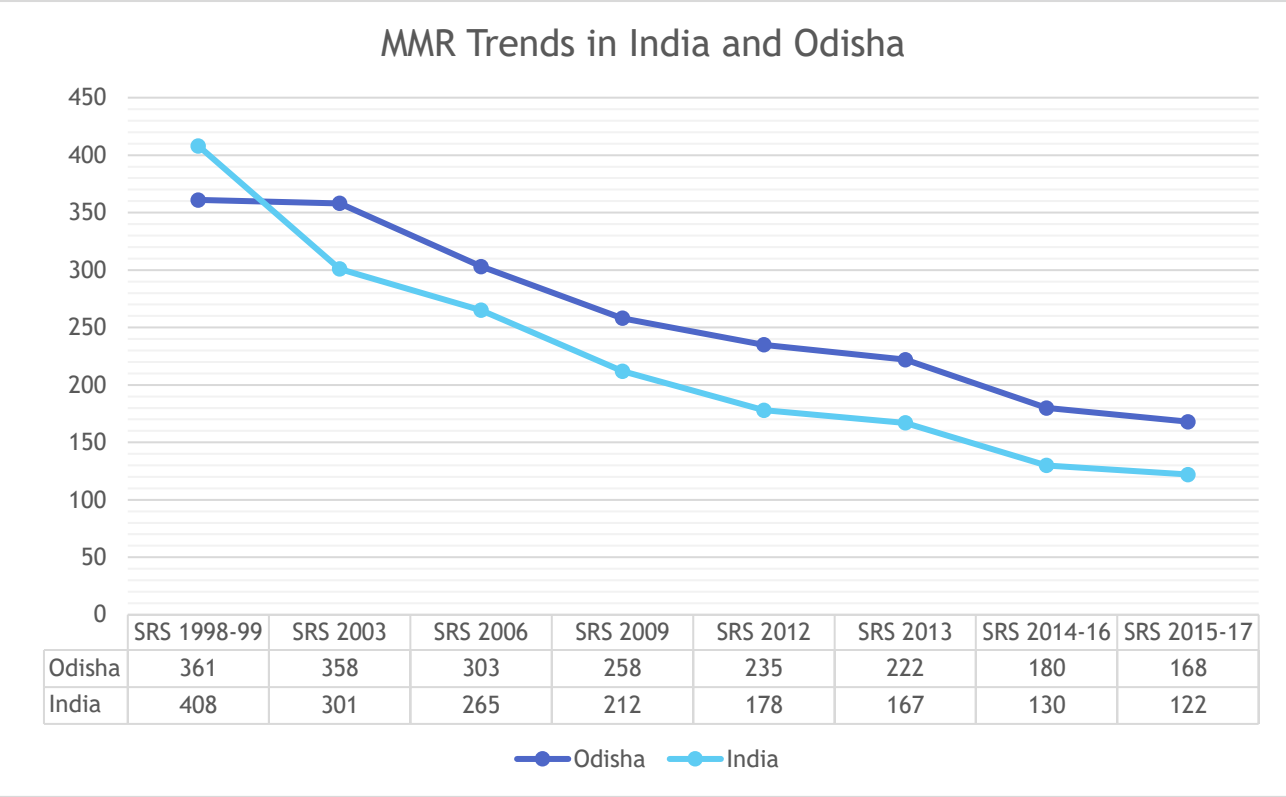
**Labour room Quality
Improvement Initiative**



A low performing state situated on the east coast of India with a total population of 41,974,218, Odisha has an MMR of 168, which is much higher than the national average of 122 per 100,000 live births. A vast majority of people live in the rural areas, with only 1/6th i.e. 17 % of the population living in Urban areas. Odisha has a literacy rate of 72.8%, which is lower than the national average of 74.04%. Literacy rate is the important parameter in assessing the economic development which in turns means better human development, better standards of living. Literacy is as important for individual and community wellbeing as it to economic development.

Apart from the central government schemes, Odisha has also launched the MAMTA campaign in the year 2011, where in the state bears the cost of antenatal, Institutional delivery and post-delivery expenditure of the mother and child(for the 1st year), for upto 2 children.

The Government of Odisha has also initiated a Chemoprophylaxis program where in pregnant women are given prophylactic Chloroquin after 12 weeks of pregnancy and continued until 2 weeks after delivery. Odisha is a malaria prone state and apart from causing maternal and infant mortality, it is also responsible for low birth weight.



METHODOLOGY

- Various online platforms were used to gather research paper which are relevant for the study such as

- Scholarly

- PubMed

- Google

- The secondary data was collected from various reliable government database such as,

- National Family Health Survey-4 (2015-16)

- Census 2011

- Sample Registration System

- Annual Health Survey 2011-12

- Statistical Analysis done using Excel.

The relationship between the two variables, which are the maternal health indicators and literacy rate, is established using Pearson's correlation coefficient formula where,

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

- A positive value of r means a positive correlation between the variables whereas a negative value of r denotes a negative correlation.
- Range of Pearson's correlation coefficient= +1 to -1

	HIGH • ±0.50- ±1
	MODERATE • ±0.30- ±0.49
	LOW • Less than or equal to ±0.29

SUMMARY OF REVIEWED LITERATURE

YEAR PUBLISHED	PLACE	OBJECTIVE	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
2001-2003	India	To find the usage of healthcare facilities by women in the rich and poor states of India	SRS 2001	Women from poorer states had poor access to healthcare, where as socio-economic factors influenced usage of the facilities in the same states
2014	India	To find the factors associated with a decline in MMR	NFHS-3	Decrease in poverty and female literacy showed a bigger impact on declining MMR, where as institutional deliveries show not significant impact

YEAR PUBLISHED	PLACE	OBJECTIVE	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
2017	India	To implicate the need for reassessment of JSY in reducing MMR	DLHS-3	Despite the increased institutional deliveries, this has not translated positively in declining MMR. Maternal health should be seen as a package starting from adolescent years and continue post delivery, and not just at the time of delivery
2016	Mashhad, Iran	Aims to find the association between maternal health literacy with pregnancy care and the outcomes.	120 women	There was a significant association seen between maternal health literacy and pregnancy outcomes such a birth-weight, pre and post natal care.

YEAR PUBLISHED	PLACE	OBJECTIVE	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
2013	India	The aim of the study was to find an association between institutional deliveries and MMR by comparing data before 2005(the year JSY was launched and period between 2006 to 2010	SRS, AHS	No association was seen between MMR and institutional deliveries
2010	Rajasthan, India.	The aim of the study is to estimate the MMR and find the possible cause of death in the desert cities of Rajasthan	25,926 households interviewed in 411 Village.	Poverty, adolescent pregnancy and home births were some of the factors associated with increased MMR. Most common direct cause of death in mothers was due to hemorrhage

YEAR PUBLISHED	PLACE	OBJECTIVE	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
2013	India Rural- Hardoi, Uttar Pradesh Urban slum- New Delhi	The study aims at finding a relationship between maternal health literacy and immunization in rural village and urban slum	Rural- 1170 women Urban- 670	Lower immunization coverage seen in rural village when compared to urban slums. At the same time, higher immunization rate seen with mothers with high and medium health literacy, than those with lower literacy.
2016	India, particularly 2 resource poor states.	The study aims to find a association between maternal health literacy with early childhood nutritional status	Rural- 1116 and Urban- 576 mother-child pair.	The odds of the child being malnourished, stunted was 50%(0.5 times) less likely in mothers with high or medium literacy rate, both in urban as well as rural.

YEAR PUBLISHED	PLACE	OBJECTIVE	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
2012	Holeta , Ethiopia.	To find the factors that determine the utilization of healthcare facilities	422 women	The odds of a women utilizing ANC services was 3 times more in women who are aware of the warning signs in pregnancy. It was also seen that the perception of husbands greatly influenced this usage of healthcare facility.

RESULTS

The various indicators (NFHS-4) that are used in assessing the relationship between female literacy rate and maternal health care utilization are as follows,

Women aged
15-19 years
who were
already
mothers or
pregnant at
the time of
survey

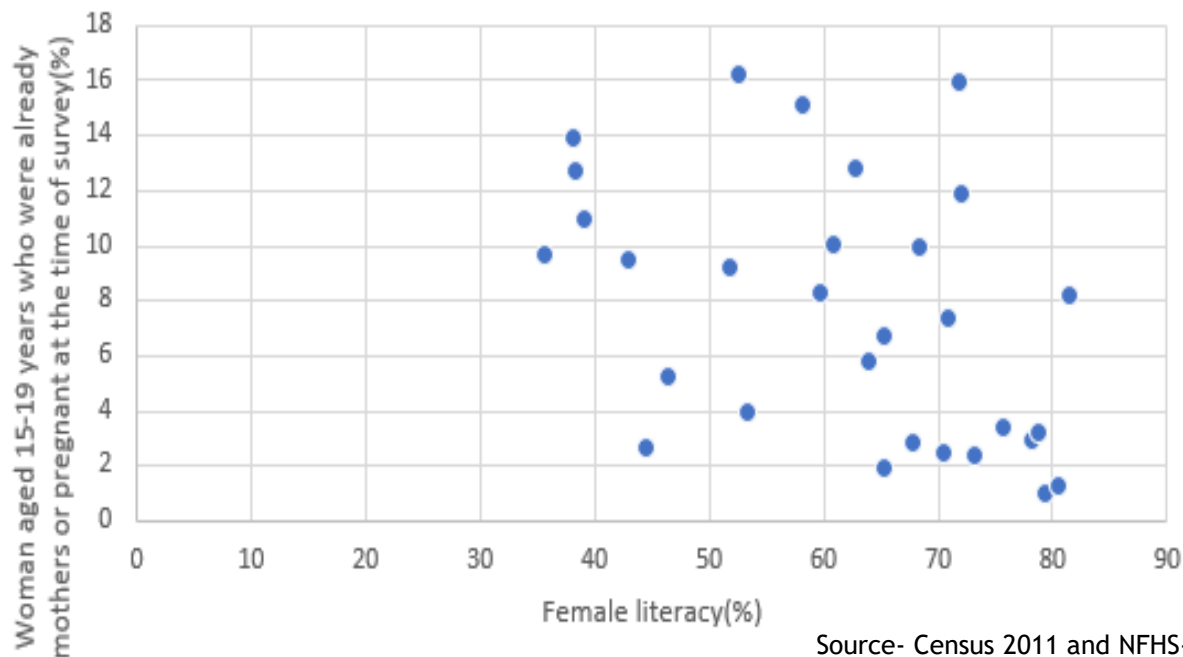
Mothers who
had at least 4
antenatal
care visits

Mothers who
received post-
natal care from a
doctor/nurse/LH
V/ANM/midwife/
other health
personnel within
2 days of
delivery

Institutional
births

❑ Woman aged 15-19 years who were already mothers or pregnant at the time of survey

'Woman aged 15-19 years who were already mothers or pregnant at the time of survey(%)' by 'Female literacy(%)'



Source- Census 2011 and NFHS-4

Scattered graph between female literacy (%) and Women aged 15-19 years who were already pregnant at the time of survey (%)

The calculated value of r from the given data set is -0.4394, upon applying fishers transformation, we get a range of 95% CI which is -0.0990 to -0.688 (Standard Error= 0.19)

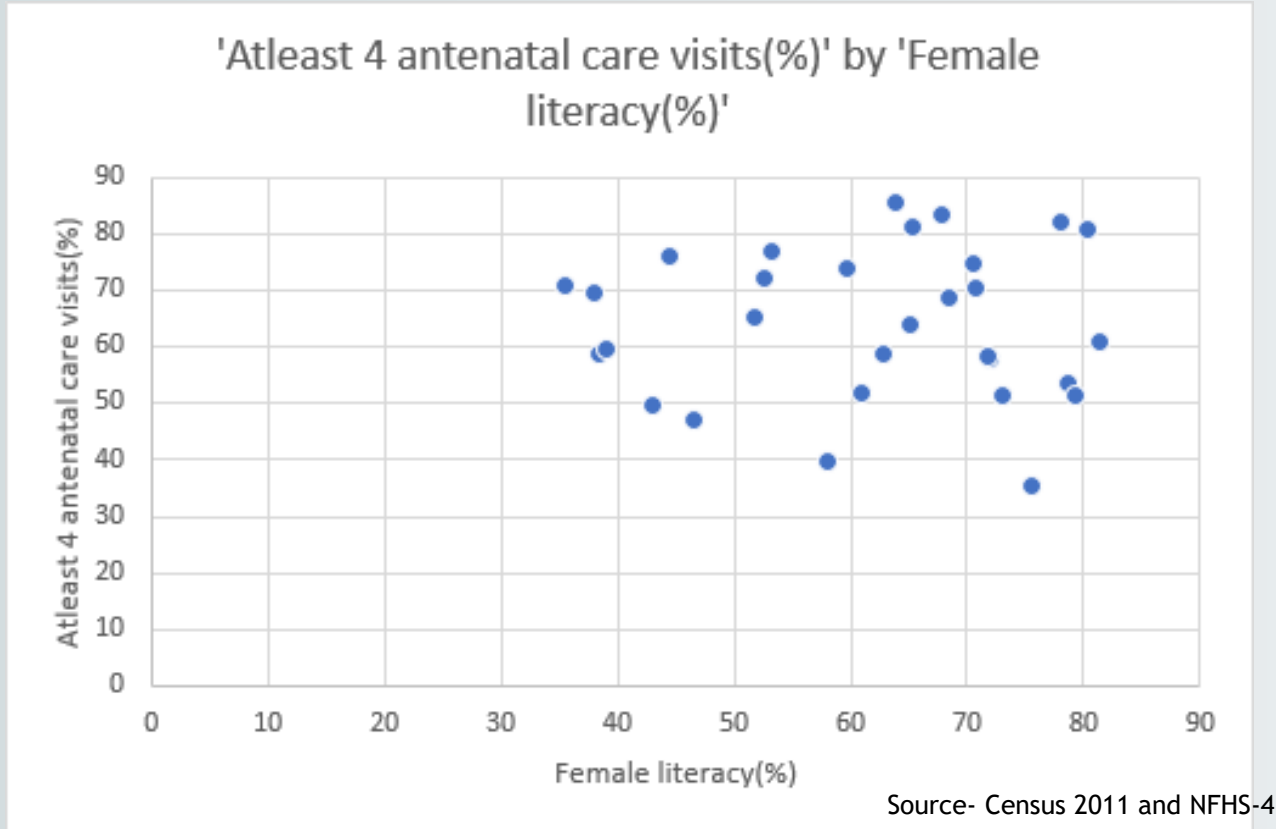
Critical value of r is ± 0.36 (two-tailed test, 0.05% significance)

Null hypothesis is accepted if the value of calculated r falls between the positive and negative value of the critical value of $-r$.

Since $-0.4394 < -0.36$, Null hypothesis is rejected. There is a significant negative relation between literacy rate and women who are pregnant or already mothers between the age of 15 and -19 years.

This means, lower adolescent pregnancy rates seen when literacy among women is higher.

❑ Mothers who had at least 4 antenatal care visits



Scattered graph between female literacy rate (%) and at least 4 antenatal visits (%)

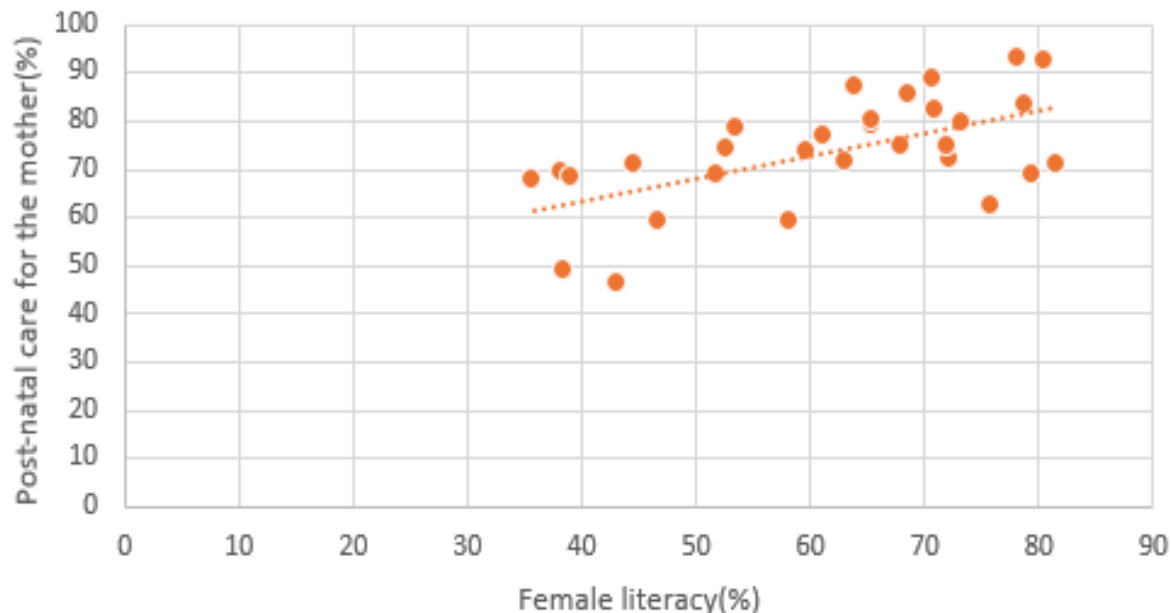
The calculated value of r from the given data set is -0.00015, upon applying fishers transformation, we get a range of 95% CI which is -0.35 to 0.35 (Standard Error=0.19).

Critical value of r is ± 0.36 (two-tailed test, 0.05% significance)

Null hypothesis is accepted, as the calculated value of r is not significant .

Mothers who received post-natal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery

Field: Female literacy(%) and Field: Post-natal care for the mother(%) appear highly correlated.



Source- Census 2011 and NFHS-4

The calculated value of r from the given data set is 0.592, upon applying fishers transformation, we get a range of 95% CI which is 0.29 to 0.781(Standard Error= 0.19)

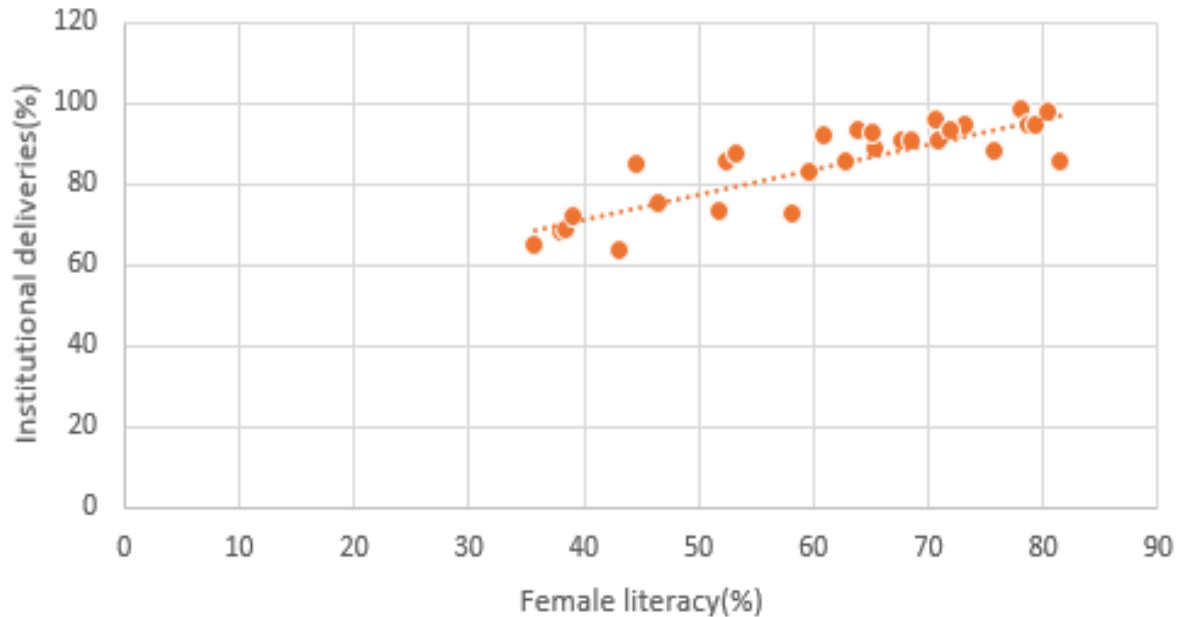
Critical value of r is ± 0.36 (two-tailed test, 0.05% significance)

$0.592 > 0.36$ and does not fall within the range of critical r , hence null hypothesis is rejected. There is a significant positive relation between literacy rate and post natal care received by mothers

- Scattered graph between female literacy rate (%) and Post natal care for mother (%) showing a high correlation

□ Institutional births

Field: Female literacy(%) and Field: Institutional deliveries(%) appear highly correlated.



Source- Census 2011 and NFHS-4

The calculated value of r from the given data set is 0.857, upon applying fishers transformation, we get a range of 95% CI which is 0.72 to 0.93.

Critical value of r is ± 0.36 (two-tailed test, 0.05% significance)

$0.857 > 0.36$, which does not lie in the range of critical r value, hence null hypothesis is rejected. There is a significant positive association between literacy rate and Institutional births.

- Scattered graph between female literacy rate (%) and Institutional deliveries showing high correlation

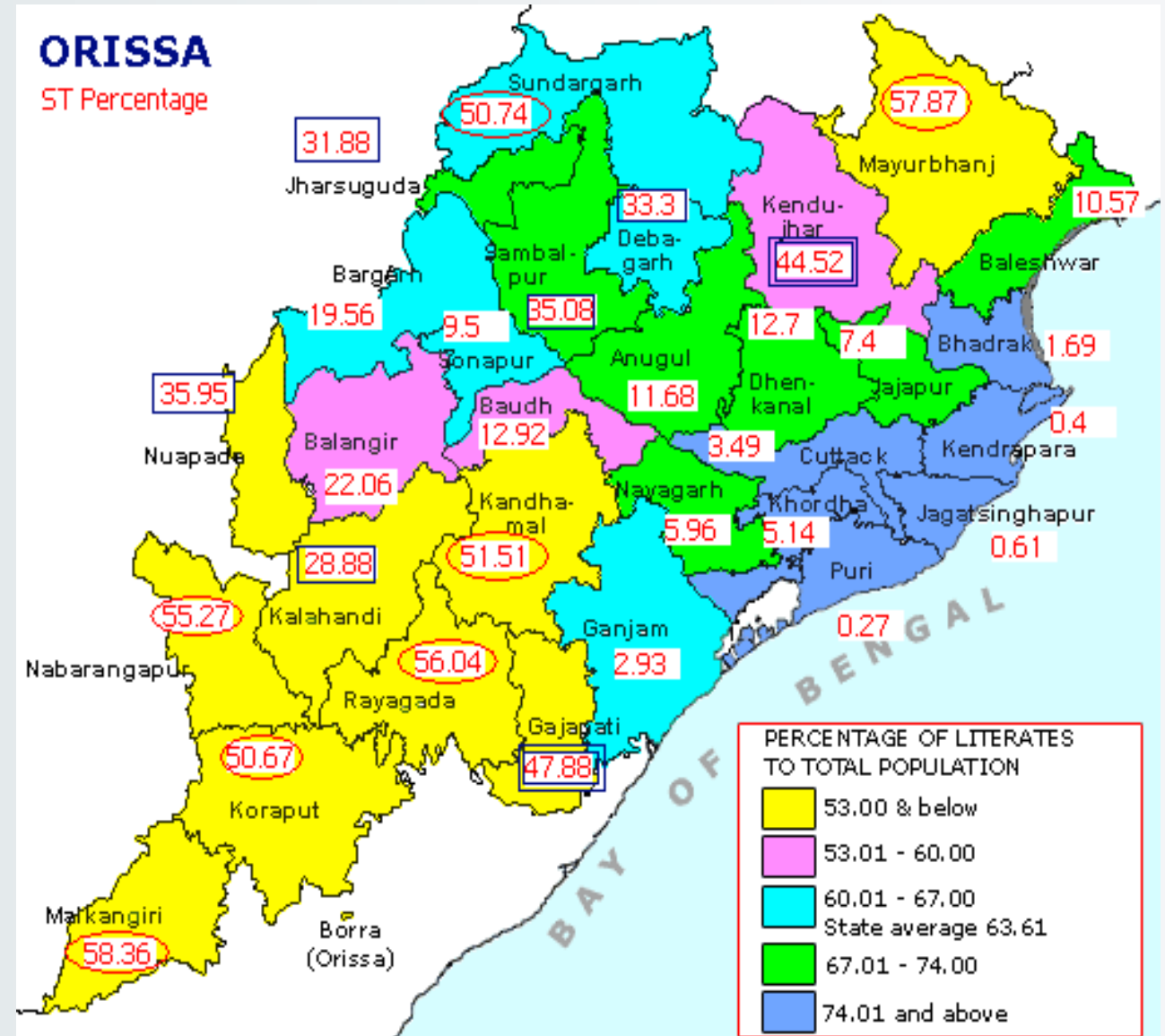
DISCUSSION

Average literacy rate and MMR in the 3 geographical divisions of Odisha

	AVERAGE FEMALE LITERACY RATE (%)	MMR
NORTHERN DIVISION (Bargarh, Jharsuguda, Sambalpur, Debagraha, Sundargarh, Kendujhar, Dhenkanal, Anugul, Sonapur, Balangir)	64.8	212
CENTRAL DIVISION (Mayurbhanj, Baleshwar, Bhadrak, Kendrapara, Jagatsinghpur, Cuttack, Jajapur, Nayagarh, Khordha, Puri)	74.51	222
SOUTHERN DIVISION (Ganjam, Gajapati, Kandhamal, Boudh, Nuapada, Kalahandi, Rayagada, Nabarangapur, Koraput, Malkangiri)	45.93	297

- Based on the AHS 2011, the division with the lowest literacy rate also records the highest maternal deaths

- Odisha has the third highest tribal population in India (Census 2011)
- The tribal population in districts such as Malkangiri, Nabarangpur, Koraput, etc is as high as more than 50% of the total population of the region. The Scheduled Tribe population in the state is overwhelmingly rural, with 94.5% living in villages.
- In 2019, The state government introduced a special development council focusing on the 9 heavily tribal populated districts of Odisha, wherein efforts will be made to bring about development while conserving and propagating the tribal culture.



LIMITATIONS

- Correlation cannot imply causation. Two variables can have strong association, but one cannot be the causation for the presence or absence of another.
- Only linear relationship can be detected

CONCLUSION

In the 30 districts of Odisha, some of which have a high tribal population, a significant association was seen between the average female literacy rate and adolescent marriage and pregnancy along with maternal health care utilization indicators such as post-natal care and institutional birth.

However, no significant association was seen between literacy and antenatal care visits. The literacy rate was also lower among women in each respective region when compared to that of men, which means programs should concentrate on female enrolment into schools. Emphasis should also be given to health education and literacy.

PART 2

HUMAN RESOURCE FOR PEOPLE MANAGEMEN: RECRUITING, HIRING AND ONBOARDING EMPLOYEES

By



UNIVERSITY OF MINNESOTA

Name of the Course

Human Resource For People Manager:
Recruiting, Hiring And Onboarding
Employees

Course Description

A vital component of the People Manager Value Proposition is the recruitment of talented people who help the organization achieve its strategic goals. This course is an introduction to the topics of recruiting, placement, and onboarding.



Objectives of the Course

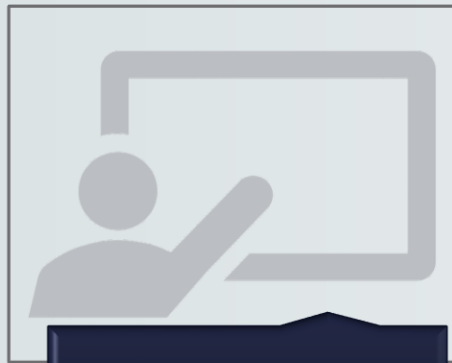
To get a brief understanding of human resources

- Recruitment
- Selection
- Onboarding



Learning Methodology used in the course

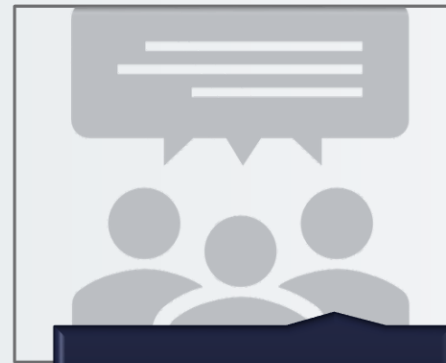
The online mode of teaching consisted of the following;



Lecture Videos



Reading Materials

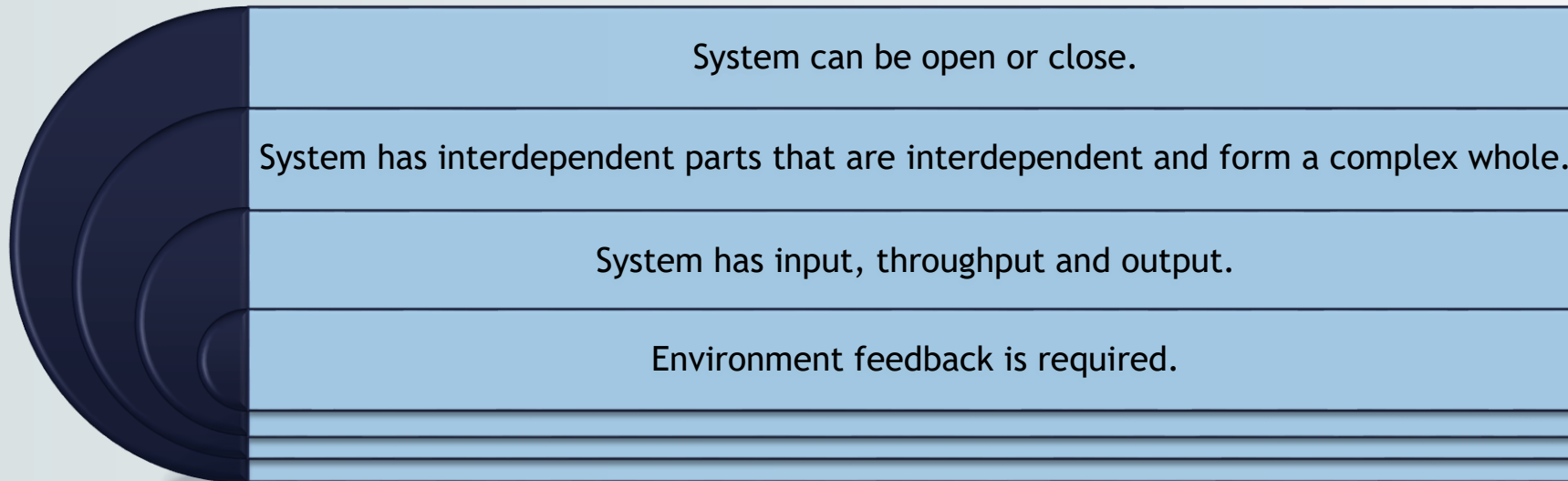


Quizzes

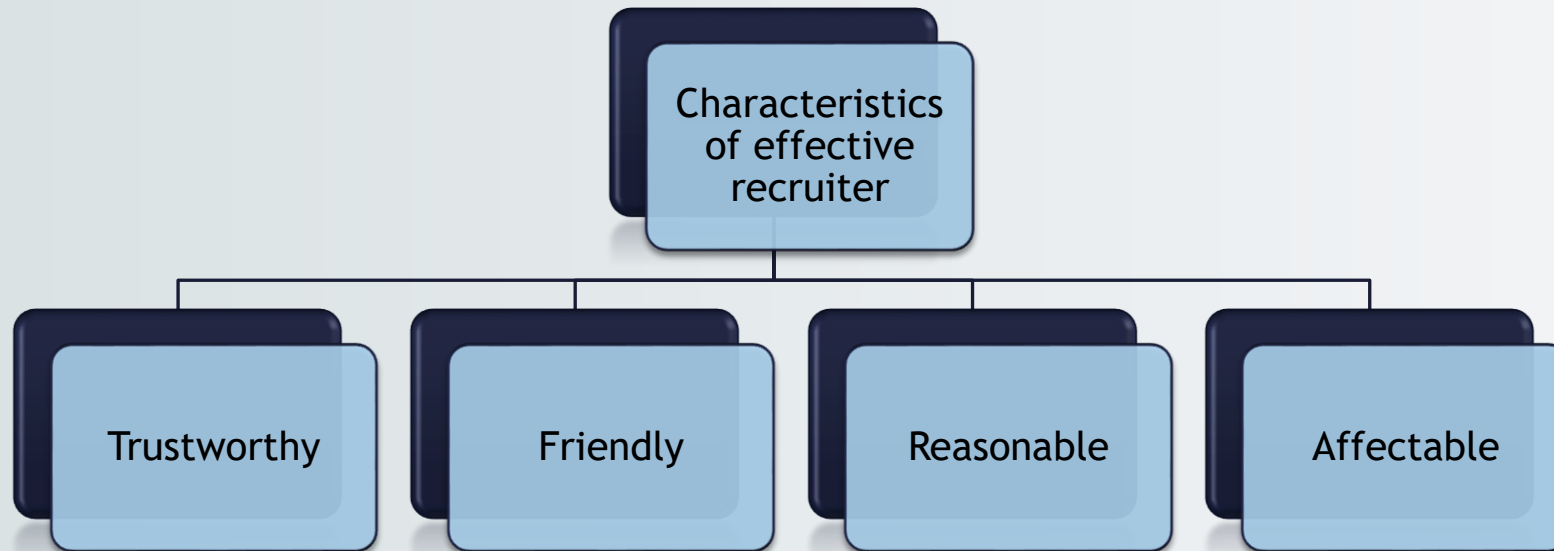
Key Learnings from the Course

❑ Week 1 -Aligning Recruitment and Selection with Company Strategy

- A brief introduction to the course was given to how system thought plays a role in recruitment and selection as a framework consisting of both internal and external factors that, in effect, characterize the function of an organization.
- There are 4 key system thought elements:



❑ Week 2 - Recruitment: Finding the Best Candidates



□ Week 3 - Selection: Choosing the Best Candidates

1. Steps in selection of a candidate



2. Biases occurring during selection process

Biases of
confirmation

Biases of
group

Biases of
contrast

Effect of
Halo

Prejudice

❑ Week 4 - Special Topic: Onboarding

The onboarding of new hires is the process of integrating a new employee with an organization and its community as well as providing a new recruit with the resources and knowledge required to become a successful team member.

THANK YOU!