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KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING CONJUNCTIVITIS AMONG THE RURAL AREAS OF SALEM DISTRICT

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ABSTRACT:

India is experiencing a conjunctivitis outbreak, affecting many people and causing economic and social burdens. Knowledge, attitude, and precautionary steps are crucial for population education. The study aims to evaluate conjunctivitis knowledge and attitudes in rural areas of Salem district, identify preventive measures, source of information, and treatment strategies used by affected individuals. The cross-sectional observation study was conducted for six months among 200 rural respondents. The respondents were selected by considering the inclusion and exclusion criteria. A survey was conducted to assess awareness and knowledge on Conjunctivitis spread, symptoms, treatment, vector characteristics, preventive measures, and sources of information based on socio demographic details and questionnaires. Among the 200 respondents, the duration of recovered respondent was found to be up to 6 months (41.0%) for majority of the respondents. The Type of Treatment shows that majority of the respondents were home isolated (50.0%) and some of the respondents visited the government hospital (38.5%). Most of the residents (70.8%) gave wrong answers for the questions asked to assess the knowledge about conjunctivitis. Most of the residents (46.2%) agreed to the questions asked to assess the attitude towards conjunctivitis. Many number of residents (64.3%) gave a correct responses for the questions asked to evaluate the practices regarding conjunctivitis. The study found that many residents have lack of knowledge and attitude towards conjunctivitis, suggesting the need for increased awareness programs on signs, symptoms, and self-hygienic care.

Keywords: conjunctivitis, epidemic, home remedies, knowledge, alternate medicine

1. INTRODUCTION:

A translucent membrane called the conjunctiva covers the back of the eyelids and reflects light back to the anterior region of the eyeball, reaching the edge of the cornea (limbus). The palpebral conjunctiva, bulbar conjunctiva, and fornix conjunctiva are the three sections. Marginal, tarsal, and orbital zones make up the palpebral conjunctiva. Between the skin of the lid and the conjunctiva proper, the marginal conjunctiva creates a transitional zone. It has a lot of vessels. Through it, yellow streaks are the tarsal glands. The orbital portion of the conjunctiva is located about halfway between the fornix and the upper edge of the tarsal plate. The anterior portion of the sclera is covered by the bulbar conjunctiva. It can be moved freely across the sclera. This epithelium has multiple thick layers that are organized erratically. It has melanin pigments, lymphatics, and blood vessels, together with papilliform digitations. The caruncle and plica are the interruptions on the medial side of the continuous cul-de-sac that is the forniceal conjunctiva. It can be separated into three parts: the lateral, inferior, and superior fornix.[1] Conjunctivitis affects a large number of people and causes economic and social problems. Acute conjunctivitis affects around 6 million people in the United States each year.[2] The cost of treating bacterial conjunctivitis alone is projected to be between $377 million and $857 million each year.[3] Many US state health departments, regardless of the underlying cause of conjunctivitis, require pupils to get topical antibiotic eyedrops before returning to school.[4] Rather than eye care specialists, primary care physicians treat the majority of patients with conjunctivitis initially.[5] Conjunctivitis accounts for about 1% of all visits to primary care offices in the US.[5] Primarily, 70% of individuals with acute conjunctivitis visit urgent care and primary care facilities.[6] Inflammation of the conjunctival tissue of the eye, resulting in redness, irritation, and discharge, is known as conjunctivitis.[7] It might be bacterial, allergic, or viral. In winter, bacterial conjunctivitis affects youngsters, while allergic conjunctivitis affects adults more frequently in the spring and summer. One of the symptoms is a red, itchy eye that is not very painful.[8,9] Conjunctivitis is one of the most common types. Infectious Conjunctivitis: A diverse range of etiological agents, including bacteria, viruses, and fungi, can infect the conjunctiva. There is no standardized criterion for classifying infective conjunctivitis. Depending on the onset, it can be classified into two major clinical categories: acute and chronic.[1] Acute conjunctivitis is caused by viruses in as many as 80% of cases. When compared to laboratory confirmation, the clinical accuracy rate for diagnosing viral conjunctivitis is less than 50%. Many cases are mislabeled as conjunctivitis caused by bacteria.[10] and they result in pharyngoconjunctival fever and epidemic keratoconjunctivitis, two of the major clinical entities linked to viral conjunctivitis.[11]Thirteen In contrast to epidemic keratoconjunctivitis, which is more severe and manifests as ipsilateral lymphadenopathy, hyperemia, chemosis, and watery discharge, pharyngoconjunctival fever is characterized by an abrupt onset of high fever, pharyngitis, bilateral conjunctivitis, and periauricular lymph node enlargement.[12] When opposed to bacterial conjunctivitis, viral conjunctivitis is more common in cases of lymphadenopathy, which can be seen in as many as 50% of cases.[13] Bacterial Conjunctivitis: The incidence of bacterial conjunctivitis, particularly those caused by Gonococcus and Corynebacterium Diphtheriae, has decreased. However, in developing nations, it remains the most prevalent kind of conjunctivitis. It can occur as sporadic or pandemic cases. Bacterial conjunctivitis outbreaks and epidemics are common during the monsoon season.[14] Fungal Conjunctivitis: Candida albicans, Nocardia, Aspergillus, and Sporothrix can all cause chronic conjunctivitis. Candida in debilitated people can cause pseudo-membranous or ulcerative conjunctivitis. Leptothrix and other fungi can induce follicular conjunctivitis along with preauricular lymphadenopathy. Topical fluconazole, miconazole 1%, and natamycin are used to treat fungal conjunctivitis.[1] non-infective conjunctivitis: allergic conjunctivitis are related

disorders caused by the ocular reaction to environmental allergens. They are widespread, affecting 10% to 20% of the population.[15]Allergy rates are rising, and over 20% of the world's population suffers from some sort of allergy. Up to 40-60% of allergic patients experience eye symptoms.[16]It is the inflammation of the conjunctiva caused by allergy or hypersensitive reactions that might be immediate (humoral) or delayed (cellular). The conjunctiva is ten times more sensitive than the skin to allergens. [14]

2. METHODOLOGY:

The study was a six-month prospective observational study conducted in rural areas in Salem district (Kondappanaickenpatti, Chinnathirupathi, Kannankurichi, and Chinna Seeragapadi, Tamil Nadu). We conducted a survey involving more than 200 patients of both genders in the rural town of Salem, as well as respondents who agreed to participate in the study. Residents of chosen rural areas with varying socioeconomic origins and recovered conjunctivitis All of the cured conjunctivitis patients were at least 18 years old and under the age of 80. Residents who refuse to offer their consent for participation in the study. Critically ill residents who were unable to submit the necessary information for the study. Patients were not affected by conjunctivitis.

PATIENT INCLUSION EXCLUSION CRITERIA:

Respondents who agree to engage in the study. Residents of chosen rural areas from various socioeconomic backgrounds recovered from conjunctivitis. All of the recovered conjunctivitis patients were at least 18 years old and under the age of 80. Residents who refuse to offer their consent for participation in the study. The residents are critically ill. Residents that were unable to give the requested information for the survey. Patients were not affected by conjunctivitis.

DESIGN OF DATA ENTRY FORM:

A distinct data entry form has been created to gather pertinent demographic information and other pertinent characteristics.

Proforma 1: Consent Form for Patients

Proforma 2: Demographic information, recovery information, and a questionnaire to evaluate the

1) Understanding of Conjunctivitis
2) Perception of Conjunctivitis
3) Handling Conjunctivitis Procedures
4) Information Sources

Data Collection:

Standard surveys will be used to gather data from rural populations, including demographic information. Patient counseling will then be offered with the help of pamphlets that have been developed in the local language addressing the same.

Statistical Analysis:

The data acquired from rural communities via designated proformas was evaluated using SPSS version 27. Means and standard deviations were calculated. All the results were expressed as frequencies and percentages. The chi-square test was employed for univariate analysis. P-values were deemed statistically significant if they were less than 0.05.

3. RESULTS AND DISCUSSION:

Age wise analysis of study population:
The study used a sample size of 200 respondents, who were split into 4 age categories. Of the 200 respondents, the majority were found to be between the ages of 18 and 31 (37.5%), 32 and 45 (26.5%), 46 and 59 (18.5%), and over 60 (17.5%). The data were shown in Table.1 and Fig.1.

Table 1 Age Wise Distribution

Age Group	Number of Respondents	Percentage (%)
18-31	75	37.5%
32-45	53	26.5%
46-59	37	18.5%
Above 60	35	17.5%
Total	200	100.0%

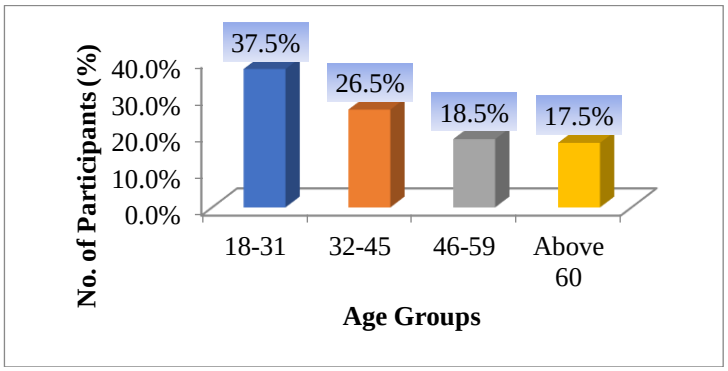

Fig.1: Age Wise Distribution

Gender wise analysis of study population
The study had a sample size of 200 respondents, who were separated into four age groups. The bulk of them were between the ages of 18 and 31 (37.5%), 32 and 45 (26.5%), 46 and 59 (18.5%), and over 60 (17.5%). The data were shown in Table 2 and Fig.2.

Table 2 Gender Wise Distribution

Gender	Number of respondents	Percentage (%)
Male	89	44.5%
Female	111	55.5%
Total	200	100.0%

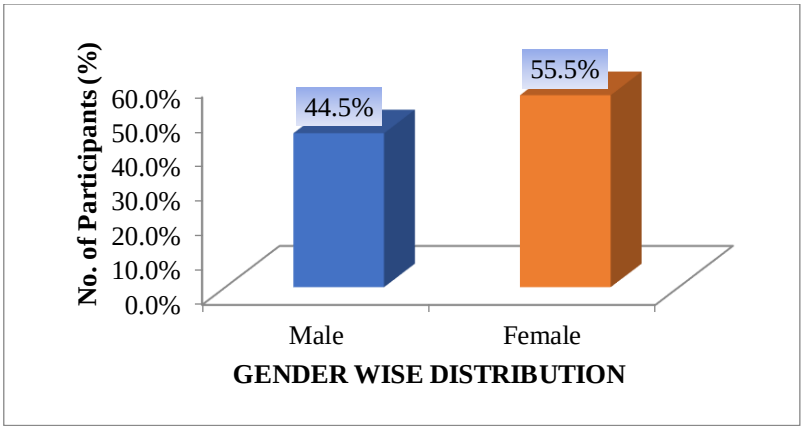

Fig.2: Gender Wise Distribution

Analysis of marital status of Respondents:

The study was conducted among 200 respondents and the marital status data was recorded which showed that 154 were married and 46 were found to be single. The marital status of respondents showed that 77% were married and 23.0% were single in the rural populations. The data were shown in Table 3 and Fig.3.

Table 3 Marital Status of Respondents

Marital status	Number of respondents	Percentage (%)
Single	46	23.0%
Married	154	77.0%
Total	200	100.0%

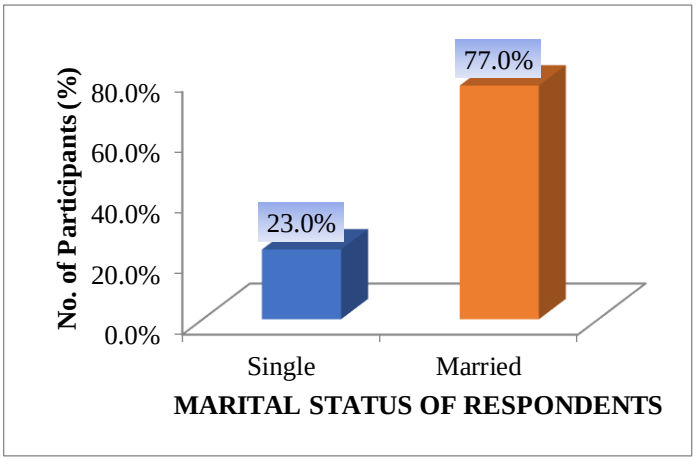

Fig.3: Marital Status of Respondents

Analysis of Duration of Recovery of Respondents:

The 200 respondents' average recovery time was determined to be one month for 10%, three months for 12.5%, six months for 41.5%, and longer than six months for 36.5% of the respondents. The data were shown in Table 4 and Fig.4.

Table 4 Duration of Recovery

Duration of recovery	Number of respondents	Percentage (%)
1 Month	20	10.0%
3 Months	25	12.5%

6 Months	82	41.0%
> 6 Months	73	36.5%
Total	200	100.0%

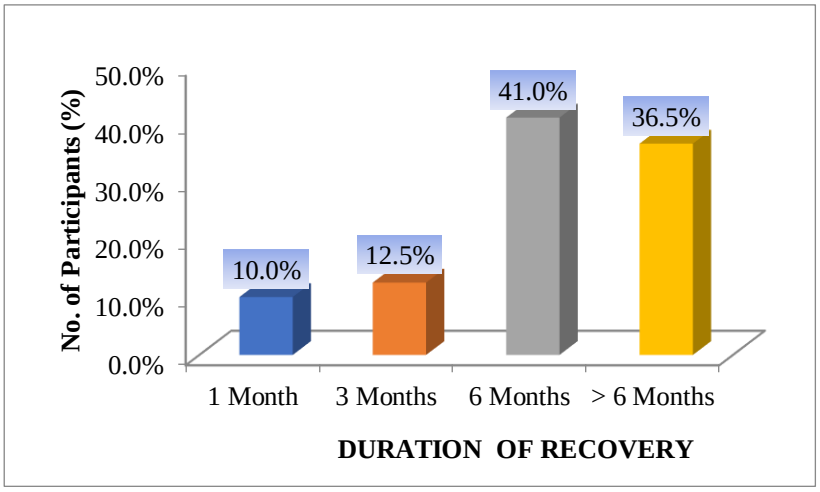

Fig.4: Duration of Recovery

Analysis of type of treatment of respondents:

Among the 200 responders, 11.5% attended a government hospital, 38.5% went to a private hospital, and 50.0% remained at home, according to the type of treatment. The data were shown in Table 5 and Fig.5.

Table 5 Type of Treatment

Type of treatment	Number of respondents	Percentage (%)
Government	23	11.5%
Private	77	38.5%
Home-Isolation	100	50.0%
Total	200	100.0%

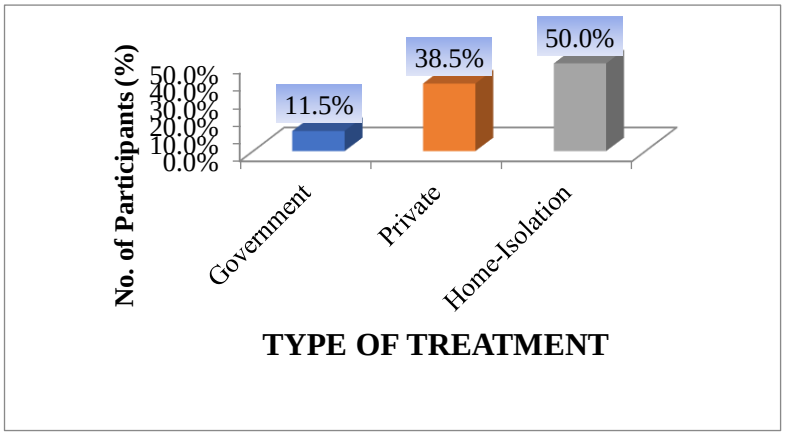

Fig. 5: Type of Treatment

Analysis of knowledge of Respondents:

The questions which are shown in Table 6 were asked to the residents to assess their

knowledge about conjunctivitis in which 110 residents gave a wrong response for Q1. 114 residents gave wrong response for Q2, 108 respondents gave wrong response for Q3, 145 residents gave wrong answer for Q4, 180 residents for Q5, 155 for Q6, 139 for Q7, 164 for Q8 and 60 residents gave wrong response for Q9 respectively. Regarding the correct answer 90 for Q1, 86 for Q2, 92 for Q3, 55 for Q4, 20 for Q5, 45 for Q6, 61 for Q7, 36 for Q8 and 40 for Q9.

Q. No	Knowledge about Conjunctivitis	Wrong		Correct	
		N	%	N	%
Q1	What is conjunctiva	110	55.0 %	90	45 %
Q2	Conjunctivitis is caused when	114	57.0 %	86	43 %
Q3	Which of these is not a symptom of conjunctivitis?	108	54.0 %	92	46 %
Q4	The three types of conjunctivitis are Bacterial, Viral and	145	72.5 %	55	28 %
Q5	Which of these causes Allergy caused Conjunctivitis	180	90.0 %	20	10 %
Q6	What is an example of a Hot compressor to treat Conjunctivitis?	155	77.5 %	45	23 %
Q7	Conjunctivitis also known as	139	69.5 %	61	31 %
Q8	Who are more prone to conjunctivitis?	164	82.0 %	36	18 %
Q9	Conjunctivitis is mostly occurred in the season of	160	80.0 %	40	20 %

Table 6 The distribution of knowledge about conjunctivitis in the people

Analysis of Attitude of Respondents towards Conjunctivitis:

The questions shown in Table 7 were asked to the residents and the responses are as follows. For Q10 nearly 86 residents strongly agreed, 97 respondents agreed, 11 respondents disagreed, 6 residents strongly disagreed. For Q11, 63 strongly agreed, 111 agreed, 13 disagreed and 12 strongly disagreed. For Q12, 63 residents strongly agreed, 105 agreed, 20 disagreed, 12 strongly disagreed. For Q13, 63 residents strongly agreed, 66 residents agreed, 57 disagreed, 14 residents strongly disagreed. For Q14, 48 residents strongly agreed, 80 agreed, 49 residents disagreed, 23 residents strongly disagreed. For Q15, 35 residents strongly agreed, 76 residents agreed, 68 residents disagreed, 21 strongly disagreed. For Q16, 58 residents strongly agreed, 104 agreed, 26 disagreed, 12 strongly disagreed. For Q17, 72 residents strongly agreed, 93 residents agreed, 21 residents disagreed, 14 strongly disagreed. For Q18, 55 residents strongly agreed, 95 agreed, 33 residents disagreed, 17 strongly disagreed.

Q. No.	Attitude Towards Conjunctivitis	Strongly Disagree		Disagree		Agree		Strongly Agree	
		N	%	N	%	N	%	N	%
Q10	Conjunctivitis is preventable and curable disease	6	3%	11	6 %	97	49 %	86	43%

Q11	Washing your hands frequently can help to prevent the spread of conjunctivitis	12	6%	13	7%	111	56%	63	32%
Q12	Health education / awareness regarding conjunctivitis can help to reduce it?	12	6%	20	10%	105	53%	63	32%
Q13	Does artificial tears provide relief for conjunctivitis?	14	7%	57	29%	66	33%	63	32%
Q14	Wearing contact lens during pink eye can worsen the condition?	23	12%	49	25%	80	40%	48	24%
Q15	Eating starchy foods can improve conjunctivitis?	21	11%	68	34%	76	38%	35	18%
Q16	Changing pillow covers often can prevent the spread of conjunctivitis?	12	6%	26	13%	104	52%	58	29%
Q17	Sleeping more than 8 hours a day can speedup healing of conjunctivitis?	14	7%	21	11%	93	47%	72	36%
Q18	It is better to avoid swimming pool during conjunctivitis?	17	9%	33	17%	95	48%	55	28%

Table 7 The distribution of Attitude Towards Conjunctivitis in the people

Analysis of Practices of Respondents regarding conjunctivitis:

The questions which are shown in Table no 8 were asked to the residents in which 105 residents gave wrong response and 95 residents gave correct response for Q19. 70 residents gave wrong response and 130 residents gave correct response for Q20. 28 residents gave wrong response and 172 residents gave correct response for Q21. 18 residents gave wrong response and 182 residents gave correct response for Q22. 107 residents gave wrong response and 93 residents gave correct response for Q23. 103 residents gave wrong response and 97 residents gave correct response for Q24.

Q.No.	**Practices Regarding Conjunctivitis**	**Wrong**		**Correct**	
		N	**%**	**N**	**%**
Q19	You shouldn't share if you have conjunctivitis.	105	53%	95	48%
Q20	You shouldn't let others use your _____if you have conjunctivitis.	70	35%	130	65%
Q21	Have you ever affected by conjunctivitis?	28	14%	172	86%
Q22	If yes, what treatment did you follow?	18	9%	182	91%
Q23	Did you done any local remedies?	107	54%	93	47%
Q24	How to prevent the spread of conjunctivitis?	103	52%	97	49%

Table 8 The distribution of practices regarding conjunctivitis in the people

3.9 Analysis of source of information regarding conjunctivitis:

Regarding the sources of information 31 residents received the information from the health care professionals, 50 respondents received on their known, 83 residents from other sources. The data were shown in Table 9 and Fig.6.

Table 9 The distribution of sources of information in the people

Sources of Information	Number of respondents	Percentage (%)
None	36	18%
Others	83	42%
Healthcare Professionals	31	16%
Self Education	50	25%
Total	200	100%

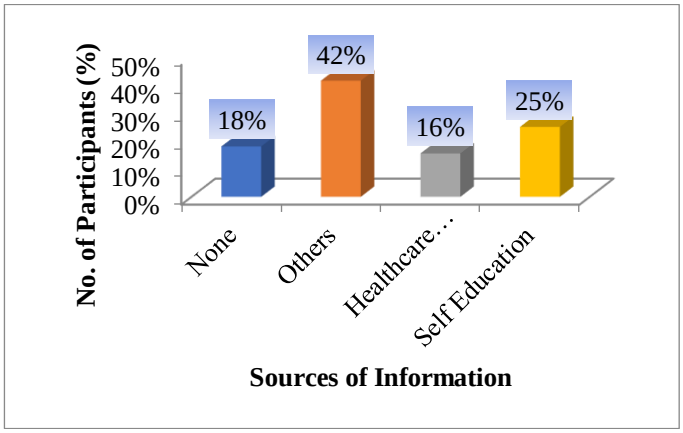

Fig.6. The diagram representation of Sources of information in the people

4. CONCLUSION

To Assess Conjunctivitis Knowledge, Attitudes, And Behaviors in The Rural Salem District, A Prospective Observational Study Was Carried Out. Throughout A Six-Month Period, 200 Respondents from Rural Areas Provided the Data. The Inclusion and Exclusion Criteria Have Been Considered When Selecting Those Who Responded. A Survey Was Carried Out to Gather Demographic Information, Questionnaire Responses, And an Assessment of The Rural Population of Salem District's Awareness and Knowledge About Conjunctivitis Symptoms, Treatment, Vector Characteristics, Preventive Measures, And Information Sources Of the 200 responders in the survey, 111 (55.5%) were female and 89 (44.5%) were male. Most residents were 18 – 31 years old Many responders completed their education. The marital status statistics revealed that most respondents were married. Many respondents' employment statuses indicate that they were self-employed. The majority of the 200 respondents reported a recovery time of up to 6 months. Most respondents received home-based treatment, with some visiting a government hospital. Most residents incorrectly answered questions about conjunctivitis.

Most residents responded positively to questions about their attitudes regarding conjunctivitis. Many residents responded correctly to the questions posed to evaluate conjunctivitis habits. This study found that many residents have poor understanding and attitude about conjunctivitis, thus performing more awareness programs addressing the signs, symptoms, and self-hygienic care should be.

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