

**MATERNAL RISK FACTORS- AN OBSERVATIONAL STUDY ON  
DEMOGRAPHIC VARIABLES FOR NEONATAL CONJUNCTIVITIS****Dr. Rahul Ghoti\*<sup>1</sup> and Dr. Rahul H. Gujarathi<sup>2</sup>**<sup>1</sup>P.G. Scholar Dept. of Kaumarabhrutya, B.V.D.U. College of Ayurveda, Pune.<sup>2</sup>Professor and HOD Dept. of Kaumarabhrutya, B.V.D.U. College of Ayurveda, Pune.Article Received on  
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College of Ayurveda, Pune.**ABSTRACT**

**Background:** Neonatal conjunctivitis also known as ophthalmic neonatorum remains a significant cause of preventable childhood blindness and even death in developing countries. The organisms causing ophthalmic neonatorum are acquired mainly from the mother's birth canal during delivery and a small percentage of cases are acquired by other ways. The maternal risks factor such as maternal hygiene, mode of delivery and socio-economical status can assist in its prevention.

**KEYWORDS:** Neonatal conjunctivitis, maternal, ophthalmic infections, ophthalmic neonatorum, risk factors.

**INTRODUCTION**

Conjunctivitis is the commonest infection found in Newborn. Conjunctivitis in newborn is an important entity. Conjunctivitis commonly known as pink eye is usually caused by a virus that is similar to one that causes the common cold, though it has a variety of other causes, including bacterial infection or allergy. It is usually assumed that the affected infant acquire the infection from mother's birth canal, though same may acquire the infection from their immediate surroundings. Therefore it is an indicator of reproductive tract microbial carriage of mother. Neonatal conjunctivitis is quite a common infection encountered in the new born. It is prevalent mostly in people from low socio-economic status of society with poor hygienic condition of the mother. There is also number of other causes factors responsible. This is the most common eye disease of newborn occurring in infants younger than 4 weeks of age. Therefore, sincere efforts should be made by every individual to preserve his/her vision till

the last breath of life. Because for an individual who is blind, day and night are the same and this beautiful world is of no use to him even if he possesses a lot of wealth.

**Objective:** This study attempts to determine the maternal risk factors for the development of neonatal conjunctivitis among neonates in Bharati Vidyapeeth Ayurvedic Hospital and Research center, Pune.

## MATERIALS AND METHODS

This was an observational study on demographic variables for neonatal conjunctivitis. Neonates from special care baby unit, postnatal ward, pediatric out-patient unit and labour room who had bilateral or unilateral eye discharge were enrolled in the study. The questionnaire sorted for information including patients' biodata, place and mode of delivery, mothers' biodata, socio-economic status and obstetrics history. Samples were collected and culture test was done.

## OBSERVATIONS

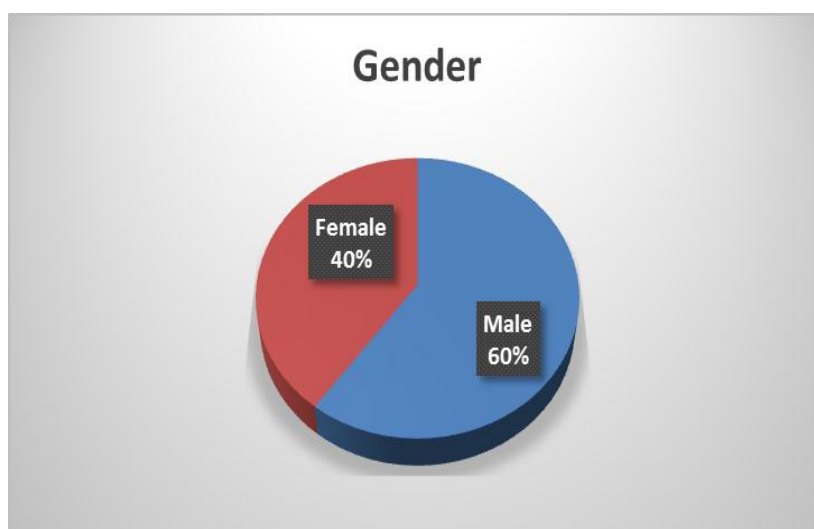
### GENDER

#### Assessment of gender

Gender	Frequency	Percentage
Male	30	60.0
Female	20	40.0
<b>TOTAL</b>	<b>50</b>	<b>100.0</b>

Out of 50 neonates, 30 were male and 20 were female.

#### Graphical Presentation of gender



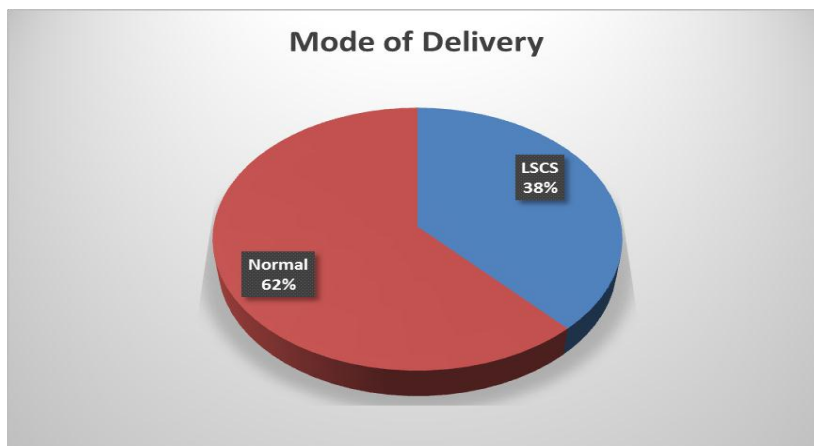
## MODE OF DELIVERY

### Assessment of mode of delivery

Mode of Delivery	Frequency	Percentage
LSCS	19	38.0
Normal	31	62.0
<b>TOTAL</b>	<b>50</b>	<b>100.0</b>

Out of 50 deliveries, 31 were normal vaginal delivery rest 19 were LSCS.

### Graphical Presentation of mode of delivery



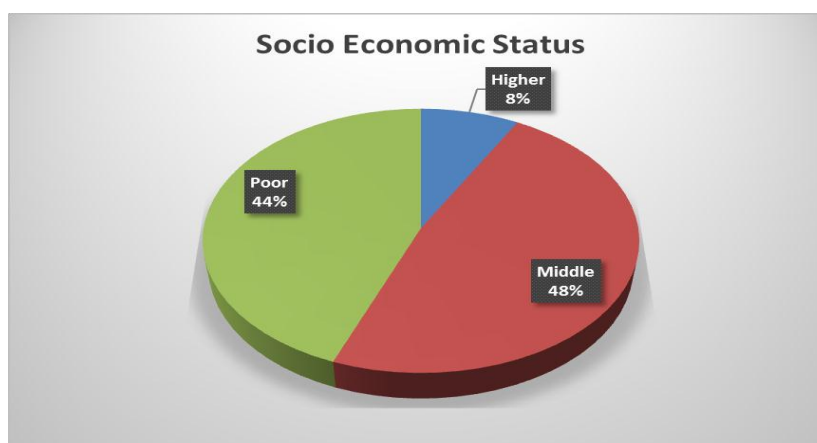
## ECONOMIC STATUS

### Assessment of Economic status

Economic Status	Frequency	Percentage
Higher	4	8.0
Middle	24	48.0
Poor	22	44.0
<b>TOTAL</b>	<b>50</b>	<b>100.0</b>

Out of 50 mothers, 4 were higher economic status, 24 were middle economic status and 22 were poor strata.

### Graphical Presentation of Economic status

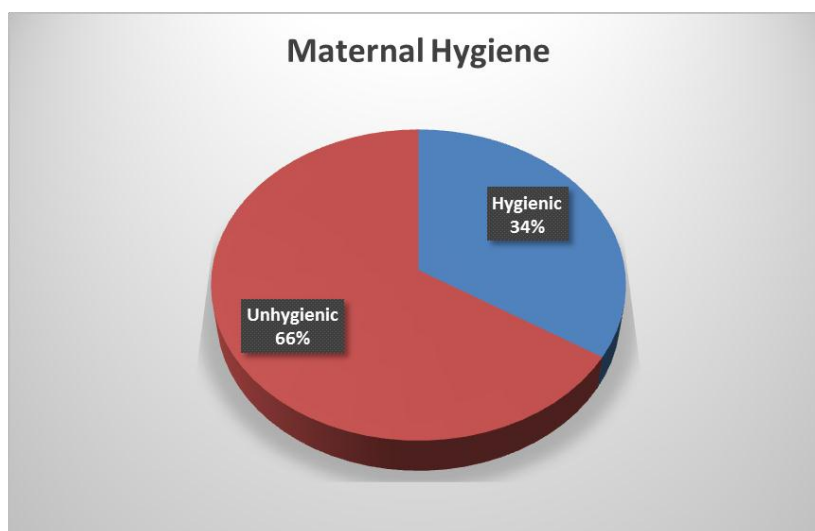


## MATRERNAL HYGIENE

### Assessment of maternal hygiene

Maternal Hygiene	Frequency	Percentage
Hygienic	17	34.0
Unhygienic	33	66.0
<b>TOTAL</b>	<b>50</b>	<b>100.0</b>

Out of 50 mothers, 17 were hygienic maternal and 33 were unhygienic.



## RESULTS AND DISCUSSION

A total of 50 neonates were enrolled for study. A total of 60% male and 40% female babies were observed. Out of these 50 patients, 31 were delivered by caesarian section. The incidence of L.S.C.S. delivered babies was comparatively low in this hospital and of these neonates, few developed symptoms of neonatal conjunctivitis. Only 38% of the registered neonates were delivered by a caesarian section as compared to 62% positive cases belonging to normal vaginal delivery. This is enough to indicate that neonates who are delivered vaginally are more susceptible to develop Neonatal Conjunctivitis. Due to direct contact with vaginal bacterial flora. The neonates who were delivered by caesarian section surpass this path and thus due to absence of direct contact with the bacteria, have lesser chance of developing infective conjunctivitis.

In this whole study only about 8% of patients belong to the high economic strata, whereas the remaining 92% were from the middle and lower socio economic group. Of these about 2/3rd did not maintain adequate hygiene, while only 1/3rd had maintained adequate hygiene and still had develop neonatal conjunctivitis. It can thus be inferred that maternal hygiene plays an important role in developing or preventing this disease. Unhygienic conditions favor the

growth of bacteria and thus the incidence of this disease is always higher in those whose mothers did not maintain hygiene.

## CONCLUSION

Maternal factors including mode of delivery, maternal hygiene and poor socio-economic conditions are significantly associated with isolate positive neonatal conjunctivitis.