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Research Article

Tobacco Consumption and Their Associated Factors about the Andhra-Odessa Border People, Andhra Pradesh, India

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ABSTRACT

Tobacco is one of the major causes to the preventable worldwide deaths. Tobacco is not only major carcinogenic agent but cause to cancer and their associated problems around the world but also major risk factor for many chronic diseases parts of lungs and cardiovascular zones. We should (identified) estimate the Tobacco users among the Tribal area along with Odessa - Andhra border people and determine the associated risk problems. We are examined the data around 1040 in the time period between June, 2024 to April, 2025 based on the survey method of adult male and female along with adolescent students. The samples collection conceder as a education of Literates and Illiterates by the cross sectional random method. We calculated the data and information based on the village and college surveys around the exanimate area. Total calculation based on the age initiation, Sex, Religion, Socio Economic status and Family history. According to our collected information total number 964 (round figure 970) The above total Literature study 424 (43.98%) and Illiterates study is 540 (56.01%) out of them 964 ever consumers are 503 (52.17%) and partial consumers are 461 (47.82%), as well as smoking tobacco consumers are 836 (86.72%) followed by the smokeless tobacco consumers are 128 (13.27%).

INTRODUCTION

Andhra Pradesh state districts Srikakulam, Vizayanagaram, Visakhapatnam are share with the Odessa districts Ganjam, Gajapathi, Rayagada, Koraput and Malkangiri. The interstate border is present with bilingual language that is Odiya and

Telugu. In this most of people are depends upon of agriculture. Tobacco using family history is higher than the other districts of Andhra Pradesh. Tobacco is the major cause to the health effects like pneumonia, Cancer, Heart and Lung diseases, highly addictive substances is effect to the brain. According to the WHO every year 8 million

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people were died by the effect of tobacco. (2) Tobacco use has been started before 18 years in the developed countries. (4) India is a second largest tobacco producer and consumer in the world and major contributor to the annual fatalities according for 9.5% out of the total. (3) All most 300 million people are low and moderate income living with poverty conditions. (1) All most 33% cancer fatalities cases are caused by the Tobacco in the global, the counting of 27% fatalities are burden by smoking. (5) Approximately 28.6% smoking adults in India total of the global. (6) Teenagers tobacco addiction is most common in rural areas more than urban areas and Tribal areas still high prevalence. (7,8,9) Study of Maharashtra and central India Tobacco use prevalence of 45.42% and 27.25% about Tribal adolescents respectively. (10,11) India's Tobacco products smoke less fallowed by Guthaka, Khani, Betel quid, Zarda users are more than smoking tobacco fallowed by Cigarette, Bidi, Hukka. (12) Nicotine is more effect to the adolescent. In my study area selected as stages the first stage studied on the Literates the age above 18 years, the second stage Illiterates the age period between 20-50 years. In this study fallowed by given objectives.

1. To calculate proportionate of Tobacco use among the Literate College / Non college students and Illiterate people in the Andhra-Odessa border region.
2. To determine the tobacco users based on the age initiation and pattern of Tobacco usage.
3. To calculate the percentage based on the graphs of age initiation, pattern of Tobacco usage, tobacco using time of ever or partial.

3. METHODS AND MATERIALS:

a) Study type:

This study was village (rural)/ town and college based oral and observation survey type with a cross sectional design

b) Study Area:

This study was conducted Odessa-Andhra border rural village and town along with Government and private Degree colleges the time period between Dece2023-March 2025 in the North districts Srikakulam, Vizayanagaram and Visakhapatnam of Andhra Pradesh.

C) Study Samples:

The study was conducted among the adolescent students, adolescent and middle age illiterates (Tribal and non tribal area) men and women's the age 18 to 50 years who self willing and participate in their survey day. It is random average and accurate data.

d) Sample Size:

Calculating the sample size based on the formula [$N = \frac{P(1-P)}{d^2}$], With 27.25% prevalence from a related study done in central India (15), 95% Confidence Interval, 5% Allowable Error, 10% non-response rate, and a design effect of 2, calculate the number of participants which was founded the total study participant number 964, it was rounded to 970.

e) Sampling Collection:

In applied random sampling method by the multiple steps. The first step Srikakulam, Vizayanagaram and Visakhapatnam Tribal and others of Odessa- Andhra border samples were collected at random from a total samples. In the second step with the conceder of cast based like Tribal, Mala sub casts, Backward and Open category people by lottery method. The third step sample collection was divided based on the



Literature, Age and development. In the fourth step selected the 14 Co-Education colleges where the all community people are studied. In the fifth step collected the illiterate samples from the rural and town area based on the lottery method. The final step collect the samples from the Graduates who are completed the Degree. The above sample collection is taken, each Literate and Illiterate participants were conceder as sample by the random sampling method from each social area and colleges.

f) Study tools:

Data collected by using self administrable, questionnaire pre design semi structure from Global Youth Tobacco Survey (GYTS). Odia, tribal and Telugu languages are translation mode of questionnaire. Collecting data translate to validate to respective languages by the initial, Transverse- Translation, Fallowed by pre testing.

G) Ethical issues:

The College/Institutional ethical committee provides the Ethical consideration data collection notice to each principal and village/ town government authorities and permission was obtained, who are Literates and Illiterates are participated in this data collection with use of self willing and without any external force. We provide the instructions how the data will collect at the time of questionnaire.

1. Literates: we are gave the questionnaire paper what we want data and options, collected samples are finalized by the random process.

2. Illiterates: We were collected data by oral questionnaire method and finalized by random process

The above data collected with confidentially divide as a Age initiation, Types of Tobacco, Family Tobacco history, Type of the Gender, Type of Religion all derived in the given tabular form (Table1)

Table1: Socio-Demographic Characteristics of the participants in the study area N=964 Round figure (970)

S.no	Characteristics	Frequency	Percentage
I	Illiterates		
A	Age group: (In years)		
	Age: 20-30 years	284	48.88
	Age: 30-50 years	256	47.4
B	Based on sex:		
	Male	328	60.74
	Female	212	39.25
C	Based on Religion:		
	Hinduism	398	73.7
	Christianity	136	25.18
	Others	6	1.11
D	Socio Economic status (B.g.Prasad,scale,AICPI,July=2022		
	Upper class	14	2.59
	Middle class (Upper-Lower)	204	37.77
	Lower class	302	55.92
E	Tobacco Family history (Any form) members:		

	No use Tobacco\Absent	190	35.18
	Use Tobacco\Present	350	64.81
	Total examined numbers	540	100%
II	Literates		
A	Age group: (In years)		
	Age: 18-22 years	229	54.1
	Age: 23-Above years	195	45.9
B	Based on sex:		
	Male	322	75.9
	Female	102	24.1
C	Based on Religion:		
	Hinduism	316	74.5
	Christianity	104	24.5
	Others	2	1.11
D	Socio Economic status B.gPrasad,scale,AICPL,July=2022		
	Upper class	40	9.4
	Middle class (Upper-Lower)	244	57.5
	Lower class	140	33
E	Tobacco Family history (Any form) members:		
	No use Tobacco\Absent	290	68.4
	Use Tobacco\Present	134	31.6
	Total examined numbers	424	100%

Note: The total number of study people (Literates and Illiterates)-964

4. RESULTS:

In the total study people number is 1040, out of them 76 people not given the correct information about the Tobacco consuming, finally we consider the 964 people only after delete the 76 people. The total people divide as Literates and Illiterates based on the Age initiation, Sex, Religion, Socio-Economic status and family history. Out of the 964 the Illiterates are 540. In the Illiterates survey, based on Age group highest responders percentage is (48.88) age between 20-30 years average mean value is 25 years and lowest percentage is (47.4) age between 30-50 years average mean value is 40 years followed by the based on Sex, Male highest responders percentage is (60.74) Female is (39.25), Based on Religion Hinduism is highest responders percentage is (73.7), Others is lowest percentage is (1.11), Socio Economic status

highest responders percentage is lower class(55.92), Upper class is lowest percentage is (2.59), Tobacco Family history highest responders percentage is Use Tobacco\Present (64.81), No use Tobacco\Absent is lowest percentage is (35.18), Followed by Literates out of 424, based on Age group highest responders percentage is (54.1) age between 18-22 years average mean value is 20 years and lowest percentage is (45.9) age above 22 to 26 years average mean value is 24 years followed the based on Sex, Male highest responders percentage is (75.9) Female is (24.1), Based on Religion Hinduism is highest responders percentage is (74.5), Others is lowest percentage is (1.11), Socio Economic status highest responders percentage is Middle class (57.5), Upper class is lowest percentage is (9.4), Tobacco Family history highest responders percentage is No Tobacco\Absent (68.4), Use Tobacco\Present is



lowest percentage is (31.6). Based on the (Table 2) Total consumers divide as a two characteristics that is based on the Ever consumers and partial consumers. In the Literates partial Tobacco consuming rate (67.5%) is higher than the Ever consume (32.5%). As followed by Illiterates are

absolutely opposite results, partial Tobacco consuming rate (39.3%) is lesser than the Ever consume (59.8%). The overall out of the total numbers of Literates and Illiterates (964) the Ever consumers (52%) and partial consumers (48%) based on (Figure 1)

Table 2: Tobacco consuming based on Ever and Partial users:

Sno	Characteristics	Ever consume	Percentage	partial consume	Percentage
1	Literates	138	32.5	286	67.5
2	Illiterates	323	59.8	217	39.3
Total		503		461	

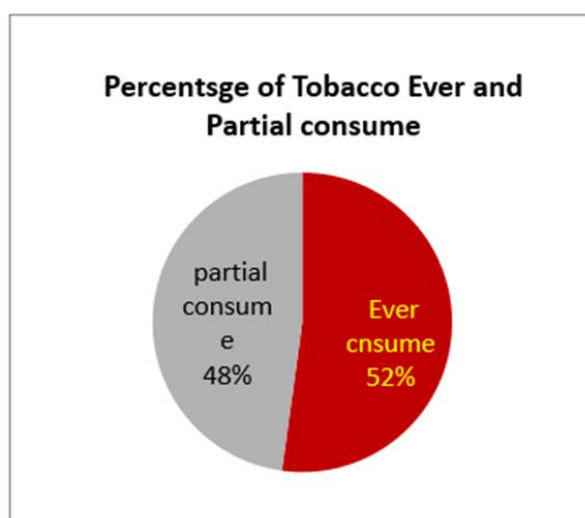


Figure 1: Proportion of tobacco consumption among study participants (n=964)

According to age period in the literates and illiterates' tobacco consuming percentage is increase followed by the age increase. (Figure 3) Ever consume highest percentage (38.4%) is in the

literates age period above 26 years followed by illiterates (33.10%) the age between 45-50 years as well as the lowest (4.30%) in literates the age between 18-20 years and illiterates the age between 20-25 years. (Table 3)

Table 3: Tobacco consuming Ever users based on age group of literates and illiterates:(461)

S.no	Age group in years	Literates		Age group in years	Illiterates	
		Frequency	Percentage		Frequency	Percentage
1	18-20	6	4.30%	20-25	30	9.30%
2	20-22	16	4.60%	25-30	44	13.70%
3	22-24	23	16.70%	35-40	56	17.30%
4	24-26	40	28.90%	40-45	86	26.60%
5	26-Above	53	38.40%	45-50	107	33.10%
Total		138	100.00%		323	100.00%

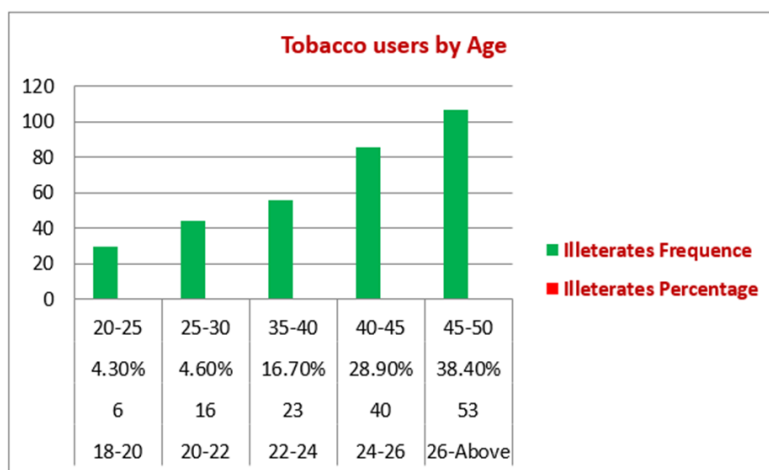


Figure 3: Tobacco consuming based on age group of literates and illiterates:

According to my study out of total study numbers smokeless tobacco users are higher than the smoke tobacco users.(**Figure 4**) Consent of smokeless tobacco literates highest percentage use as a khani (48.10%), lowest percentage type is betel quid

(13.90%) and followed by the illiterates highest type is Guthaka (37.80%), lowest type is Betel quid (16.10%). Smoke tobacco highest in literates as cigarette (11%) lowest bidi (2.8%), illiterates highest is as a bidi (6.6%) and lowest is cigarette (6.1%). (10,11) (**Table 4**)

Table 4: Tobacco consuming based on type pattern of literates and illiterates:(964)

S.no	Type of Tobacco	Literates		Illiterates	
		Frequency	Percentage	Frequency	Percentage
I	Smokeless Tobacco				
1	Guthaka	102	24.10%	204	37.80%
2	Khani	204	48.10%	180	33.30%
3	Betel quid	59	13.90%	87	16.10%
II	Smoke Tobacco				
4	Cigarette	47	11.00%	33	6.10%
5	Bidi	12	2.80%	36	6.60%
Total		424	100.00%	540	100.00%

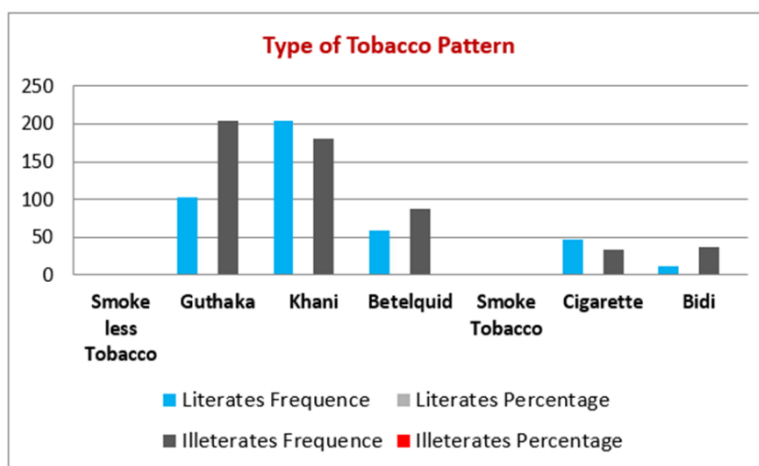


Figure 4 : Tobacco consuming based on type pattern of literates and illiterates:

5. DISSCUSONS:

In my study Odessa- Andhra border highest people illiterates are lowest income (lower class) than the literates and they are believe to old culture and habits. I calculated the data as two subdivisions literates and illiterates based on the Age initiation, Sex, Religion, Socio-Economic status and family history. Based on the age period literates ever users (84,I%) highest than the partial users (27.62%) in the age of above 23 years, opposite of the below 22 years ever users are lesser(15.90%) than the partial users (72.37%) as well as illiterates fallowed by ever users (56.34%) highest than the partial users (34.10%) in the age between 30-50 years, opposite age between 20-30 years ever users are lesser(45.20%) than the partial users (63.59%). Male ever users are higher than the female , in male literates ever users (71.5%) are lesser than the partial users (64.02%) as well

as females illiterates partial users are highest than the literates and literates ever users lesser than the illiterates. According to based on Religion Hinduism is highly consume tobacco than Christianity . In Hinduism literates ever users (71.00%) are lesser than the partial users (76.92%) as well as Hinduism illiterates partial users (81.73%) are highest than the literates (76.92%) . In socio- economic status lower class people are highly consume than the middle class and higher class. Lower class tobacco ever users (39.88%) are lesser than the partial users (51.45). Middle class tobacco ever users (61.3%) are higher than the partial users (41.11%). Upper class people are very less percentage use of the tobacco why because their family education history is better than the middle and lower class people. In illiterates tobacco family history highest than the iterates family history . (Table 5),(Figure 5).

Table 5: Socio-Demographic Characteristics of the participants in the study area based on the frequency and percentage:

S.no	Character	Variable	Literate Ever use		Literate partial use		Illiterate Ever use		Illiterate partial use	
			Frequency	%	Frequency	%				Frequency
1	Age (In years)	20-30(IL)\18-22(L)	22	15.90 %	207	72.37 %	146	45.20 %	138	63.59%
		30-50(IL)\23-Above	116	84,I%	79	27.62 %	182	56.34 %	74	34.10%
2	Sex	Male	106	76.80 %	216	75.52 %	214	66.25 %	114	52.53%
		Female	32	23.10 %	70	24.47 %	109	33.74 %	103	47.46%
3	Religion	Hinduism	98	71.00 %	220	76.92 %	264	81.73 %	134	61.75%
		Christianity	39	28.20 %	65	22.72 %	57	17.64 %	79	36.40%
		Others	1	0.70%	1	0.34%	2	0.61%	4	1.84%
4	Socio Economic	Upper class	8	5.80%	32	11.18 %	6	1.85%	8	3.68%

	Status(SES)	Middle class	84	60.90 %	160	55.94 %	167	51.70 %	57	26.26%
		Lower class	46	33.33 %	94	32.86 %	150	46.43 %	152	70.04%
5	Family History	Present	51	17.83 %	83	60.14 %	92	28.48 %	98	45.16%
		Absent	55	39.85 %	235	82.16 %	231	71.51 %	119	54.83%

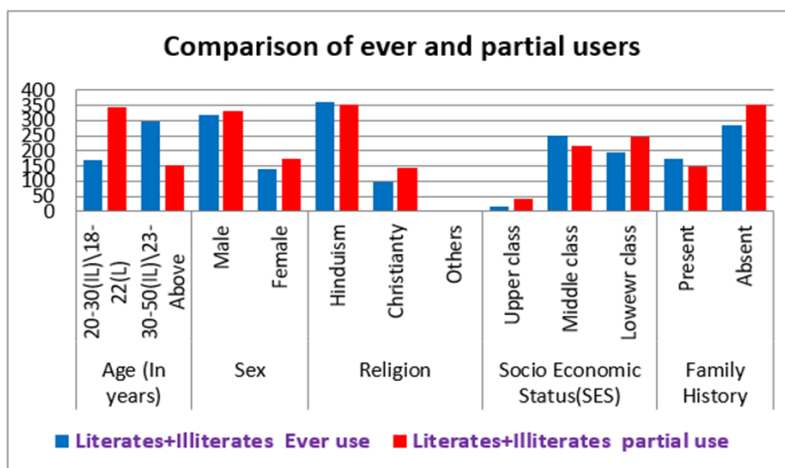


Figure 5: Socio-Demographic Characteristics of the participants based on percentage in the study area

6. CONCLUSION:

Interstate border area people had been using high percentage of Tobacco. The current study was shows male Tobacco users are more than female users as well as Illiterates are more than Literates. Most of Illiterate females are consume Tobacco as a Guthka. Illiteracy 45-50 years (Mean value 45.5-years) age people are(33%) consume the Tobacco, why because poor family background, no education history, Un employment and Tobacco family history is one of the reasons causes to the Tobacco addiction. Illiterates and Literates Tobacco consuming rate is increase according to age. Most of Literates the age period above 26 years are highly use the Tobacco (38.40%). 48.1% Literates are consume the Tobacco as a Khani. Totally smokeless Tobacco is more consume than the smoke Tobacco, why because all most females

are use as smokeless Tobacco. According to study recently high percentage of adults also convert to the smoke to smokeless Tobacco. Below 20 years (7.8%) people is use the tobacco. Most of them below 20 years adolescent divert to the smoking in town area comparison to rural areas(4). According to above information first reason that home government and family members both are resemble elements to influence the tobacco use. Finally second reason of the Tobacco addiction is majorly influence the poor family social life. (7,8,9).

7. Recommendations:

- IEC (Information, Education, and Communication) activities are emphasizing need.
- Awareness programs are need to the change of old family habits.
- We will create and want to development education and society.



- Counselling programs are need to causes of Tobacco consuming.
- Low price and easily availability is one of cause to Tobacco consume.

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