
**“AWARENESS OF CIGARETTES AND OTHER
TOBACCO PRODUCTS (COTPA) ACT AMONG
TOBACCO RETAILERS IN A CITY OF NORTH
KARNATAKA: A COMMUNITY BASED CROSS-
SECTIONAL STUDY.”**

Submitted by

(REG NO. BD0119001)

Dissertation

Submitted to

KAHER, Belagavi, Karnataka,

In partial fulfilment of the requirements for the degree of

M. D. (DOCTOR OF MEDICINE)

IN

COMMUNITY MEDICINE

**DEPARTMENT OF COMMUNITY MEDICINE,
JAWAHARLAL NEHRU MEDICAL COLLEGE, KAHER,
BELAGAVI – 590010 KARNATAKA, INDIA.**

APRIL – 2022

**KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH,
BELAGAVI**

**Endorsement by the HOD & Principal / Head of the
Institution**

This is to certify that the dissertation entitled “**AWARENESS OF CIGARETTES AND OTHER TOBACCO PRODUCTS (COTPA) ACT AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A COMMUNITY BASED CROSS-SECTIONAL STUDY**” is a bona fide research work done by the Candidate **Reg. No. BD0119001**.

Dr. SHIVASWAMY M. S. MD
Professor and Head,
Department of Community Medicine,
J. N. Medical College, KAHER,
Belagavi – 590010,
Karnataka, India.

Place: Belagavi

Date:

Dr. (Mrs.) N. S. MAHANTSHETTI MD
Principal,
J. N. Medical College, KAHER,
Belagavi – 590010,
Karnataka, India.

Place: Belagavi

Date:

UNDERTAKING

I, **Reg. No. BD0119001**), hereby declare that the information and the data mentioned in my dissertation entitled **“AWARENESS OF CIGARETTES AND OTHER TOBACCO PRODUCTS (COTPA) ACT AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A COMMUNITY BASED CROSS-SECTIONAL STUDY”** belongs to me and is original.

I am aware of the definition of plagiarism as detailed below:

- An act or instance of using or closely imitating the language and thoughts of another author without authorization and the representation of that author’s work as one’s own, as by not crediting the original author.
- A piece of writing or other work reflecting such unauthorized use or imitation.
- The deliberate or reckless representation of another’s words, thoughts or ideas as one’s own without attribution in connection with submission of academic work, whether graded or otherwise.



I hereby declare that the dissertation prepared by me is original-one and does not involve plagiarism anywhere. In case at a later stage it is found that I have indulged in plagiarism, then I am solely responsible for the same and the institution is at liberty to take any disciplinary action against me including cancellation of dissertation or any other penalties imposed by the University.

Date:

Place: Belagavi


(Reg. No: BD0119001)


PLAGIARISM ACCEPTED LETTER

	JAWAHARLAL NEHRU MEDICAL COLLEGE (Recognized by Medical Council of India, New Delhi)	
Accredited 'A' Grade by NAAC (2 nd Cycle)		Placed in Category 'A' by MHRD (GoI)
<i>Nehru Nagar, Belagavi- 590 010, Karnataka, INDIA</i>		
☎ 0831 - 2471359	☎ 0831 - 2470759	🌐 www.jnmc.edu
		✉ principal@jnmc.edu
Ref No: MDC/PG/		Date: 12-11-2021.

ACCEPTANCE LETTER

The softcopy of thesis entitled: "AWARENESS OF CIGARETTES AND OTHER TOBACCO PRODUCTS (COTPA) ACT AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A COMMUNITY BASED CROSS SECTIONAL STUDY" has been submitted for Anti-Plagiarism check through Turnitin software. The scan has been carried out and the scanned output reveals a match percentage of 04% which is within the acceptable limits of 10% as per the guidelines given by UGC.




Dr. (Mrs.) N.S. Mahantashetti,
Chairperson-Antiplagiarism Committee &
Principal,
J. N. Medical College, Belagavi.

To,
Reg. No. BD0119001.
Postgraduate Student,
2019-20 Batch,
Department of Community Medicine,
J. N. Medical College, Belagavi.

LIST OF ABBREVIATIONS USED

AIDS	Acquired Immune Deficiency Syndrome
WHO	World Health Organization
SEAR	South East Asia Region
NFHS	National Family Health Survey
FCTC	Framework Convention on Tobacco Control
COTPA	Cigarettes and Other Tobacco Products Act
POS	Point Of Sale
TS	Tobacco Seller
PHW	Pictorial Health Warnings
PHC	Primary Health Center
PUC	Pre University Course
SES	Socio Economic Status
CPI	Consumer Price Index

ABSTRACT

Title: “AWARENESS OF CIGARETTES AND OTHER TOBACCO PRODUCTS (COTPA) ACT AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A COMMUNITY BASED CROSS-SECTIONAL STUDY.”

Introduction:

Tobacco is a global epidemic killing around 8 million people worldwide. Tobacco smoking is associated with many health hazards and can affect multiple systems involving almost all the organs. First hand smoke accounts to 7 million deaths, whereas second hand smoke claims 1.2 million innocent lives. Second hand smoke is quickly emerging to be a public health concern as it equally affects the organ systems much like first hand smoke and there are no safety limits to second hand smoke exposure. The primary concern of smoke-free laws is to protect individuals from the ill effects of second hand smoke, encourage smokers to quit smoking, all the while without affecting trade.

In India, The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (COTPA) is the principal law governing tobacco control. It lays out various rules and regulations pertaining to tobacco manufacture, trade & retail, packaging, labelling, selling, and consumption under various sections. Tobacco retailers play a crucial role in this chain of tobacco use, and hence should be aware of the laws on tobacco use. The role of availability and accessibility of Tobacco point of sales (POS) is undeniable in increased smoking rates of adolescents and minors. Not many studies conducted in India explored the tobacco retailers’ awareness and their compliance to COTPA act. Hence our study aims to assess their awareness and compliance to

various sections under the Act, their tobacco consumption pattern and socio-demographic profile.

Objectives:

Primary Objective – To assess the level of awareness of Cigarettes and Other Tobacco Products Act (COTPA) among the tobacco product retailers.

Secondary Objective – To assess the implementation status of COTPA act by the tobacco product retailers.

Methodology:

This cross - sectional study was conducted among the tobacco retailers in field practice area of four primary health centres under the Department of Community Medicine, J.N. Medical College, KAHER, Belagavi, from 1st January 2020 to 31st December 2020. Universal sampling method was adopted and all the licensed, consenting tobacco retailers were recruited which came to a sample size of 360.

Personal interview of eligible participants was conducted by the investigator, using pre-designed and pre-tested questionnaire. Visits were made by the investigator to all the 360 Point of Sales (POS) in the study area and the respective tobacco vendors were identified, and explained about the purpose of the study and after getting their written informed consent, they were interviewed at their respective Point of Sales (POS) on their awareness and implementation status of COTPA Act.

Results:

The current cross sectional study reported that 12.22% of the study participants heard of COTPA before. Majority (69.72%) of the study participants were aware that minors should neither sell nor buy tobacco products. Most (95.28%) were aware that smoking in public places is prohibited and 70.83% claimed that their POS's were not within 100 m radius of any educational institute. However, only 11.94% were aware

that it is prohibited to sell tobacco products around educational institutes, 37.23% were aware that it is prohibited to put up display of tobacco products, 19.72% were aware that health warning boards must be put up and only 17.22% practiced putting up a health warning board. Majority (79.72%) were aware that smoking had ill effects on health but only 31.94% of the participants were aware of passive smoking. Socio demographic factors like education, religion and gender were significantly associated with knowledge, attitude and practice regarding COTPA.

Conclusion:

The present cross sectional study reports that most of the tobacco vendors were not gravely ignorant of COTPA rules and regulations, despite their less prevalent preliminary knowledge of COTPA, which was reflected in their knowledge, attitude and practice pertaining to key sections under COTPA Act. However, it is a far cry from the ideal awareness levels a tobacco retailer must possess.

Keywords: COTPA, Smoking laws, Tobacco retailers, Belagavi.

TABLE OF CONTENTS

SL.NO	CONTENTS	PAGE NO.
1	INTRODUCTION	1-4
2	OBJECTIVES	5
3	REVIEW OF LITERATURE	6-14
4	METHODOLOGY	15-21
5	RESULTS	22-69
6	DISCUSSION	70-85
7	CONCLUSION	86-87
8	RECOMMENDATIONS	88
9	LIMITATIONS	89
10	SUMMARY	90-92
11	BIBLIOGRAPHY	93-98
12	ANNEXURES	99-116

LIST OF TABLES

Sl No.	Table	Page No.
1	Distribution of study participants according to age	22
2	Distribution of study participants according to gender	23
3	Distribution of study participants according to religion	24
4	Distribution of study participants according to educational status	25
5	Distribution of study participants according to marital status	26
6	Distribution of study participants according to type of family	27
7	Distribution of study participants according to socio-economic status	28
8	Distribution of study participants according to type of house	29
9	Distribution of study participants according to number of years in the present occupation	30
10	Distribution of study participants according to monthly income through tobacco sale	30
11	Distribution of study participants according to their opinion on sales status of tobacco products in general	31
12	Distribution of study participants according to their opinion on tobacco products in increasing sale trends	32
13	Distribution of study participants according to their opinion on tobacco products in decreasing sales trends	33
14	Distribution of study participants according to their basic awareness on COTPA Act	34
15	Distribution of study participants according to their knowledge on ban of sale of tobacco products to and by minors	35

16	Distribution of study participants according to their knowledge on ban of sale of tobacco products around Educational Institutes	36
17	Distribution of study participants according to their knowledge on their point of sale (POS) located around educational institutes	37
18	Distribution of study participants according to their knowledge on Prohibition of brand promotion of all tobacco products	38
19	Distribution of study participants according to their knowledge on prohibition of smoking in public places	40
20	Distribution of study participants according to their knowledge on display of health warnings on tobacco products and punishment offered for violation of any of the sections under the Act	41
21	Distribution of study participants according to their attitude on selling tobacco products to a minor	43
22	Distribution of study participants according to their attitude on customers smoking in front of shop	44
23	Distribution of study participants according to their attitude on seeing someone smoke in public places	45
24	Distribution of study participants according to their attitude on effect of health warnings of tobacco products on sale	46
25	Distribution of study participants according to their attitude on effect of pictorial warnings/ increased price of tobacco products on sale	46
26	Distribution of study participants according to their attitude on strict implementation status of the COTPA Act	47
27	Distribution of study participants according to their attitude on stop selling tobacco products	47
28	Distribution of study participants according to their attitude on banning tobacco products	48

29	Distribution of study participants according to their attitude on smoke free nation	48
30	Distribution of study participants according to their practice on minors buying tobacco products	49
31	Distribution of study participants according to their practice on asking for age proof for a minor-looking customer	50
32	Distribution of study participants according to their practice on hiring minors to sell tobacco products	50
33	Distribution of study participants according to their practice on displaying health warning boards	51
34	Distribution of study participants according to their practice on seeing female customers for their POS	52
35	Distribution of study participants according to their knowledge on smoking ill effects on health	53
36	Distribution of study participants according to their knowledge on smoking in causation of other diseases other than cancer	53
37	Distribution of study participants according to their knowledge on smoking in causation of heart diseases	54
38	Distribution of study participants according to their knowledge on mortality due to tobacco related diseases	54
39	Distribution of study participants according to their knowledge and attitude on less dangerous forms of tobacco consumption	56
40	Distribution of study participants according to their awareness of passive smoking	56
41	Distribution of study participants according to their knowledge on ill effects of passive smoking	57

42	Distribution of study participants according to their tobacco consumption	59
43	Distribution of study participants according to the type of tobacco product consumed	60
44	Distribution of study participants according to the frequency of smoking cigarettes	60
45	Distribution of study participants according to the frequency of smoking beedi	61
46	Association between socio demographic parameters and knowledge on COTPA	62
47	Association between Occupational data and knowledge on COPTA	64
48	Association between socio demographic parameters and awareness on health hazards of tobacco	65
49	Association between socio demographic parameters and Attitude and Practice regarding COTPA	67
50	Association between awareness on health hazards and knowledge on COPTA	68
51	Association between knowledge and attitude-practice regarding COPTA	68
52	Association between attitude-practice regarding COTPA and awareness on health hazards	69

LIST OF GRAPHS

Si no.	Graphs	Page no.
1	Distribution of study participants according to age	22
2	Distribution of study participants according to gender	23
3	Distribution of study participants according to religion	24
4	Distribution of study participants according to educational status	25
5	Distribution of study participants according to marital status	26
6	Distribution of study participants according to type of family	27
7	Distribution of study participants according to socio-economic status	28
8	Distribution of study participants according to their opinion on sales status of tobacco products in general	31
9	Distribution of study participants according to their opinion on tobacco products in increasing sale trends	32
10	Distribution of study participants according to their opinion on tobacco products in decreasing sales trends	33
11	Distribution of study participants according to their knowledge on ban of sale of tobacco products to and by minors	35
12	Distribution of study participants according to their knowledge on ban of sale of tobacco products around Educational Institutes	36
13	Distribution of study participants according to their knowledge on Prohibition of brand promotion of all tobacco products	39
14	Distribution of study participants according to display of health warning boards	39

15	Distribution of study participants according to their knowledge on prohibition of smoking in public places	40
16	Distribution of study participants according to their knowledge on display of health warnings on tobacco products	42
17	Distribution of study participants according to their knowledge on punishment offered for violation of any sections under COTPA	42
18	Distribution of study participants according to their practice on minors buying tobacco products	49
19	Distribution of study participants according to their practice on displaying health warning boards	51
20	Distribution of study participants according to their knowledge and attitude on less dangerous forms of tobacco consumption	55
21	Distribution of study participants according to their awareness of passive smoking	56
22	Distribution of study participants according to knowledge on ill effects of passive smoking	58
23	Distribution of study participants according to role of passive smoking in cancer and cardiovascular disease	58
24	Distribution of study participants according to their tobacco consumption	59

INTRODUCTION

Tobacco is a global epidemic killing around 8 million people worldwide, which is more than the number of deaths claimed by AIDS, illegal drugs, road accidents, homicides and suicides collectively. Cigarette smoking is the most widely used form of tobacco consumption in the world.¹ Tobacco smoking is associated with many health hazards and can affect multiple systems involving almost all the organs, and thereby poses a serious threat to a person's overall health and their quality of life.² Individuals who smoke are at a higher risk to develop cardiovascular disease, cerebrovascular accident, and lung cancer than the individuals who does not smoke. Smokers can develop cancer in almost any of their organ systems.³ It is the foremost cause of preventable premature deaths around the world.⁴ First hand smoke accounts to 7 million deaths, whereas second hand smoke, the smoke exhaled by the smoker and inhaled by others claims 1.2 million innocent lives. Any form of tobacco consumption is not devoid of harmlessness. There are no safe limits to tobacco exposure in any form.¹

Alarmingly, the matter of concern is that majority (80%) of the tobacco users worldwide belong to low and middle income countries which are the worst affected in terms of tobacco related morbidity and mortality.¹ South-East Asia Region (SEAR) of WHO alone accounts to 1.6 million tobacco related deaths, which also happens to be the highest in both tobacco production and consumption in the world.⁵ Particularly speaking, India and Indonesia from the WHO SEAR positioned themselves as one of the top 5 countries that produces tobacco the highest in the world.⁶ India stands second in the world in tobacco consumption and production.⁴ The region is also peculiar in that, around 80% of the world's smokeless tobacco consumption happens

here. It constitutes 22% of the global smokers above the age of 15 years.⁵ An area of particularly bothering concern is that WHO SEAR is also a home to 14.8 million children aged 13-15 years engaged in tobacco consumption in any one of its forms.^{4,5}

As per WHO estimations in 2010, nearly 33% of the then India's population aged above 14 years turned out to be current tobacco users. Going by current trends, as per 2020, a point estimate of over 25% of India's population aged above 14 years consume tobacco. If Tobacco control enforcement laws were to be applied with strict vigilance, the point estimate of tobacco users in the above said age groups could be brought down to 22%, says WHO.⁶

Second hand smoke is quickly emerging to be a public health concern as it equally affects the organ systems much like first hand smoke and there are no safety limits to second hand smoke exposure. More than 1.2 million premature lives per year are lost to second hand smoke, and affects cardiovascular and respiratory systems. It is of prime concern to note the debilitating effects second hand smoke has on growing children since almost half of them are exposed to it regularly in public places, claiming around 65,000 children's lives.⁷ It elevates the risk of sudden death infant syndrome (SIDS) among infants. Among pregnant women, it elevates the risk of pregnancy complications and low birth weight (LBW).¹

It is important to note that there was a drop in the consumers of tobacco from 57% to 45% among men and 11% to 7% among women from NFHS-3 to NFHS-4 surveys. It is also noteworthy that smokeless tobacco was consumed more than its smoking variants according to NFHS-4, more so in rural areas. It is noted that among Indian men, 15% chewed gutkha and paan masala, 14% smoked cigarettes and 13% smoked bidis. Among the smokers, nearly 37% admitted that they had smoked 10 or

more cigarettes/bidis in the past 24 hrs when the survey had been conducted.⁸ As per NFHS-5 state fact sheets – Karnataka, it is observed that 27.5% of men and 8.5% of women aged 15 years and above consume tobacco in any of its forms.⁹ Hence, keeping all of the above observations, the primary concern of smoke-free laws lies in protecting individuals from the ill effects of second hand smoke, to protect the vulnerable populations like children and adolescents from making the habit of tobacco consumption and encourage smokers to quit smoking, all the while without affecting trade.¹⁰

To control the tobacco epidemic and regulate illicit trade, WHO had brought in the first ever international public health treaty, The WHO Framework Convention on Tobacco Control (WHO FCTC).^{11,12} It aids in reducing both the demand and supply of tobacco products.^{12,13} India had formally given consent to WHO FCTC, as many other countries around the world to officially adapt it and further it with country specific needs to regulate tobacco consumption. India had taken lead in the matters as the regional co-ordinator among the WHO-SEAR countries.¹¹⁻¹³

In India, The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (COTPA) is the principal law governing tobacco control. It lays out various rules and regulations pertaining to tobacco manufacture, trade & retail, packaging, labelling, selling, and consumption under various sections. Of particular importance is prohibition of smoking in public and open places (section 4), banning sale to minors and by minors (section 6a), and banning tobacco sale around the educational institutes (section 6b). It also lays down the punishment offered to various violations.^{14,15}

Successful implementation of such smoke free laws depends on the smooth phasing into the public by the government with the help of mass media campaigning, and in return, public showing compliance and willingness to adopt and practice healthy behaviors. Studies showed that smoke free laws were effective in decreasing the prevalence rates of tobacco consumption among people and also preventing from children and youth to pick up the habit of smoking.¹⁶

Tobacco retailers play a crucial role in this chain of tobacco use, and hence should be aware of the laws on tobacco use. In India, there are approximately 267 million tobacco users.¹⁷ In India, only licensed shops are permitted to sell tobacco products.¹⁸ The role of availability and accessibility of Tobacco point of sales (POS) is undeniable in increased smoking rates of adolescents and minors. It was noticed that there was a strong correlation between tobacco retailer density and smoking among students, tobacco retailer density being the statistically significant predictor. It was also documented that tobacco vendors most often do not check the age proof before selling the tobacco products to minors.¹⁹ Tobacco retailers also are accountable in promoting tobacco products by putting up large displays which they aren't supposed to do under COTPA 2003. Such big, attractive and illuminated displays would change an experimental smoker into a regular one.²⁰ It was also observed from various studies that tobacco retailers violate the smoking regulations put down by COTPA 2003 that in turn would lead to increased smoking rates among individuals and communities. Not many studies conducted in India explored the tobacco retailers' awareness and their compliance to COTPA act. Hence our study aims to assess their awareness and compliance to various sections under the act, their tobacco consumption pattern and socio-demographic profile.

OBJECTIVES

- **Primary Objective** – To assess the level of awareness of Cigarettes and Other Tobacco Products Act (COTPA) among the tobacco product retailers.
- **Secondary Objective** – To assess the implementation status of COTPA act by the tobacco product retailers.

REVIEW OF LITERATURE

A study carried out in 2017 in Shimla, Himachal Pradesh to evaluate the compliance status of various points of sales focusing on advertising and selling tobacco products showed that 41% of POS (Point of Sales) did advertise tobacco products in some form. The most common way of advertising was found to be the showcasing of tobacco products (64%), whereas advertisement boards constituted to only 14.6%. It is noteworthy that around 87% of these advertisement boards had some health warning. It was seen that loose cigarettes were sold in majority (77%) of the POS. Study concluded that contrary to the popular belief, only tiny proportion of POS were displaying advertisement boards encouraging tobacco sales. Coming to the tobacco products, almost all the tobacco products showed good compliance with the Act. The major disappointment, as the researchers pointed out, was that despite the presence of Act for nearly 16 years there was no mention of nicotine and tar content on the products packaging.⁷

A cross-sectional study was conducted in 2013 among the tobacco sellers across three jurisdictions (Chennai city, District Vadodara and District Mohali) in India to evaluate the compliance rates to COTPA Act. The results revealed that nearly one-fourth of POS were not compliant with the legal provisions concerned with display of advertisement boards. There were some (16.3%) advertisement boards put up without any health warning along with it and among those who had put up an advertisement with a health warning, majority (90%) failed to do so as per the specifications laid down under COTPA. Product showcasing (51.1%) was found to be the most common form of advertising tobacco products, followed by danglers (49.6%),

stickers (33.8%) and boards (27.1%). The study concluded that tobacco industry must be more responsible and less aggressive in promoting their products.¹²

A study done in a block of Haryana to assess how compliant the tobacco stores were with COTPA and to find the knowledge of people pertaining to COTPA showed that none of the 218 stores selling tobacco which were included in the study were fully compliant with all the provisions under COTPA. Stores in urban areas were found to be more compliant than that of in rural areas. The study observed that there have been some violations of COTPA Act by the tobacco sellers like 41% were selling tobacco to minors, 24% advertised tobacco products in the form of showcasing, 10% of the point of sales were within 100 metres of educational institutes, and only 8% of the schools had put up a signage against smoking. It was also noted that only half of the study participants heard of COTPA before and only a little proportion (4%) of them were aware of the four important provisions under COTPA.¹³

A cross-sectional observational study was conducted among 307 educational institutes spanning across 12 districts and 5 states to observe any violations to COTPA Act, with focus on sections 4 (prohibition of smoking in public places) and 6b (prohibition of sale of tobacco products near educational institutes). It showed that a majority (85%) of the schools violated section 4 and 69% of the schools violated section-6b.¹⁵

A cross-sectional observational study was conducted among 307 educational institutes spanning across 12 districts and 5 states to observe any violations to COTPA Act, with focus on sections 4 (prohibition of smoking in public places) and 6b (prohibition of sale of tobacco products near educational institutes). It showed that

a majority (85%) of the schools violated section 4 and 69% of the schools violated section-6b.¹⁵ A study carried on in Chennai to evaluate the awareness of the Cigarette and Other Tobacco Products Act (COTPA) among Tobacco sellers (TS) revealed that the awareness on COTPA sections-4, 5, 6a, 6b among the TS was 42.0%, 31.0%, 69.3% and 57.2%, respectively, and 65.4% believed that tobacco epidemic can be controlled by strong legislative laws. One fourth of the study participants did think of putting an end to their tobacco sale business and some (13.4%) of them were even requested by their family and relatives to do so. Tobacco sales alone constituted to less than 10% only for a majority (58.1%) of the study participants monthly income. The study participants also believed that there was no change in the trends of tobacco products sale. Among various forms of tobacco products, smoking products (56.2%) stood the highest. It was observed that 54.6% of the study participants had put up health warning boards against smoking in public spaces as laid under section 4. Nonetheless, 85.6% of the tobacco sellers did advertise tobacco in one or the other form, thus violating section-5 and it was disappointing to note that they showed complete non-compliance in regard to section-6a and 6b.²¹

A cross-sectional observational study was carried out in 2014 in Alwar, Rajasthan to assess the compliance of 365 public places, 357 educational institutes and 357 tobacco retailers to section-4, section-6b, section-5 & 6a of COTPA respectively. It revealed that majority (90%) of the public places were compliant with section 4 by displaying a “No smoking” board. It was appreciative to note that all the study sites were compliant with section 4. Coming to the POS, it was observed that majority (93%) of the POS did display signage and all of it were done according to the signage rules under COTPA. The researchers observed with great satisfaction that the compliance to sections 6-a & 6-b was above 90%. It was also appreciative of POS

in Alwar city study area that 93% (332) of the POS did not display any tobacco advertisements. The study concluded that the study sites showed a high level of compliance to the four sections evaluated under the study.²²

A study was carried out in Mumbai to evaluate the factors associated with tobacco vendor compliance with the tobacco control law, Cigarettes and Other Tobacco Products Act (COTPA). It was found out that only 4% of the vendors were completely amenable with the Act. Majority (80%) of the vendors said that they don't practice selling tobacco products to minors and were aware that it is prohibited to do so. However, only 10% did display a signage against the sale to minors. Coming to the compliance of the study participants with the advertisements, it was interesting to note that a majority (84%) were compliant with the advertisement limits set by COTPA, and 67% and 68% were found to be displaying advertisements within the size limits and content restrictions respectively. However, only 8% were compliant with the health warning requirements. It was also reported that knowledge on fines for violating COTPA rules was significantly associated with compliance with ban on sales to minors, likewise, the higher compliance rates with the two-advertisement limit was associated with greater profits off tobacco products.²³

A study was carried out in Delhi to assess the compliance of various sections under COTPA Act. Among which 376 public places were considered for checking of compliance with section-4, 350 places were marked to evaluate the compliance status with section-5, and to assess section 6(a) and 6(b), 70 educational institutes were selected. The results revealed that a majority (59.28%) of the public places violated section-4 but it was gratifying to have observed that 97.42% were compliant with section 5. However, the study reported a moderate compliance status with respect to

sections 6-a and 6-b being 68.57% and 52.85% respectively. Coming to evaluation of other sections, i.e., section 7, 8, 9 of COTPA, it was observed that the study area and participants were 100% compliant.²⁴

A cross sectional study was conducted in 2010 among the tobacco retailers (n=232) of Belgaum city Karnataka, India to assess the compliance status with COTPA Act. The results conveyed that a majority (59.1%) of the study participants believed that pictorial warnings affected the sales of tobacco products. It was also noted that a majority (81%) were not aware of the allowed minimum distance a tobacco point of sale should maintain from a nearby educational institutes. The study concluded that the study participants exhibited a poor knowledge and awareness regarding tobacco sales and COTPA Act and recommended for further studies in Belgaum city and educating the chain of tobacco retailers.²⁵

A study was conducted in Muradnagar, Uttar Pradesh to solely evaluate the compliance of pictorial health warnings (PHWs) on tobacco products as per packaging and labeling rules laid down by COTPA showed that five tobacco brands did not display any PHWs on their packages, 15 tobacco brands did have PHWs but did not meet the said criteria, and 6 brands of bidis were observed to have rather obscure and misleading PHWS, out of which 3 beedi brands had them on the discreet curved axis. The study also observed that there were concealed promotional messages and misleading descriptions as well on the packages.²⁶

Another study was conducted in Udupi district, Karnataka to assess the compliance status and influence of pictorial health warnings on tobacco products. The study team had collected 26 tobacco packages to evaluate. They observed that only two packs (8%) were fully compliant with respect to the size of the health warnings

i.e., to cover 85% of the displayed area of any tobacco pack with the health warning. Majority (58%) of the packs had readable and comprehensible warnings, and 69% of the packages had health warning messages in a suitable local language as well. The researchers had also conducted a student survey to assess the impact of these pictorial health warnings on their future smoking habit forming. It showed that 60% of boys and 52% of girls would never make a habit of smoking in future, holding the health warnings on the packets accountable for this solely, which is indeed a positive sign that health warnings did have some impact on habit forming.²⁷

A study was conducted in Shimla city to estimate the conformity of tobacco points of sale (POS) and educational institutes with the government's tobacco legislations in which a total of 32 schools, colleges and 157 tobacco POSs were considered. It showed that a majority (88%) of the educational institutes were compliant with the key indicators of COTPA Act but only a trifling 7.5% POSs were compliant. It was noteworthy that none of the POSs were found within the premises of schools and colleges; however it was observed that 26% of the tobacco POS were located within 100 yards of these educational institutes. Of alarming and urgent concern was that 8% of POSs were observed selling tobacco products to minors.²⁸

A study was carried out in Odisha, spanning across seven districts to assess how well the tobacco control laws were being enforced among the tobacco point of sales and public alike. It was observed that government employees constituted the highest percentage of study participants. It was noted that educational status did have an association with the habit forming of tobacco consumption; 70% of the illiterates and 34% of the post graduates used tobacco. More than half (52.1%) of the participants were aware of India's tobacco legislations, and a majority (80.8%) were

aware of the prohibition of smoking in public places. However, it was distressing to note that 36.6% of the participants observed tobacco products being sold to a minor more frequently while 31.2% had reported that they saw a minor selling tobacco products. Furthermore, 24.8% of the participants reported that they saw tobacco point of sales within a radius of 100 meters of any educational institute.²⁹

A study conducted in south Bengaluru to assess the compliance of public places to tobacco control laws revealed that among 359 public places included in the study, only one-third of the public places showed complete (1.9%) or partial compliance (28.1%). It was noted that majority (93%) of the personnel and all the authorized officers involved in regulating and enforcing anti-smoking laws were aware of COTPA. However, upon delving further into details of various provisions and sections of the Act, these officials couldn't keep up. It was also noticed that eateries violating anti-smoking laws the most in comparison with other public places; the violations included smoking (3.9%), presence of cigarette butts (13%) and ashtrays (6%) in the eateries. Furthermore, only 19% of the public places complied with a provision of a designated smoking zone in public places where it were supposed to be installed.³⁰

A case study conducted in Karnataka to evaluate the implementation status of COTPA utilising records related to COTPA from the departments of police, health, education, media and transport showed that five government bodies (police, health, education, media, city corporations, and transport) played a key role in helping implementation of COTPA smoothly. As many as 60,000 cases were booked for violating COTPA provisions in the year of 2014 as per the police records. It was also notable that as many as 1130 cases and more than 14,000 cases were booked by

district anti-tobacco cells (n=3) and the transport departments (n=2) respectively for violating COTPA in the same year. However, it was relieving to note that a majority (84.7%) of the schools showed compliance with the anti-smoking law. Besides contributing the records to the study, the state's health department also took the initiative of creating awareness on educating people and personnel involved with regulating tobacco use on health hazards of tobacco consumption and various provisions under COTPA.³¹

A mixed-methods study was conducted in Daman among the police staff (n=155) to estimate the knowledge and attitude about COTPA Act. It showed that a majority (63.2%) were aware that a tobacco control law exists in India, but only 13% had any formal training in its implementation. One person had conducted inspections for COTPA compliance in the last 12 months. Majority (78.1%) of the police staff felt responsible of enforcing anti-tobacco laws strictly and its role in better implementation status. The study concluded by identifying various factors that hindered the successful execution of tobacco control laws, among which lack of knowledge and cooperation among the police staff, dodging of the law by tobacco retailers, concentration of power within the higher ranking officials were of prime concern.³²

A study conducted in Shimla city in 2018, to assess the compliance of tertiary healthcare institutes to tobacco control laws showed that a majority (71.9%) of the institutes were compliant with putting up a "No smoking" signage and 77.2% of the places evaluated under the study reported no active smoking. However, 25% of the points of sales were observed selling tobacco products within 100 yards of the healthcare institutes. It was noteworthy that none of the shops selling tobacco

products were compliant with signage boards warning against sale to minors and sales within 100 meters of an educational institute. Furthermore, it was observed that a majority (80%) of the educational institutes had tobacco vendors within and around the premises and 60% of these institutes were compliant with putting up signage of tobacco-free institution.³³

METHODOLOGY

A) Source of Data:

All the tobacco retailers in field practice area of four Primary Health Centres (PHC) namely Ashoknagar, Rukmininagar, Vantamuri and Kinaye under the Department of Community Medicine, J.N. Medical College, KAHER, Belagavi were enrolled in the study.

B) Study Design: Community based cross-sectional study.

C) Study Period: 1st January 2020 to 31st December 2020.

D) Sample Size:

Total number of tobacco point-of-sales (POS) in the study area; i.e., all the POS combined from four PHC areas under Jawaharlal Nehru Medical College, KAHER, Belagavi is around 400 according to the data collected from Belagavi City Corporation and respective medical officers and health workers from four PHCs. Depending upon the accessibility of tobacco retailers and their procurement of proper license, we rounded off the tobacco points-of-sale at each center as mentioned below and the sample size was rounded off to **360**.

- The distribution of tobacco retailers in the four PHC areas is as follows:
 - Kinaye – 70
 - Vantamuri – 80
 - Rukmininagar – 150
 - Ashoknagar - 60

- **Universal sampling method** was adopted and all the consenting tobacco retailers were included in the study and interviewed with a structured questionnaire testing their knowledge, attitude and practice regarding COTPA 2003.

E) Inclusion Criteria – All the licensed tobacco retailers in the field practice areas who were willing to give consent were included in the study.

F) Exclusion Criteria – None.

G) Questionnaire:

A pre-designed and pre-tested questionnaire was developed according to sections under COTPA 2003.

H) Method of Data Collection

Personal interview of eligible participants was conducted by the investigator, using pre-designed and pre-tested questionnaire. Data regarding socio-demographic variables like age, address, educational status, years working in present occupation, socioeconomic status etc. were collected.

Visits were made by the investigator to all the 360 Point of Sales (POS) in the study area; i.e., all the POS combined from four PHC areas under Jawaharlal Nehru Medical College, KAHER, Belagavi and the respective tobacco vendors were identified, and explained about the purpose of the study and after getting their written informed consent, they were interviewed at their respective Point of Sales (POS) only at their convenience when the flow of

costumers was less and thus care was taken to make sure that the participants did not have any hindrance in their work.

The participants were given free chance to discontinue from the study at any given point of time for any privacy or confidential issues or work related issues.

I) Ethical clearance has been obtained from the Institutional Ethics Committee for Human Subjects Research of J.N. Medical College, KAHER, Belagavi (Ref: MDC/DOME/237 dated 24 December 2019).

J) Informed consent – Written informed consent was taken from each participant prior to the study. Participants were informed in detail about the purpose of the study and their rights, possible benefits and risks.

K) STATISTICAL ANALYSIS

Data collected through the questionnaire was coded and compiled in Microsoft excel sheet. The data was tabulated and master chart was prepared. Data was analyzed by using **Co-guide software**, V.1.03. Categorical data was analyzed by calculating frequency and percentages. Tables and charts were prepared. Statistical analysis was done using Pearson's Chi-Square test to find the associations between various variables. A probability value (p value) of less than 0.05 was considered statistically significant.

L) Operational Definition

A tobacco retailer/ tobacconist is a retailer of tobacco products in various forms (cigarettes, beedi, chewable tobacco – Gutkha, Zarda, Khaini, Tobacco powder and other chewable tobacco products) and the related accoutrements, such as pipes, lighters, matches, ashtrays, pipe cleaners, pipe tampers etc.

M) Proforma Variables:

Whenever possible, standard definitions were used to determine the definitions of the terminologies in the study.

Socio-demographic Variables:

Age: Age of the participant in years as completed on his/her last birthday.

Address: Study participant's place of present stay was collected. It was grouped as urban among those who stayed within the area covered under study area of urban primary health centres i.e., Ashoknagar and Rukmininagar, and rural among those who stayed within the area covered under study area of rural primary health centres i.e., Kinaye and Vantamuri.

Religion: An organized system of beliefs, ceremonies, and rules used to worship a God or groups or Gods. For examples Hindu, Muslims and Christian.³⁴

Education: Every study subject was asked about his/her educational qualification. It was classified as follows:

1. **Illiterate** – A person who cannot read and write any language.
2. **Primary school** – A person who has had formal education from first to seventh standard.
3. **High school** – A person who has had formal education from eighth to tenth standard.
4. **P.U.C** – A person who had studied up to pre-university college first or second year or 11th or 12th std.
5. **Diploma or Graduate** – A person who had completed diploma or graduation in any subjects or had any other higher qualifications.³⁵

Total family income – Combined income of all earning members of the family.

Family size – Total number of members in the family.

Type of family

1. **Nuclear family:** The family consisting of married couple along with their dependent children.
2. **Joint family:** It consists of number of married couples and their children who live in the same household.
3. **Three generation family:** A family where of representatives of three generations related to each other by direct descent live together.³⁶

Socio Economic Status (SES) Class:

Information regarding per capita income (in INR/ month) was collected and SES was classified using Modified B.G. Prasad's classification for the study period (2020).³⁷

The B.G. Prasad's scale was introduced in 1961 considering the base of Consumer Price Index (CPI) for 1960 as 100.

Consumer Price Index for January 2020 was 330

Multiplication factor = Current index value (330) = 3.3

Base index value in 2001 (100)

The new income value is calculated using the following equation:

= multiplication factor × old income value × 4.63 × 4.93.

Here 4.63 and 4.93 are the linking factors given by the Labour Bureau of India.

So, after substituting the values, the new scale is,

Modified BG Prasad Socio-economic Classification, Updated – 2020

Socio-Economic status: class	B. G. Prasad's classification of 1961 (monthly income in rupees)	Revised B. G. Prasad's classification for 2020 (Monthly income in rupees)
I	100 and above	7533 and above
II	50-99	3766-7532
III	30-49	2260-3765
IV	15-29	1130-2259
V	Below 15	1129 below

Marital Status: Data regarding marital status was obtained and categorized as married, unmarried, widow, widower and divorcee.

Type of house:

1. **Kacha** – The walls and/or roof of which are made of material other than those mentioned above, such as unburnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc. are treated as kutchha house.
2. **Semi pucca** – A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
3. **Pucca** – A pucca house is one, which has walls and roof made of the following material. Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc.³⁸

Types of Tobacco products:

- 1) **Cigarette:** A thin cylinder of ground or shredded tobacco that is wrapped in paper, lit, and smoked.
- 2) **Beedi:** Small, thin, hand-rolled cylindrical product which contain tobacco and can be flavoured. When smoked, beedis have higher concentration of nicotine, tar, and carbon monoxide than conventional cigarettes.
- 3) **Gutkha:** It is a dry, relatively non-perishable, commercial preparation containing areca nut, slaked lime, catechu, condiments and powdered tobacco. Tobacco, betel quid nut and catechu are mixed together with several other ingredients, flavored and sweetened. Product is sold in small brightly colored packets which could be appealing to minors.
- 4) **Khaini:** Dried tobacco leaves are crushed and mixed with slaked lime and chewed as a quid.³⁹
- 5) **Zarda:** It is prepared by cutting tobacco leaves into small pieces and boiling them in water with slaked lime and spices until the water evaporates. It is then dried, and coloring and flavoring agents are added. Zarda may be chewed by itself, with areca nut or in betel quid.⁴⁰

RESULTS

A total of 360 subjects were included in the final analysis.

A. SOCIO-DEMOGRAPHIC DATA

Table 1: Distribution of study participants according to age (n=360)

Age Group (in years)	Number	Percentage
18 to 25 years	8	2.22%
26 to 30 years	113	31.39%
31 to 35 years	89	24.72%
36 to 40 years	79	21.94%
41 to 45 years	60	16.67%
46 to 50 years	11	3.06%
TOTAL	360	100%

Among the study participants, 8 (2.22%) were aged between 18 to 25 years, 113 (31.39%) were aged between 26 to 30 years, 89 (24.72%) were aged between 31 to 35 years, 79 (21.94%) were aged between 36 to 40 years, 60 (16.67%) were aged between 41 to 45 years and 11 (3.06%) were aged between 46 to 50 years.

Figure 1: Distribution of study participants according to age

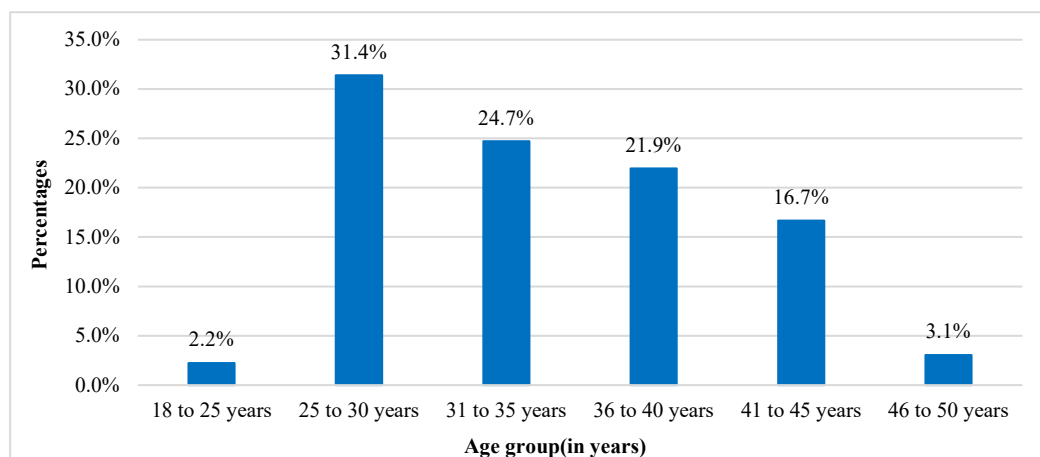


Table 2: Distribution of study participants according to gender (n=360)

Gender	Number	Percentage
Male	315	87.50 %
Female	45	12.50 %
TOTAL	360	100 %

Among the study participants, 315 (87.50%) were male and 45 (12.50%) were female.

Figure 2: Distribution of study participants according to gender

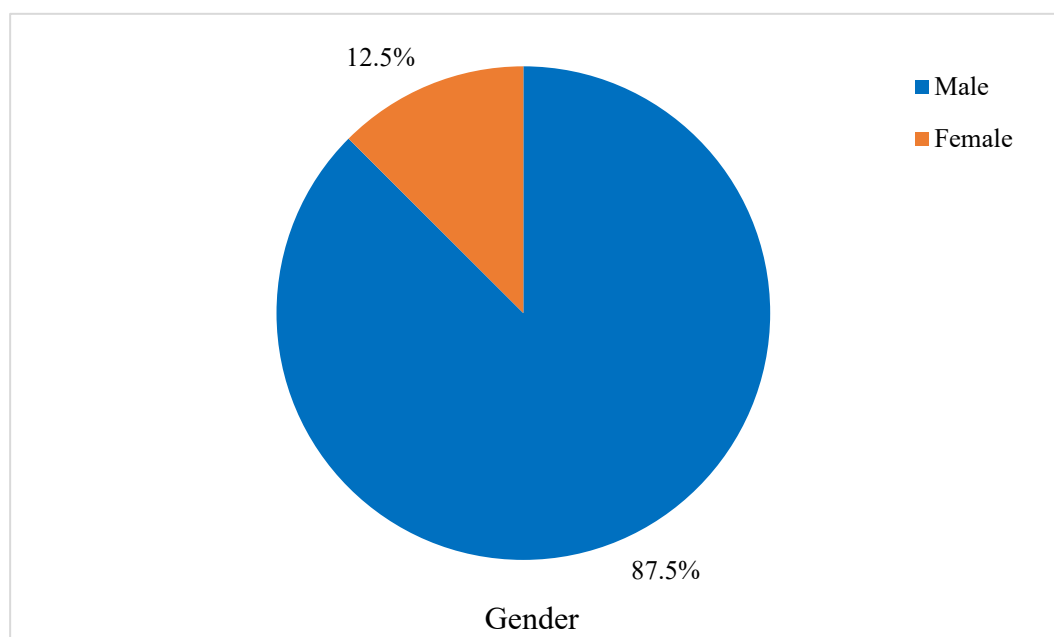


Table 3: Distribution of study participants according to religion (n=360)

Religion	Number	Percentage
Hindu	123	34.17%
Muslim	186	51.67%
Christian	51	14.17%
TOTAL	360	100 %

Among the study participants, 123 (34.7%) were Hindu, 186 (51.67%) were Muslim and 51 (14.7%) were Christian.

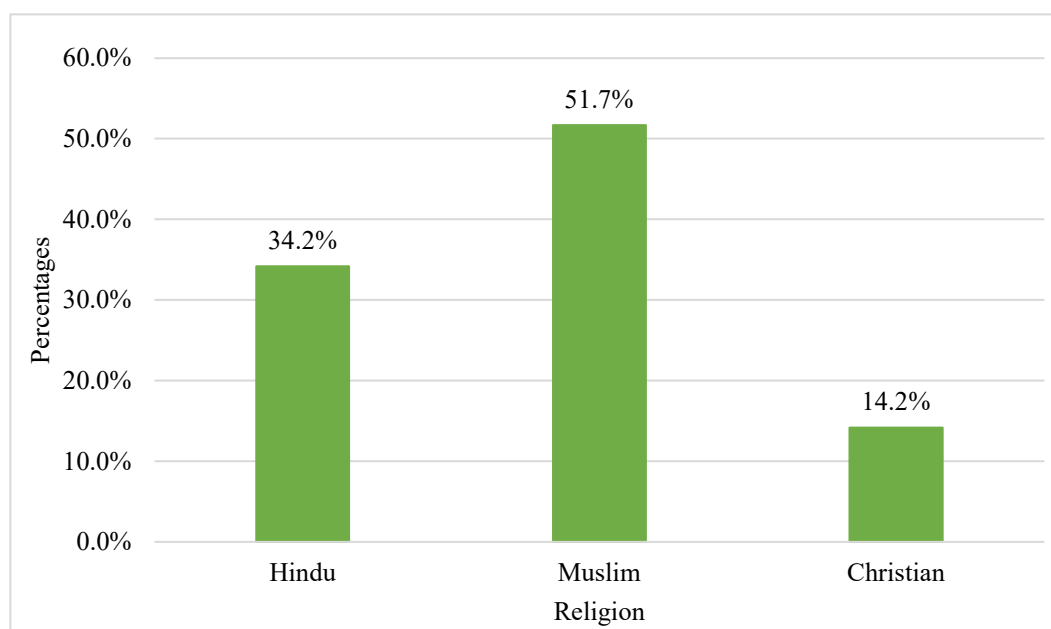
Figure 3: Distribution of study participants according to religion

Table 4: Distribution of study participants according to educational status

(n=360)

Education	Number	Percentages
Illiterate	63	17.50%
Primary	278	77.22%
High school	19	5.28%
TOTAL	360	100 %

Among the study population, 63 (17.50%) were illiterate, 278 (77.22%) finished their primary school and 19 (5.28%) finished their high school.

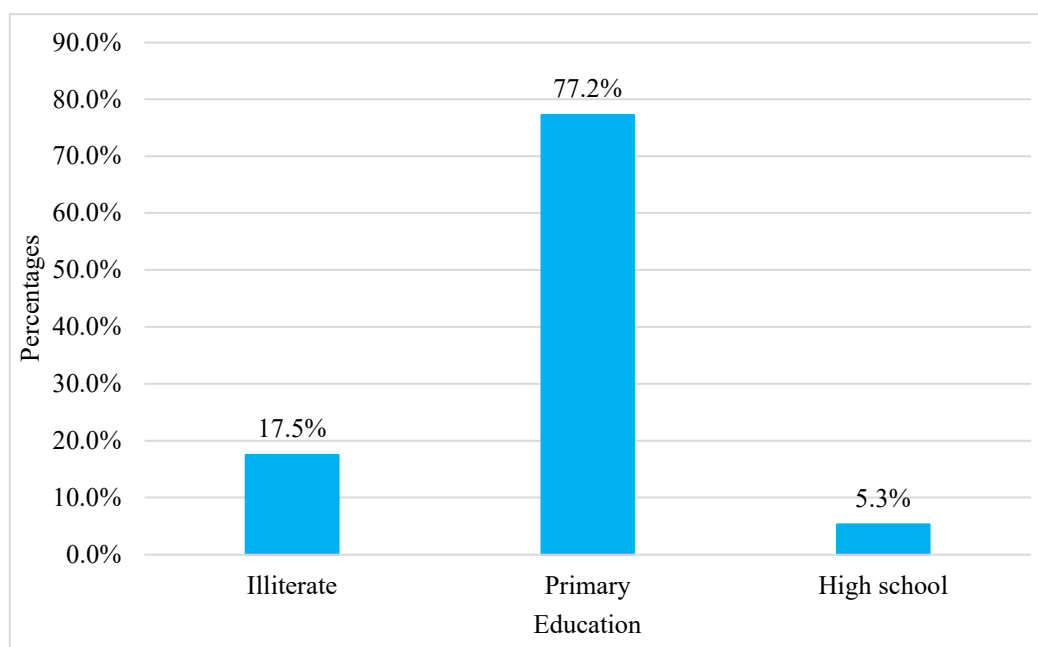
Figure 4: Distribution of study participants according to educational status

Table 5: Distribution of study participants according to marital status (n=360)

Marital status	Number	Percentages
Married	280	77.78%
Unmarried	35	9.72%
widow	24	6.67%
Divorcee	21	5.83%
TOTAL	360	100 %

Among the study population, 280 (77.78%) participants were married, 35 (9.72%) were unmarried, 24 (6.67%) were widow and 21(5.83%) were divorcee.

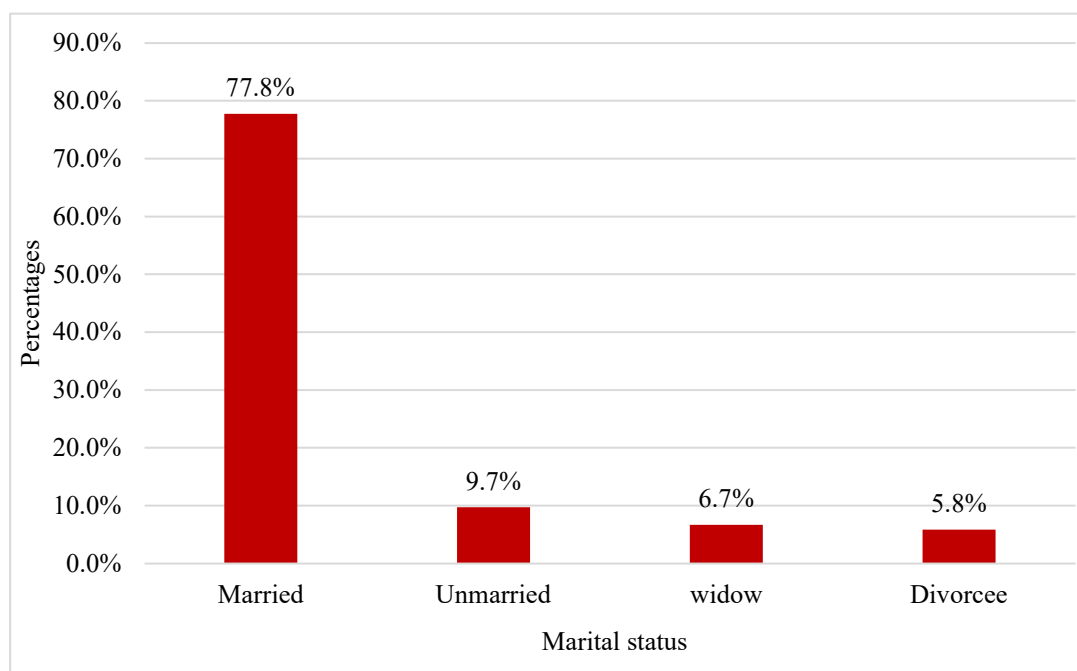
Figure 5: Distribution of study participants according to marital status

Table 6: Distribution of study participants according to type of family (n=360)

Family	Number	Percentages
Nuclear family	299	83.06%
Joint family	61	16.94%
TOTAL	360	100 %

Among the study population, 299 (83.06%) belonged to a nuclear family and 61 (16.94%) lived in joint families.

Figure 6: Distribution of study participants according to type of family

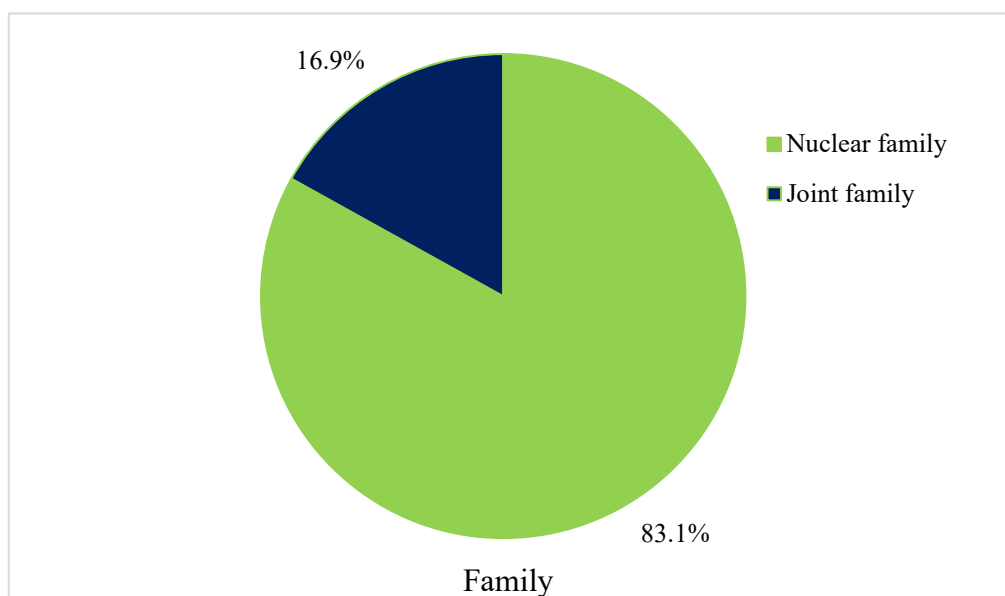


Table 7: Distribution of study participants according to Socio-economic Status (Modified B.G. Prasad Classification, updated 2020) (n=360)

Socio Economic Status	Number	Percentages
Class I	15	4.17%
Class II	74	20.56%
Class III	232	64.44%
Class IV	39	10.83%
TOTAL	360	100 %

Among the study population, 15 (4.17%) belonged to class I, 74 (20.56%) to class II, 232 (64.44%) to class III and 39 (10.83%) to class IV according to Modified B.G. Prasad Classification.

Figure 7: Distribution of study participants according to Socio-economic Status

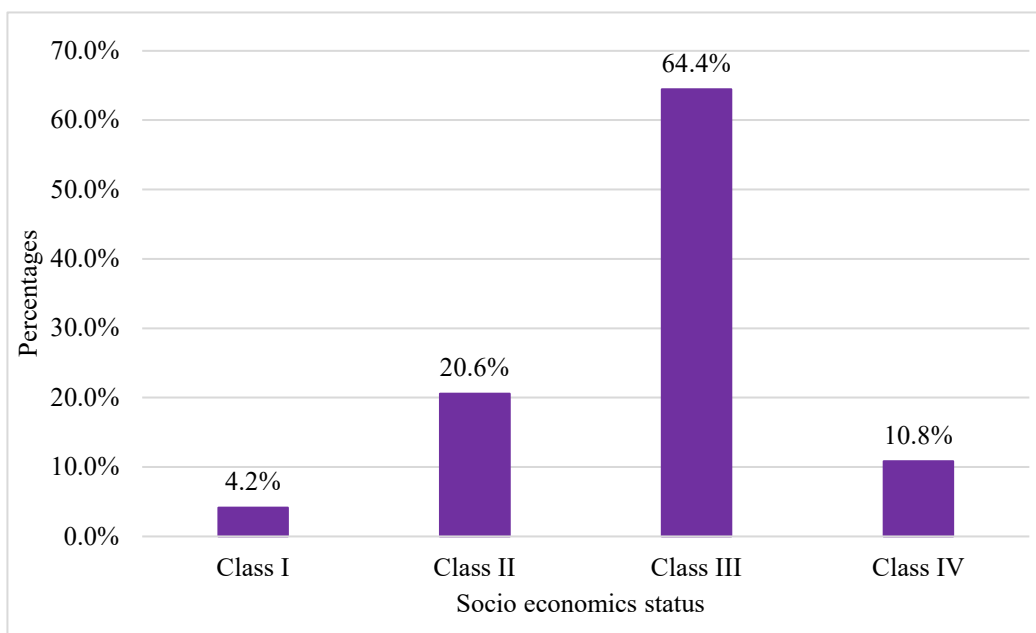


Table 8: Distribution of study participants according to type of house (n=360)

Housing	Number	Percentages
Kutchha	3	0.83%
Semi-pucca	130	36.11%
Pucca	227	63.06%
TOTAL	360	100 %

Among the study population, 3 (0.83%) lived in katcha houses, 130 (36.11%) in semi-pucca houses and 227(63.06%) in pucca houses.

B. OCCUPATIONAL DATA**Table 9: Distribution of study participants according to number of years in the present occupation (n=360)**

Years in tobacco sale	Number	Percentage
Less than 5 years	170	47.22 %
More than 5 years	190	52.78 %
TOTAL	360	100 %

Among the study participants, 170 (47.22%) are in tobacco sale occupation for less than five years and 190 (52.78%) for more than five years.

Table 10: Distribution of study participants according to monthly income through tobacco sale (n=360)

Income	Number	Percentage
Less than 5000 rupees	194	53.89%
More than 5000 rupees	166	46.11%
TOTAL	360	100 %

Among the study participants, 194 (53.89%) made less than 5000 rupees a month through tobacco sales, and 166 (46.11%) made more than 5000 rupees a month.

Table 11: Distribution of study participants according to their opinion on sales status of tobacco products in general (n=360)

Sales status	Number	Percentage
Increase	36	10.00%
Decrease	160	44.44%
No change	164	45.56%
TOTAL	360	100 %

Among the study participants, 36 (10%) felt that there is an increase in the sales of tobacco products, 160 (44.44%) thought there is a decrease and 164 (45.56%) felt there was no change in sale of tobacco products.

Figure 8: Distribution of study participants according to their opinion on sales status of tobacco products in general.

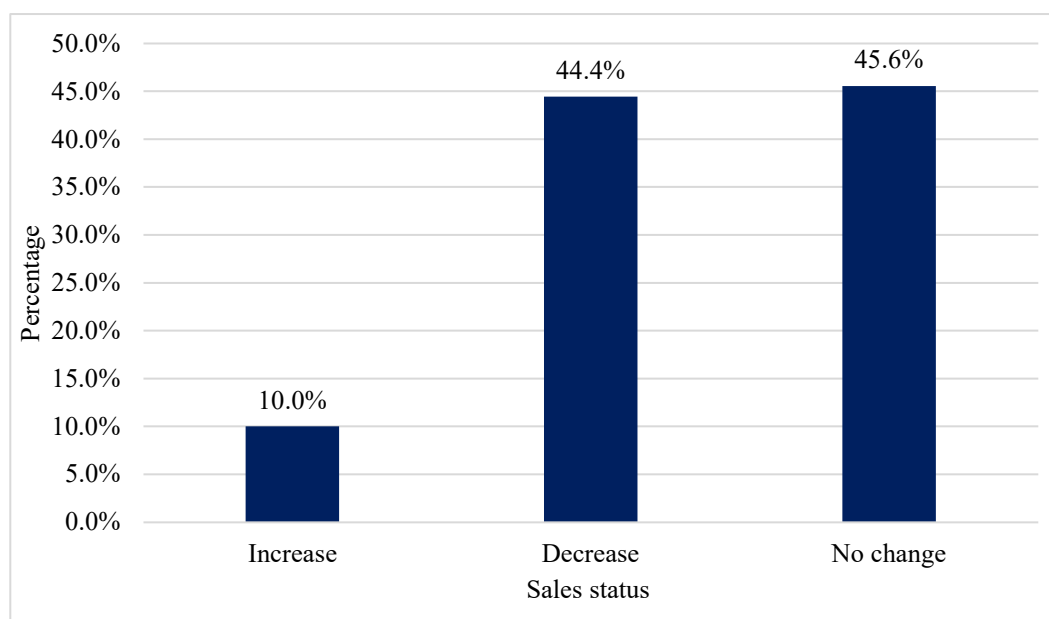


Table 12: Distribution of study participants according to their opinion on tobacco products in increasing sale trends (n=360)

Tobacco products in increasing sale trends	Number	Percentage
Cigarettes	221	61.39%
Beedi	20	5.56%
More than one product	119	33.06%
TOTAL	360	100 %

Among the study participants, 221 (61.39%) felt that cigarettes are among the tobacco products on rising sales, 20 (5.56%) felt beedis are, and 119 (33.06%) told more than one product are on rising sales among many tobacco products.

Figure 9: Distribution of study participants according to tobacco products in increasing sale trends.

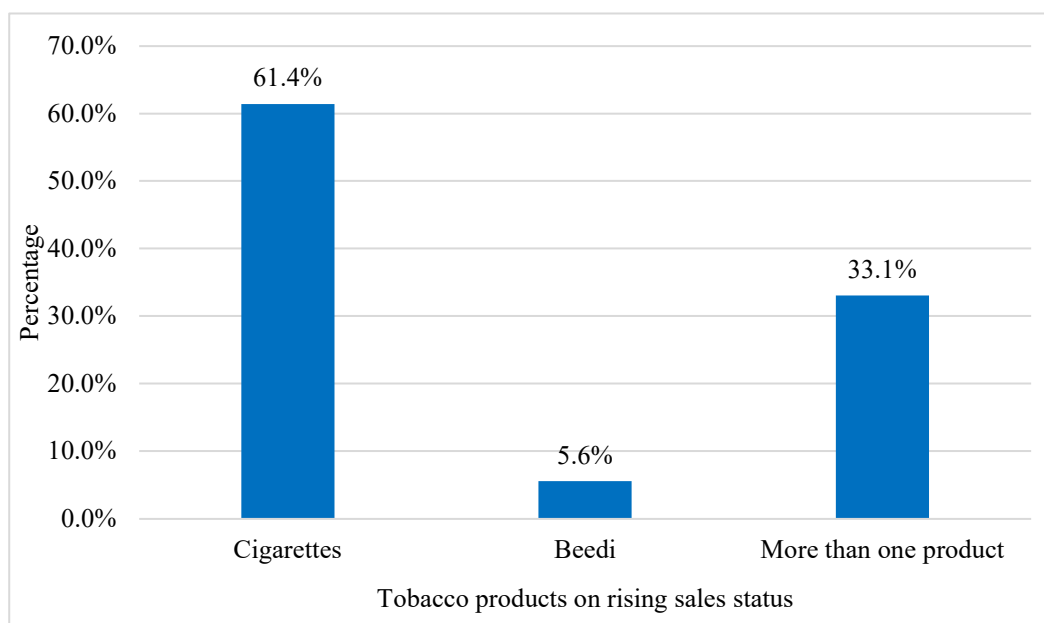
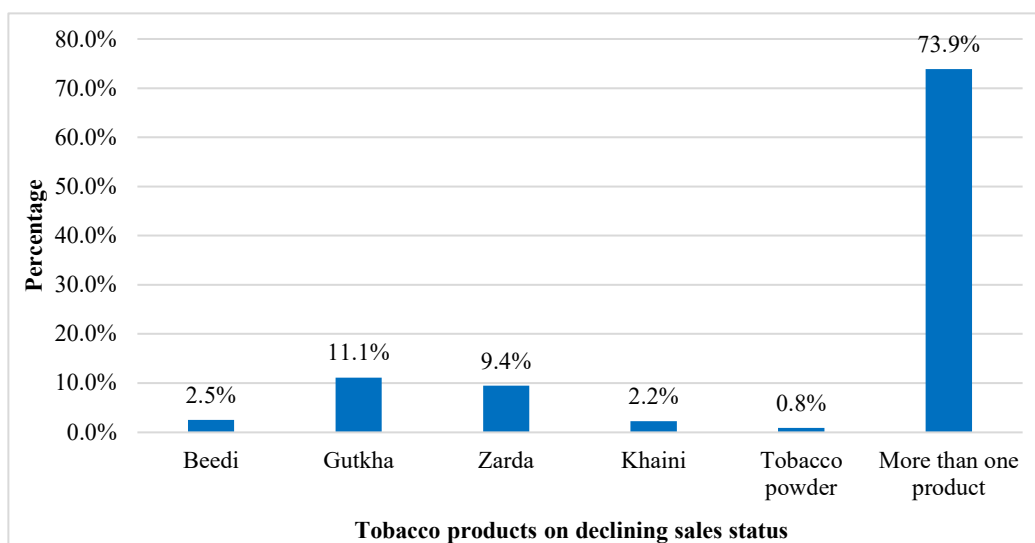


Table 13: Distribution of study participants according to their opinion on tobacco products in decreasing sales trends (n=360)

Tobacco products in decreasing sale trends	Number	Percentage
Beedi	9	2.50%
Guthka	40	11.11%
Zarda	34	9.44%
Khaini	8	2.22%
Tobacco powder	3	0.83%
More than one product	266	73.89%
TOTAL	360	100 %

Among the study participants, 09 (2.5%) felt that beedis are among the tobacco products on declining sales, 40 (11.11%) felt Guthka is, 34 (9.44%) felt Zarda is, 08 (2.22%) felt Khaini is, 03 (0.83%) felt tobacco powder is, and 266 (73.89%) felt more than one type of these tobacco products, as a collective are on a declining sales trend.

Figure 10: Distribution of study participants according to tobacco products in decreasing sale trends.



C. KNOWLEDGE, ATTITUDE, PRACTICE REGARDING COTPA**a) Knowledge regarding COTPA Act.****Table 14: Distribution of study participants according to their basic awareness on COTPA Act (n=360)**

Heard of COTPA	Number	Percentages
Yes	44	12.22%
No	316	87.78%
TOTAL	360	100 %

Among the study participants, 44 (12.22%) heard of COPTA, and 316 (87.78%) never heard of COTPA before.

Table 15: Distribution of study participants according to their knowledge on ban of sale of tobacco products to and by minors (n=360)

Can minor sell or buy tobacco products	Number	Percentage
Yes	109	30.28%
No	251	69.72%
TOTAL	360	100 %

Among the study participants, 109 (30.28%) believed that minors can sell or buy tobacco products and 251 (69.72%) said that minors can't sell or buy tobacco products.

Figure 11: Distribution of study participants according to their knowledge on ban of sale of tobacco products to and by minors

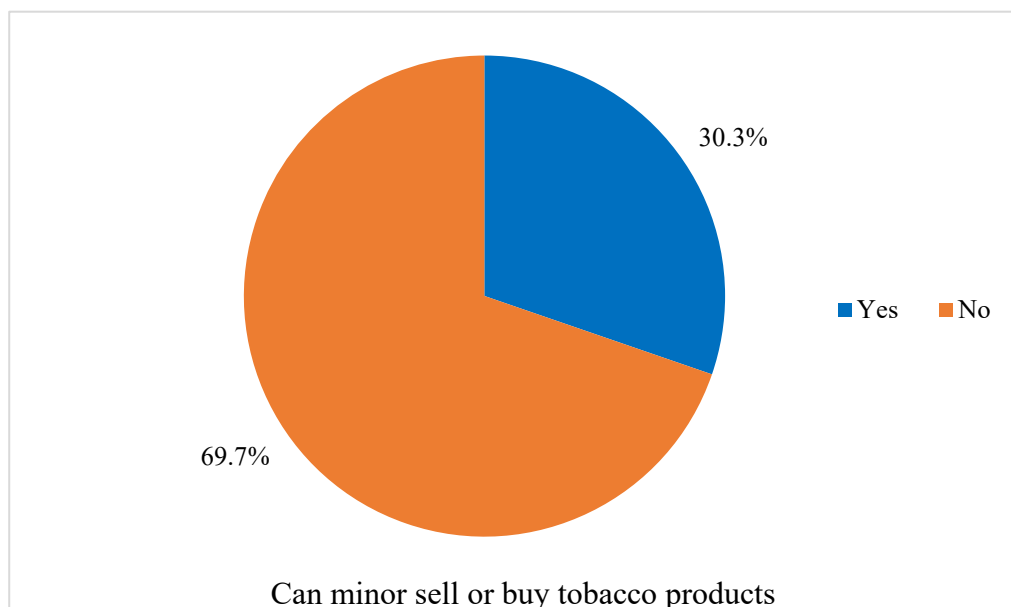


Table 16: Distribution of study participants according to their knowledge on ban of sale of tobacco products around Educational Institutes (n=360)

Prohibition of sale of tobacco products around Educational Institutes	Number	Percentage
Yes	43	11.94%
No	307	85.27%
TOTAL	360	100 %

Among the study participants, 27 (7.50%) knew that it is prohibited to sell tobacco products around educational institutes and 333 (92.50%) were not aware of this.

Figure 12: Distribution of study participants according to their knowledge on ban of sale of tobacco products around educational institutes

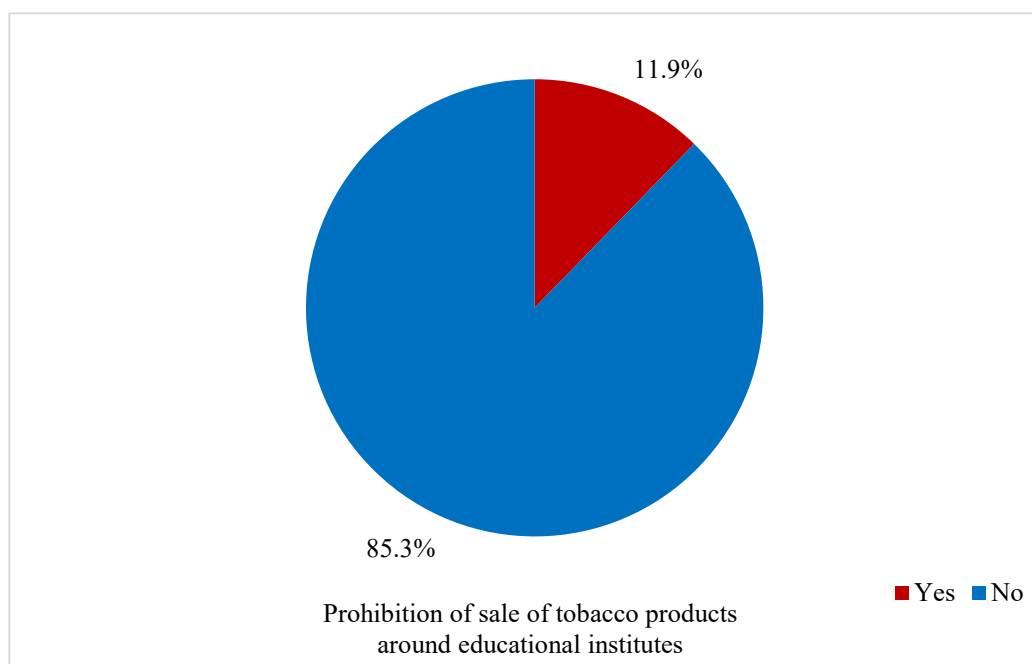


Table 17: Distribution of study participants according to their knowledge on their point of sale (POS) located around educational institutes (n=360)

Location of POS within 100 meters of an educational institute	Number	Percentage
No	255	70.83%
Don't know	105	29.17%
TOTAL	360	100 %

Among the study participants, 255 (70.83%) knew that their POS is not within 100 meters of any educational institute and 105 (29.17%) didn't know.

Table 18: Distribution of study participants according to their knowledge on Prohibition of brand promotion of all tobacco products (n=360)

Prohibition to put up displays of Tobacco products	Number	Percentage
Yes	134	37.23%
No	226	62.77%
TOTAL	360	100 %
Display of health warning boards	Number	Percentage
Yes	71	19.72%
No	289	80.28%
TOTAL	360	100%

Among the study participants, 08 (2.22%) were aware that it is prohibited to put up displays of tobacco products at their POS and 352 (97.78%) were not aware of this. And 71 (19.72%) were aware that there should be displays of health warning boards at POS's, and 289 (80.28%) were not aware of this.

Figure 13: Distribution of study participants according to their knowledge on prohibition of brand promotion of all tobacco products

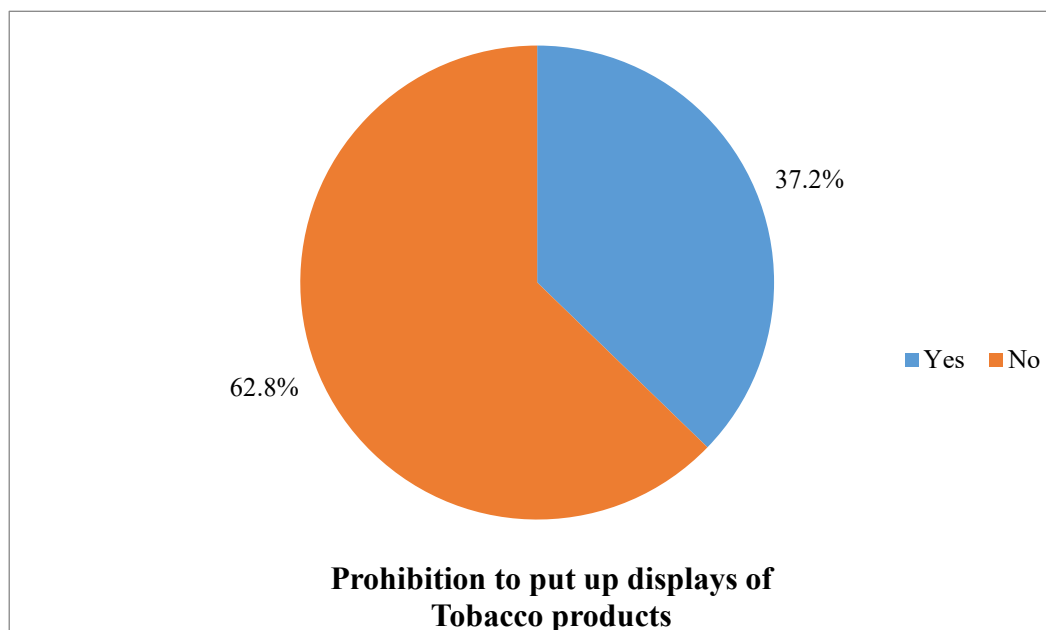


Figure 14: Distribution of study participants according to display of health warning boards

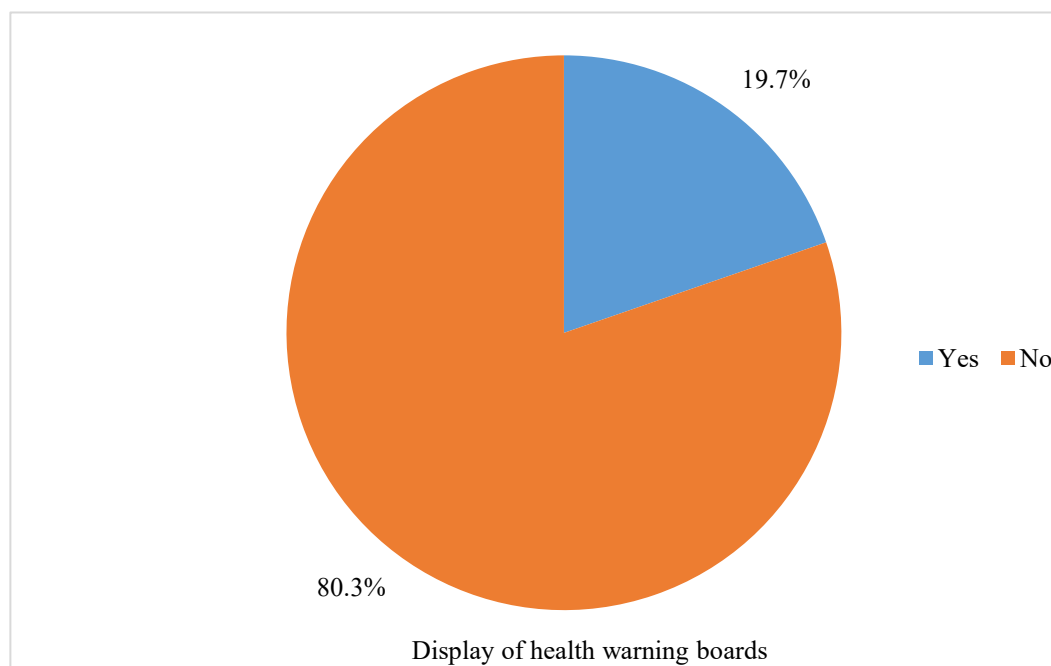


Table 19: Distribution of study participants according to their knowledge on prohibition of smoking in public places (n=360)

Prohibition of smoking in public places	Number	Percentage
Yes	343	95.28%
No	17	4.72%
TOTAL	360	100 %

Among the study participants, 343 (95.28%) were aware that it is prohibited to smoke in public places and 17 (4.72%) were not aware of this.

Figure 15: Distribution of study participants according to their knowledge on prohibition of smoking in public places

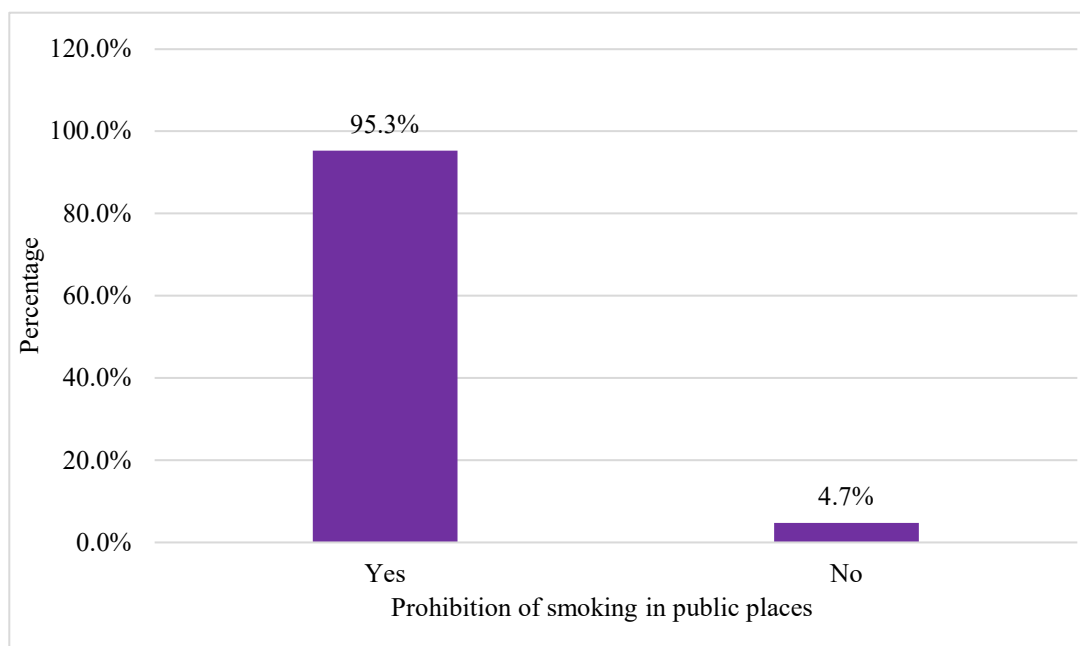


Table 20: Distribution of study participants according to their knowledge on display of health warnings on tobacco products and punishment offered for violation of any of the sections under the Act (n=360)

Health Warnings on cigarette pack	Number	Percentage
Yes	104	28.88%
No	256	71.11%
TOTAL	360	100%
Punishment for violation of any sections under COTPA	Number	Percentage
Yes	65	18.05%
No	295	81.94%
TOTAL	360	100%

Among the study participants, 48 (13.33%) were aware that health warnings should be present on cigarette packs and 312 (86.67%) were not aware of this. And none of the study participants were aware of punishments under COTPA if there are any violations.

Figure 16: Distribution of study participants according to their knowledge on display of health warnings on tobacco products

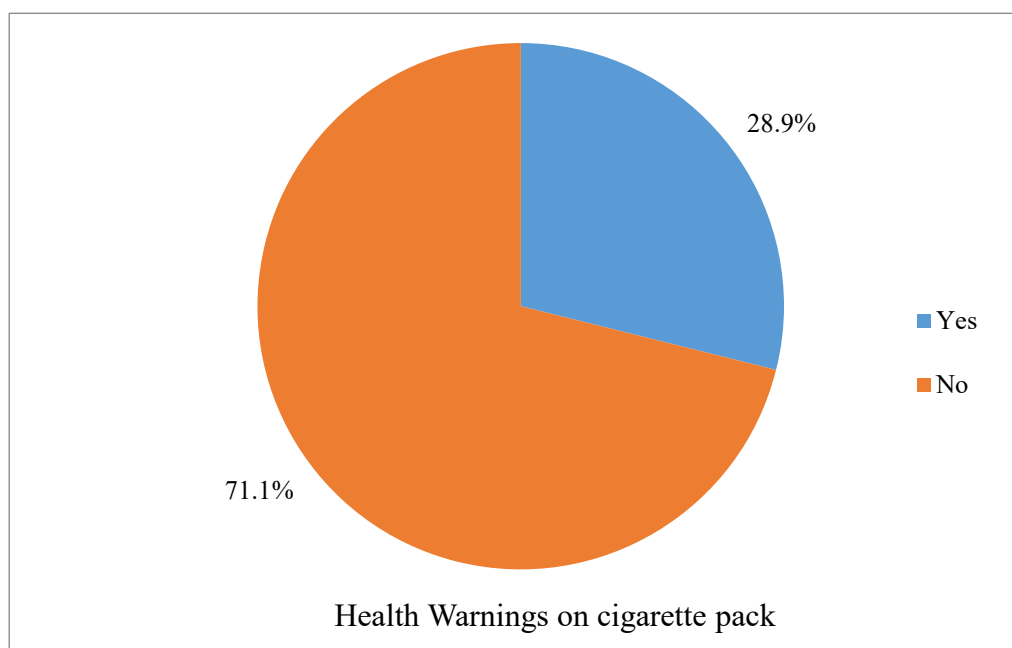
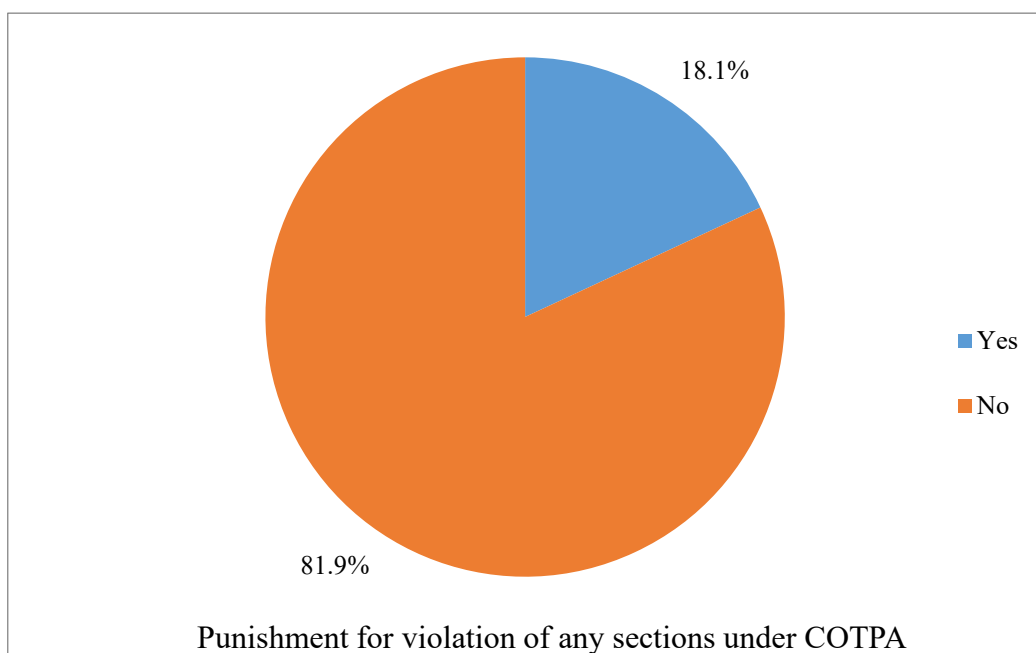


Figure 17: Distribution of study participants according to their knowledge on punishment offered for violation of any sections under COTPA



b) Attitude regarding COTPA Act

Table 21: Distribution of study participants according to their attitude on selling tobacco products to a minor (n=360)

Selling tobacco products to a minor	Number	Percentage
Deny	34	9.44%
Sell	207	57.50%
Sell but advice to quit	115	31.94%
Inform parent or teacher	4	1.11%
TOTAL	360	100 %

Among the study participants, 34 (9.44%) would deny selling tobacco products to a minor, 207 (57.50%) would sell, 115 (31.94%) would sell but advice to quit and 04 (1.11%) would inform parent or teacher.

Table 22: Distribution of study participants according to their attitude on customers smoking in front of shop (n=360)

Customers smoking in front of shop	Number	Percentage
Stay quiet as I have put up warning board	34	9.44%
Stay quiet concerning about losing customer	127	35.28%
Say politely to move away	104	28.89%
Ignore	95	26.39%
TOTAL	360	100 %

Among the study participants, 34 (9.44%) would stay quiet if their customers smoked in front of their shops having put up a warning board, 127 (35.28%) would prefer to stay quiet concerning about losing customer, 104 (28.89%) would ask the customer to politely move away, 95 (26.39%) would ignore.

Table 23: Distribution of study participants according to their attitude on seeing someone smoke in public places (n=360)

Seeing someone smoke in public places	Number	Percentage
Move away	236	65.56%
Call Police or toll-free	17	4.72%
Say politely to move away	25	6.94%
Ignore	82	22.78%
TOTAL	360	100 %

Among the study participants, 236 (65.56%) would move away if they see someone smoking in public places, 17 (4.72%) would call police, 25 (6.94%) would ask the person smoking to politely move away and 82 (22.78%) would ignore.

Table 24: Distribution of study participants according to their attitude on effect of health warnings of tobacco products on sale (n=360)

Effect of health warnings on sale	Number	Percentage
Negative effect	70	19.44%
No effect	290	80.56%
TOTAL	360	100 %

Among the study participants, 70 (19.44%) felt that health warnings had a negative effect on tobacco products sale and 290 (80.56%) felt it had no effect on sales.

Table 25: Distribution of study participants according to their attitude on effect of pictorial warnings/ increased price of tobacco products on sale (n=360)

Effect of pictorial warnings on decreasing sales	Number	Percentage
Yes	99	27.50%
No	97	26.94%
No effect	164	45.56%
TOTAL	360	100 %

Among the study participants, 99 (27.50%) felt that sales of tobacco products have decreased due to the pictorial warnings, 97 (26.94%) said no and 164 (45.56%) felt that there was no effect of pictorial warnings on sale.

Table 26: Distribution of study participants according to their attitude on strict implementation status of the COTPA Act (n=360)

Strict implementation of COTPA Act	Number	Percentage
No	56	15.56%
Can't decide	304	84.44%
TOTAL	360	100 %

Among the study participants, 56 (15.56%) felt that COTPA Act had been implemented strictly and 304 (84.44%) can't decide.

Table 27: Distribution of study participants according to their attitude on stop selling tobacco products (n=360)

Stop selling tobacco products	Number	Percentage
Yes	113	31.39%
No	247	68.61%
TOTAL	360	100 %

Among the study participants, 113 (31.39%) would consider stop selling tobacco products and 247 (68.61%) would not consider so.

Table 28: Distribution of study participants according to their attitude on banning tobacco products (n=360)

Banning tobacco products	Number	Percentage
Yes	98	27.22%
No	262	72.78%
TOTAL	360	100 %

Among the study participants, 98 (27.22%) thinks that tobacco products should be banned and 262 (72.78%) feels otherwise.

Table 29: Distribution of study participants according to their attitude on smoke free nation (n=360)

Possibility of a Smoke Free Nation	Number	Percentage
Yes	52	14.44%
No	70	19.44%
Can't tell	238	66.11%
TOTAL	360	100 %

Among the study participants, 52 (14.44%) said that a smoking free nation is possible and 70 (19.44%) said that it is not possible and 238 (66.11%) could not tell if it was possible.

c) Practice regarding COTPA Act.

Table 30: Distribution of study participants according to their practice on minors buying tobacco products (n=360)

Minors buying tobacco products	Number	Percentages
Often	123	34.17%
Rare	197	54.72%
Not at all	40	11.11%
TOTAL	360	100 %

Among the study participants, 123 (34.17%) said that minors do come often to buy tobacco products, 197 (54.72%) said it is a rare event and 40 (11.11%) claimed that minors never come to buy tobacco products.

Figure 18: Distribution of study participants according to their practice on minors buying tobacco products

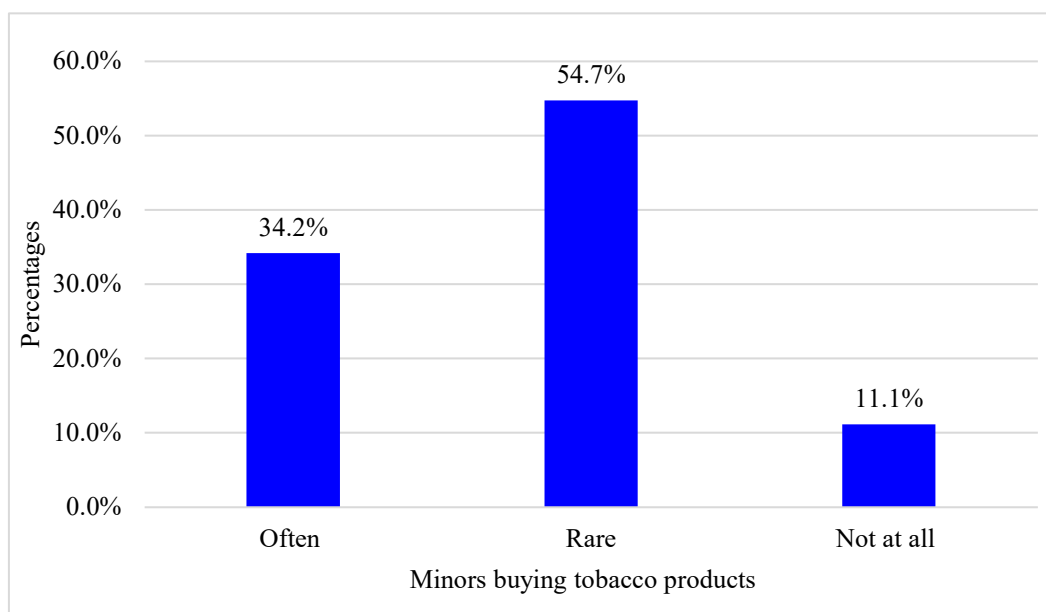


Table 31: Distribution of study participants according to their practice on asking for age proof for a minor-looking customer (n=360)

Ask for age proof	Number	Percentage
Yes	06	1.67%
No	354	98.33%
TOTAL	360	100 %

Among the study participants, 06 (1.67%) said that they ask for age proof to a minor-looking customer and 354 (98.33%) said they don't.

Table 32: Distribution of study participants according to their practice on hiring minors to sell tobacco products (n=360)

Hiring minors to sell tobacco products	Number	Percentage
Yes	0	0%
No	360	100%
TOTAL	360	100 %

Among the study participants, none of them claimed that they ever hired minors to sell tobacco products.

Table 33: Distribution of study participants according to their practice on displaying health warning boards (n=360)

Displaying Health Warning Boards	Number	Percentage
Yes	62	17.22%
No	298	82.77%
TOTAL	360	100 %

Among the study participants, 62 (17.22%) displayed health warning boards in their shops and 298 (82.77%) did not display any health warning boards.

Figure 19: Distribution of study participants according to their practice on displaying health warning boards

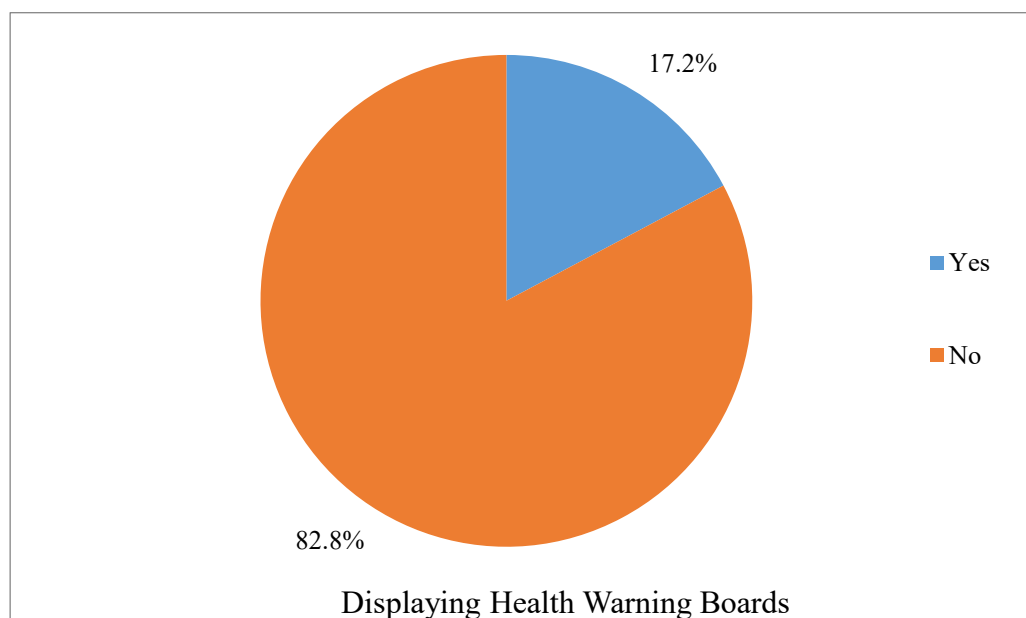


Table 34: Distribution of study participants according to their practice on seeing female customers for their POS (n=360)

Female customers buying tobacco products	Number	Percentage
Yes	84	23.33%
No	276	76.67%
TOTAL	360	100 %

Among the study participants, 84 (23.33%) claimed that females do buy tobacco products from them and 276 (76.67%) said females never bought tobacco products from them.

D) KNOWLEDGE AND PRACTICES REGARDING TOBACCO PRODUCTS

i. Knowledge regarding health hazards

Table 35: Distribution of study participants according to their knowledge on smoking ill effects on health (n=360)

Smoking Ill Effects on Health	Number	Percentage
Yes	287	79.72%
No	73	20.28%
TOTAL	360	100 %

Among the study participants, 287 (79.72%) were aware of the fact that smoking had ill effects on health and 73 (20.28%) were not aware of this.

Table 36: Distribution of study participants according to their knowledge on smoking in causation of other diseases other than cancer (n=360)

Smoking causing diseases other than cancer	Number	Percentage
Yes	135	37.50%
No	225	62.50%
TOTAL	360	100 %

Among the study participants, 135 (37.50%) were aware that smoking can also cause diseases other than cancer and 225 (62.50%) were not aware of this.

Table 37: Distribution of study participants according to their knowledge on smoking in causation of heart diseases (n=360)

Smoking causing cardiovascular diseases	Number	Percentage
Yes	37	10.28%
No	323	89.72%
TOTAL	360	100 %

Among the study participants, 37 (10.28%) were aware that smoking can cause CVS diseases and 323 (89.72%) were not aware of this.

Table 38: Distribution of study participants according to their knowledge on mortality due to tobacco related diseases (n=360)

Mortality due to tobacco related diseases	Number	Percentage
Yes	47	13.06%
No	313	86.94%
TOTAL	360	100 %

Among the study participants, 47 (13.06%) were aware of the mortality due to tobacco related diseases and 313 (86.94%) were not aware of this.

Table 39: Distribution of study participants according to their knowledge and attitude on less dangerous forms of tobacco consumption (n=360)

Less dangerous forms of consumption	Number	Percentage
Smoking	4	1.11%
Chewing	75	20.83%
Sniffing	29	8.06%
None	252	70.00%
TOTAL	360	100 %

Among the study participants, 04 (1.11%) felt that smoking was a less dangerous form of tobacco consumption, 75 (20.83%) felt it was chewing that was less dangerous, 29 (8.06%) felt it was sniffing whereas 252 (70%) said none of the tobacco products were any less dangerous and are equally dangerous.

Figure 20: Distribution of study participants according to their knowledge and attitude on less dangerous forms of consumption

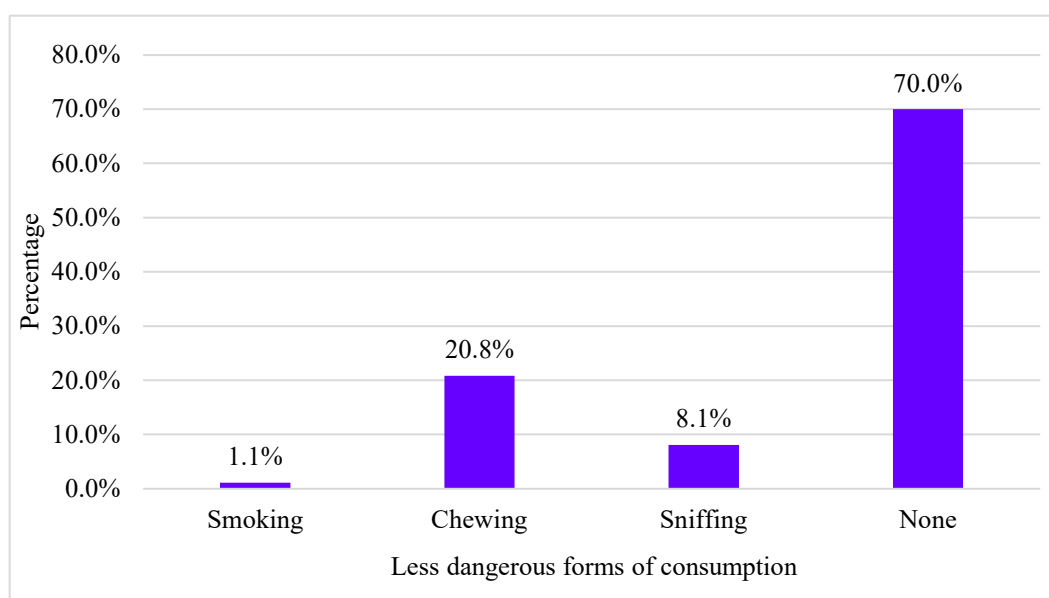


Table 40: Distribution of study participants according to their awareness of passive smoking (n=360)

Awareness of passive smoking	Number	Percentage
Yes	115	31.94%
No	245	68.06%
TOTAL	360	100 %

Among the study participants, 115 (31.94%) heard of passive smoking and 245 (68.06%) were not aware.

Figure 21: Distribution of study participants according to their awareness of passive smoking

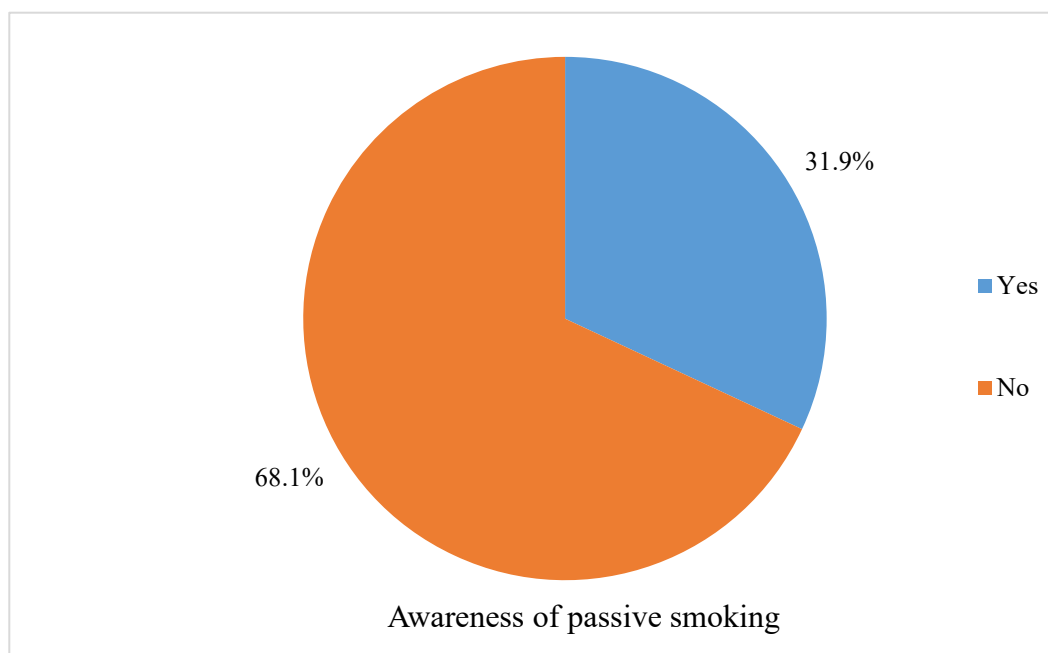


Table 41: Distribution of study participants according to their knowledge on ill effects of passive smoking (n=115)

Is passive smoking dangerous?	Number	Percentage
Yes	82	71.30%
No	33	28.70%
TOTAL	115	100%
Can it cause cancer and Cardiovascular Disease	Number	Percentage
Yes	11	9.57%
No	104	90.43%
TOTAL	115	100%

Among 115 study participants who heard of passive smoking, 82 (71.30%) said that passive smoking is also dangerous and 33 (28.70%) were not aware and 11 (9.57%) believed that passive smoking can also cause cancer and CVS disease, whereas 104 (90.43%) were not aware of this.

Figure 22: Distribution of study participants according to knowledge on ill effects of passive smoking

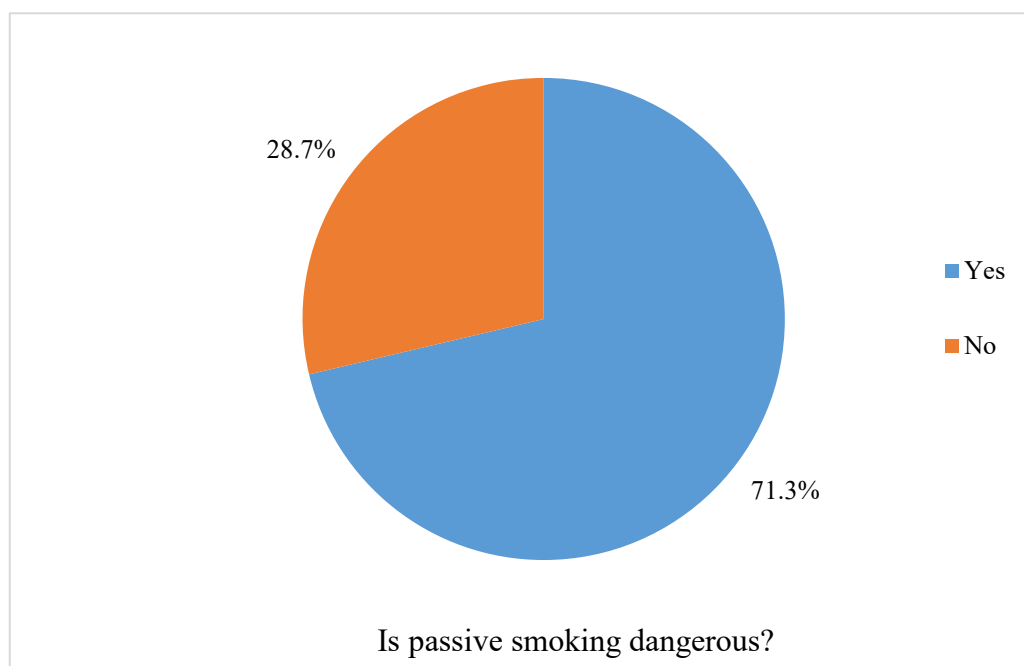
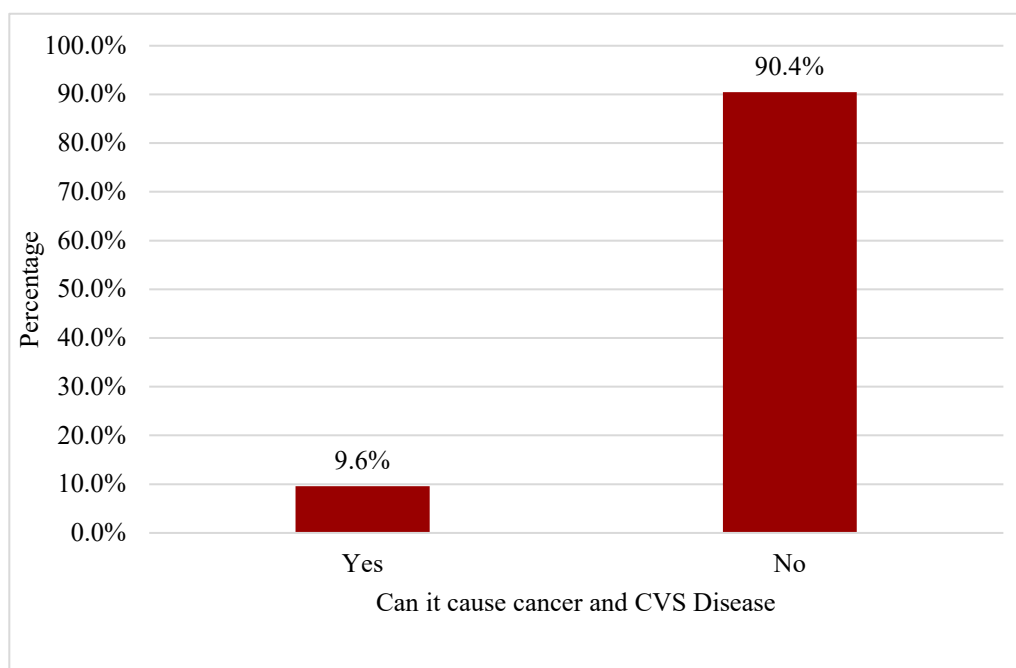


Figure 23: Distribution of study participants according to role of passive smoking in cancer and cardiovascular disease.



ii. Practices regarding habit of tobacco products

Table 42: Distribution of study participants according to their tobacco consumption (n=360)

Smoking/ consume tobacco products	Number	Percentage
Yes	189	52.50%
No	171	47.50%
TOTAL	360	100%

Among the study participants, 189 (52.50%) consumes tobacco products in any form and 171 (47.50%) doesn't.

Figure 24: Distribution of study participants according to their tobacco consumption

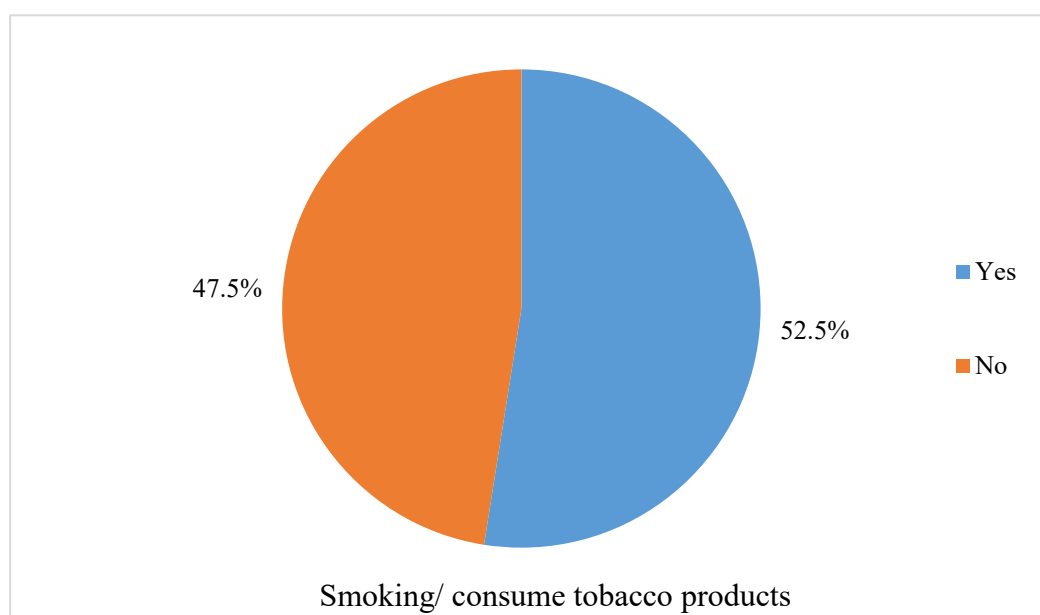


Table 43: Distribution of study participants according to the type of tobacco product consumed (n=189)

Type of tobacco product consumed	Number	Percentage
Cigarettes	88	48.08%
Beedi	26	13.75%
More than one type of product	75	39.68%
TOTAL	189	100%

Among 189 study participants who consume tobacco products in any form, 88 (48.08%) smoke cigarettes, 26 (13.75%) smoke beedi, and 75 (39.68%) consume more than one type of tobacco products.

Table 44: Distribution of study participants according to the frequency of smoking cigarettes (n= 88)

Cigarettes smoked	Number	Percentage
Less than a pack per day	74	84.09 %
More than a pack per day	14	15.9 %
TOTAL	88	100 %

Among 88 study participants who smoke cigarettes, 74 (84.09%) smoke less than a pack per day and 14 (15.9%) smoke more than a pack per day.

Table 45: Distribution of study participants according to the frequency of smoking beedi (n= 26)

Beedis consumed	Number	Percentage
Less than 3 packs per day	17	65.38 %
More than 3 packs per day	09	34.61 %
TOTAL	26	100 %

Among 26 study participants who smoke beedi, 17 (65.38%) smokes less than 3 packs a day and 09 (34.61%) smokes more than 3 packs a day.

E) ASSOCIATION TABLES

Table 46: Association between socio demographic parameters and knowledge on COTPA (n=360)

Parameter	Knowledge on COTPA		Chi square	P value
	Good Knowledge (>2.01) (n=98)	Poor Knowledge (≤ 2) (n=262)		
Gender				
Male	96 (97.96%)	219 (83.59%)	13.468	<0.001
Female	2 (2.04%)	43 (16.41%)		
Religion				
Hindu	24 (24.49%)	99 (37.79%)	33.694	<0.001
Muslim	73 (74.49%)	113 (43.13%)		
Christian	1 (1.02%)	50 (19.08%)		
Education				
Illiterate	9 (9.18%)	54 (20.61%)	14.442	<0.001
Primary	78 (79.59%)	200 (76.34%)		
High School	11 (11.22%)	8 (3.05%)		
Family				
Nuclear Family	87 (88.78%)	212 (80.92%)	3.131	0.077
Joint Family	11 (11.22%)	50 (19.08%)		

SES				
Class I	9 (9.18%)	6 (2.29%)	10.991	0.012
Class II	24 (24.49%)	50 (19.08%)		
Class III	54 (55.1%)	178 (67.94%)		
Class IV	11 (11.22%)	28 (10.69%)		

In the present study, among the various socio-demographic factors fit for applying statistical tests Gender, Religion and Education status had significant association with knowledge on COTPA. No significant association was seen between SDF's Family, Socio Economic Status and knowledge on COTPA. No statistical test was applied for SDF's Age group, Occupation, marital status and housing since there were no subjects in the cells.

Table 47: Association between Occupational data and knowledge on COPTA (n=360)

Parameter	Knowledge on COTPA		Chi square	P value
	Good Knowledge (>2.01) (n=98)	Poor Knowledge (\leq 2) (n=262)		
Years in sale				
Less than 5 years	45 (45.92%)	125 (47.71%)	0.092	0.762
More than 5 years	53 (54.08%)	137 (52.29%)		
Income				
Less than 5000 rupees	56 (57.14%)	138 (52.67%)	0.574	0.449
More than 5000 rupees	42 (42.86%)	124 (47.33%)		
Status of sales				
Increase	8 (8.16%)	28 (10.69%)	24.339	<0.001
Decrease	64 (65.31%)	96 (36.64%)		
No change	26 (26.53%)	138 (52.67%)		
Product Sale on increasing trend				
Cigarettes	72 (73.47%)	149 (56.87%)	9.795	0.007
Beedi	6 (6.12%)	14 (5.34%)		
More than one product	20 (20.41%)	99 (37.79%)		

In the present study, among the variables of occupational data, it is seen that status/ trends of sales was significantly associated with tobacco retailers' knowledge on COTPA. No significant association was found between years in sale, Income, Products sale on increasing trend and knowledge on COTPA. No statistical test was applied for Product sale on decreasing trend due to no subjects in the cells.

Table 48: Association between socio demographic parameters and awareness on health hazards of tobacco (n=360)

Parameter	Awareness on health hazards		Chi square	P value
	Good Knowledge (>4) (n=127)	Poor Knowledge (≤4) (n=233)		
Gender				
Male	112 (88.19%)	203 (87.12%)	0.085	0.770
Female	15 (11.81%)	30 (12.88%)		
Religion				
Hindu	29 (22.83%)	94 (40.34%)	11.293	0.004
Muslim	76 (59.84%)	110 (47.21%)		
Christian	22 (17.32%)	29 (12.45%)		
Education				
Illiterate	16 (12.6%)	47 (20.17%)	5.335	0.069
Primary	101 (79.53%)	177 (75.97%)		
High School	10 (7.87%)	9 (3.86%)		
Family				
Nuclear Family	97 (76.38%)	202 (86.7%)	6.217	0.013
Joint Family	30 (23.62%)	31 (13.3%)		
SES				
Class I	6 (4.72%)	9 (3.86%)	6.992	0.072
Class II	25 (19.69%)	49 (21.03%)		
Class III	75 (59.06%)	157 (67.38%)		
Class IV	21 (16.54%)	18 (7.73%)		

In the present study, among various socio-demographic factors Religion was found to be significantly associated with study participants' awareness on health hazards of tobacco. No significant association was found between Gender, Educational status, Type of family, SES and awareness on health hazards due to tobacco. No statistical test was applied for SDF's Age group, Occupation, marital status and housing since there were no subjects in the cells.

Table 49: Association between socio demographic parameters and Attitude and Practice regarding COTPA (n=360)

Parameter	Attitude and practice		Chi square	P value
	Good Knowledge (>6) (n=166)	Poor Knowledge (≤6) (n=194)		
Gender				
Male	157 (94.58%)	158 (81.44%)	14.111	<0.001
Female	9 (5.42%)	36 (18.56%)		
Religion				
Hindu	58 (34.94%)	65 (33.51%)	13.986	<0.001
Muslim	73 (43.98%)	113 (58.25%)		
Christian	35 (21.08%)	16 (8.25%)		
Education				
Illiterate	31 (18.67%)	32 (16.49%)	20.134	<0.001
Primary	117 (70.48%)	161 (82.99%)		
High School	18 (10.84%)	1 (0.52%)		
Family				
Nuclear Family	131 (78.92%)	168 (86.6%)	3.751	0.053
Joint Family	35 (21.08%)	26 (13.4%)		

In the present study, among various socio-demographic factors, gender, religion and education were found to have significant association with attitude-practice regarding COTPA. No significant association was found between type of family and attitude-practice regarding COTPA. No statistical test was applied for SDF's Age group, Occupation, marital status, SES and housing since there were no subjects in the cells.

Table 50: Association between awareness on health hazards and knowledge on COPTA (n=360)

Awareness on health hazards -knowledge	Knowledge on COTPA		Chi square	P value
	Good Knowledge (n=98)	Poor Knowledge (n=262)		
Good Knoweldge (>4)	47 (47.96%)	80 (30.53%)	9.484	0.002
Poor Knoweldge (\leq 4)	51 (52.04%)	182 (69.47%)		

In the present study, it was found that awareness on health hazards was significantly associated with knowledge on COTPA.

Table 51: Association between knowledge and attitude-practice regarding COPTA (n=360)

Attitude and practice	Knowledge on COTPA		Chi square	P value
	Good Knowledge (n=98)	Poor Knowledge (n=262)		
Good Knoweldge (>6)	58 (59.18%)	108 (41.22%)	9.261	0.002
Poor Knoweldge (\leq 6)	40 (40.82%)	154 (58.78%)		

In the present study, it was found that Knowledge on COTPA was significantly associated with attitude and practice.

Table 52: Association between attitude-practice regarding COTPA and awareness on health hazards (n=360)

Attitude And Practice	Awareness On Health Hazards		Chi square	P value
	Good Knowledge (>4) (n=127)	Poor Knowledge (≤ 4) (n=233)		
Good Knoweldge (>6)	79 (62.2%)	87 (37.34%)	20.453	<0.001
Poor Knoweldge (≤ 6)	48 (37.8%)	146 (62.66%)		

In the present study, it was found that there was significant association between awareness on health hazards and attitude-practice regarding COTPA.

DISCUSSION

The present study was conducted among 360 tobacco retailers having their point of sales (POS) within the field practice areas of four Primary Health Centres under the Department of Community Medicine, J.N. Medical College, KAHER, Belagavi during the period of January 2020 to December 2020.

A) SOCIO-DEMOGRAPHIC DATA

Table 1. Distribution of study participants according to age

In the current study, majority (31.39%) of the participants were between 26 to 31 years of age followed by the age group of 31 to 35 years (25.72%). A similar study conducted in Mumbai had mean age of the participants around 39 years.²³ Another study conducted in Odisha had mean age of the respondents of 35.12 ± 11.64 .²⁹

Table 2. Distribution of study participants according to gender

In the current study, majority (87.50%) of the participants were males and rest were females. A similar study conducted in Belgaum had 96.6% of males as its participants²⁵, and the study conducted in Mumbai showed that 88% of the participants were males.²³

This could be explained by the general gender norms in the Indian society, that occupations such as that of tobacco vendors are viewed more as a man's job. However, in the current study 12.5% of the tobacco retailers were women, relatively higher than the other similarly conducted studies. It is noteworthy that most of these women and their POS in the current study belonged to the rural areas than urban areas.

Table 3. Distribution of study participants according to religion

In the current study, most of the participants were Muslim (51.67%) compared to Hindus (34.17%), who generally would otherwise dominate the general religion distribution in India. This distribution in the current study could be explained by the peculiar demography with Muslim majority populations residing in the field practice areas of Rukmininagar and Ashoknagar which also happened to constitute 210 POS's out of 360 POS's in total. Naturally, POS's within these areas had muslim vendors in greater numbers. However the study conducted in Mumbai had Hindu majority (77%) among the study participants.²³

Table 4. Distribution of study participants according to educational status

In the current study, majority (77.22%) of the participants have had primary education and 5.28% finished their high school. However 17.5% of the study participants were illiterate. None of the study participants had gone to college or had neither a diploma nor a degree certificate. This could very well be explained by the literacy rates and trends in India that at least most of them are literate having had primary education before dropping out. However, 17.5% of the illiterates are still a big number, with most of them being female vendors from rural areas.

A similar study conducted in Belgaum, 19.8% of the vendors were illiterate, whereas 29.3% have finished their primary school and 37.9% finished middle school.²⁵ The study conducted in Mumbai had 48% of its participants having finished their high school.²³

Table 5 and 6: Distribution of study participants according to marital status and type of family

In the current study, most (77.78%) of the participants were married while 9.72% are unmarried followed by 24 widows (6.67%). Of particular interest here is, how out of 45 women vendors in the study, 24 were widows which comes to around 53.3%. This reflects on how widowhood in the Indian societies pushes women to support themselves and their families by taking up jobs that were long considered to be a man's job.

Also, in the current study, majority (83.06%) of the study participants lived in nuclear families whereas rest (16.94%) of them lived in joint families.

Table 7 and 8. Distribution of study participants according to Socio Economic Status and type of housing

In the current study, most of the participants (64.4%) belonged to class III, followed by 20.56% belonging to class II and 10.83% belonging to class IV according to Modified B.G. Prasad classification. None of the participants belonged to class V but it is noteworthy that a small proportion (4.17%) of the participants belonged to class I. This shows that tobacco retailing industry is lucrative enough not to push its retailers into lower classes or extreme poverties. On the contrary, it offers an upper class status to a small proportion (4.17%) of its vendors who have their POSs located in the city junction areas or areas with bustling people in motion and also is lucrative to 20.56% of its vendors offering an upper middle class life status.

Also in the current study, majority (63.06%) of the study participants stayed in pucca houses, followed by 36.11% staying in semi-pucca houses and remaining 0.83% living in Kutchha houses. It is worthwhile to note that a substantial set (36.11%) of the participants are living in semi-pucca houses which are known to carry moderate risk for a range of health related problems in addition to some burden if they also happen to consume tobacco.

B) OCCUPATIONAL DATA

Table 9 and 10. Distribution of study participants according to number of years in the present occupation and monthly income through tobacco sale

In the current study, 52.78% of the tobacco vendors had been in tobacco sale for more than five years and 47.22% for less than five years.

In the current study, 53.89% of the vendors make less than 5,000 INR a month through tobacco sale and 46.11% of the vendors make more than 5,000 INR a month. In a study conducted in Chennai, 58.1% of the vendors made only less than 10% profits from tobacco sales and only 1.9% made more than 80% of the profits through tobacco sale²¹ and in the study conducted in Mumbai showed that vendors make 56% of the average store income through tobacco sales.²³

In a study conducted in Shimla, it was reported that only 3.8% of the participants made money through exclusive tobacco products POS's whereas for 81.10% of the POSs, tobacco sale was not the sole income generator; they were multi-purpose stores that also sold tobacco products.⁷

In another study conducted across three jurisdictions (Chennai, Vadodara, Mohali) reported that around 59.8% of POSs sold other products also besides tobacco. Such delineations of POS's based on exclusive tobacco sales or not were not made in the current study.¹²

Table 11, 12 and 13. Distribution of study participants according to their opinion on sales status and trends of tobacco products.

In the current study, most (45.56%) of the participants claimed that there was no change in the sales trend of tobacco products. On the similar lines, a study conducted in Chennai observed that 47.8% of its participants felt the same with respect to sales status.²¹

In the current study, 44.44% of the participants said that the tobacco products were on a declining trend whereas rest of the 10% said that they were on a rising trend. Similarly, the study conducted in Chennai also had 38.1% of its participants claiming a declining trend whereas 12.5% of them saying that the tobacco products were on a rising trend.²¹

The current study also observed that a majority (61.39%) of the participants felt that Cigarettes were the tobacco products on rising trends in the sales. And, coming to the tobacco products on declining trends, majority (73.89%) of the participants named a multitude of tobacco products which include Ghutka, Khaini, Zarda and tobacco powder among others which also were claimed individually by the study participants as the tobacco products on declining trends by 11.11%, 9.44% and 2.22% respectively.

C) KNOWLEDGE, ATTITUDE, PRACTICE REGARDING COTPA

Table 14 and 15. Distribution of study participants according to their basic awareness on COTPA Act and awareness on knowledge on the ban of sale of tobacco products to and by minors

In the current study, majority (87.78%) of the participants never heard of COTPA Act before, and only 12.22% of the participants said that they heard of the Act before. It is alarming to find out that such high numbers never heard of COTPA Act or any tobacco governing laws in India but are in retail business. This reflects the ignorance levels of tobacco vendors but also throws a light on how penetrating is the Act itself in the retailer communities, which is poor.

However, majority (69.72%) of the study participants said that minors can neither sell nor buy tobacco products, whereas 30.28% believed that minors can either sell or buy tobacco products. On the similar lines, in the study conducted in Chennai, 69.3% of tobacco vendors said that selling or buying tobacco products by a minor is prohibited.²¹ Also, a similar study conducted in Belgaum showed that 69.9% of its participants were not aware of the minimum age to whom the tobacco products could be sold.²⁵ Whereas a study conducted in Mumbai showed that 89% of its participants were aware of the prohibition of sale of tobacco products to minors.²³

In a study conducted in Alwar, Rajasthan it was observed that 93% of POS's had a signage against selling products to minors²² and a study conducted in Shimla reported that 44.6% of its participants had put up a warning signage against selling to minors⁷, whereas another study conducted in Shimla reported none of their POS's had put up any such warning signage.²⁸ Similarly, in a study conducted in Belgaum

reported that none of the shops had any warning signage against selling tobacco products to minors.²⁵ However, in the current study, no such observations were made.

Table 16 and 17. Distribution of study participants according to their knowledge on ban of sale of tobacco products on their points of sale (POS) located around educational institutes

In the current study, majority (85.27%) of the participants were not aware of the fact that it is prohibited to sell tobacco products within 100 meters of an educational institute, and only 11.94 % were aware of this. However, majority (70.83%) of the participants were aware that their POS is not within 100 meters radius of any educational institute whereas 29.17% were not aware if their POS is within proximity of any educational institute but none of the participants told that their POS was within 100 meters of a institute.

In a study previously conducted in Belgaum, 80% of the participants were not aware of this.²⁵ It is striking to note that there is an increase in the ignorance level from 80% to 92.5% in the current study, but this could be explained by the sample size disparity. The previous study had a sample size of 232 whereas the current study had 360, so it is only natural to expect a proportional effect.

The study conducted in Chennai showed that 57.2% of its participants were aware of section 6b, prohibiting sale of tobacco products around educational institutes.²¹ In the study conducted in Mumbai, it was observed that 35.3% of the participants were aware of this.²³

In a study conducted in Shimla, no tobacco sale was observed around 100 meters in 20% of the educational institutes.²⁸ Another study conducted in Shimla,

where compliance of educational institutes and surrounding POSs to COTPA were assessed, it was observed that 26.1% of POS's were found to be located within 100 meters of educational institutes.⁷

Table 18 and 33. Distribution of study participants according to their knowledge and practice on prohibition of brand promotion of all tobacco products of COTPA Act.

In the current study, majority (62.77%) of the participants were not aware that it is prohibited to display tobacco products at POS and 37.33% were aware of this. Similar findings were seen in the study conducted in Chennai where 38% of the participants were aware that it is prohibited to display any sort of attractive displays encouraging tobacco sales.²¹

In another study conducted across three jurisdictions (Chennai, Vadodara, Mohali) it was observed by the researchers that 80% of the POS had violated section 5 in more than one form.¹² In the study conducted in Shimla, it was reported that 41% of the POS's had displayed any kind of advertisement and out of that 64.6% advertisements were by product showcase and 14.6% were actual advertisements.⁷

In the study conducted in Mumbai, it was noted that majority (84%) of the participants displayed fewer than three advertisements on average in their POS's.²³ In the study conducted in Shimla, none of the POS's visited (n=2) displayed any advertisements of tobacco products.³³

Coming to the display of health warning boards, the current study shows that majority (80.28%) of the participants were not aware that they should be health warning boards put up at POS's, and only 19.72% of the participants were aware of

this. Also, in the current study, it was observed that 17.22% of the participants had actually practiced putting up a health warning board.

On the contrary, the study conducted in Chennai showed that 75.2% were aware that a health warning board should be put up.²¹ In a study conducted in Odisha, it was noted that 66.6% of the participants were not aware of the mandatory display of health warning boards.²⁹

Table 19. Distribution of study participants according to their knowledge on prohibition of smoking in public places.

In the current study, majority (95.28%) of the participants were aware that it is prohibited to smoke in public places and only a minor portion (4.72%) were not aware of this.

Contrastingly, the study conducted in Chennai reported that 42% of the participants were aware of the prohibition of smoking in public places.²¹ In the study conducted in Odisha, 80.8% were aware of prohibition of smoking in public places.²⁹

Alarmingly, in a study conducted in Anantapur and Chittoor districts of Andhra Pradesh, it was reported that 100% of the educational institutes violated section 4.¹⁵

Table 20. Distribution of study participants according to their knowledge on display of health warnings on tobacco products and punishment offered for violation of any of the sections under the Act

In the current study, majority (71.11%) of the participants were not aware of the fact that health warnings should be present on tobacco products and 28.88 % were aware of this.

In a study conducted in Shimla, 59% of the participants were aware that health warnings should be present on tobacco products⁷ and in a study previously conducted in Belgaum reported that 53.4% were aware that tobacco products for sale must have some health warnings on them.²⁵

In the current study, it was observed that majority (81.94%) of the participants were not aware of punishments/ penalties offered for violations under COTPA Act, whereas 18.05% of the participants were aware.

In the study conducted in Chennai, it was noted that 20.3% of the participants were aware of the punishment for selling tobacco products around educational institutes.²¹ In the study conducted in Mumbai, 72% of the participants were aware of the fines associated with selling tobacco products to minors and 22.3% were aware of the fines for not displaying warning board signage.²³

Table 21 and 30-32: Distribution of study participants according to their attitude & practice on selling tobacco products to a minor and hiring a minor.

In the current study, most (57%) of the participants said that they would sell tobacco products to a minor-looking customer where as 31% of the participants said that they would sell but advice a minor-looking customer to quit. Rest 9.44% said that they would deny and only 1.11% said that they would inform a parent/ teacher/ guardian.

In the study conducted in Chennai, it was reported that 51.4% of the participants would deny selling and only 10% would sell tobacco products to a minor, which runs in contrast to the finding from our study.²¹

However, in the current study it was observed that most (54%) of the participants said that minors rarely buy tobacco products from them and alarmingly it was also noted that a whopping (98.33%) number of participants never asked for age proof of a minor-looking customer, and none of the participants admitted to ever hiring a minor to sell tobacco products.

In a study previously conducted in Belgaum, it was reported that 96.6% of the participants said they don't practice asking for an age proof to a customer before selling products.²⁵ Similarly, a study conducted in Shimla observed that none of its participants practice asking for an age proof³³ but another study conducted in Shimla reported that 14% of the vendors enquire age of the customer before selling tobacco products.²⁸ However a study conducted in Mumbai noted that 80.5% of the participants said that they were compliant with prohibition of selling tobacco products to minors.²³

In the study conducted in Shimla, it was observed that 87.3% of the POS's had non-minor vendors and was also observed by the researchers that in 92.7% of the POS's, no selling tobacco products to the minors was practiced.²⁸

Table 22 and 23. Distribution of study participants according to their attitude on customers smoking in front of shop and seeing someone smoke in public places

In the current study, most (35%) of the participants said that they would stay quiet if a customer smokes in front of the shop, of the fear of losing them. But, not staying far away from the majority, it was also observed that 28.8% of the participants said that they would politely ask the customer to move away

In a study conducted in Chennai, it was observed that 32.8% of the participants would politely ask the customer to move away and 24.9% would warn them strictly.²¹

However, both the studies are almost similar in a finding that, in the current study only 9.4% responded that they would stay quiet as they had put up the warning board and the study conducted in Chennai, 10.8% said the same.²¹

Coming to the study participants' attitude on seeing someone smoking in public places, 65.56% said that they would move away, followed by 22% saying that they would ignore. The similar sentiment had also been shared by the study participants' in Chennai, where a majority (44.8%) said that they would move away, followed by 30.6% saying that they would ignore.²¹

Table 24, 25 and 26. Distribution of study participants according to their attitude on effect of health warnings and pictorial warnings on tobacco products on sale, and implementation status of COTPA

In the current study, a majority (80.56%) of the participants said that health warnings had no effect on tobacco sales, whereas rest 19.44% said that it affected the sales negatively. Also, most (45.56%) of the participants said that pictorial warnings on tobacco products had no effect on sales, whereas 27.50% said yes and 26.95% said no.

In a study previously conducted in Belgaum, 59.1% of the participants said that tobacco sales have come down by pictorial warnings and also, 24.6% said that increased price on tobacco products affected tobacco sales negatively.²⁵

In the current study, 84.4% of the participants said that they can't tell on how strictly COTPA Act is being implemented whereas 15.56% said that COTPA was not being implemented strictly. A study conducted in Chennai showed that a most (42.1%) of the participants said that tobacco laws were not strictly implemented whereas 35.3% of the participants said that they don't know how strictly its being implemented and 22.6% said that tobacco laws were implemented strictly.²¹

Table 27 to 29 and 34: Distribution of study participants according to their attitude on stop selling tobacco products, banning tobacco products, hopes of a smoke-free nation and practice on selling tobacco products to female customers.

In the current study, a majority (68.61%) of the participants said that they wouldn't stop selling tobacco products. On similar lines, majority (72.78%) of the participants also said that tobacco products should not be banned and, coming to their hopes on seeing a smoke free nation, majority (66.11%) of the study participants said that they can't tell whereas 19.44% said no and only 14.44% said they believed in the possibility of a smoke free nation.

In a study conducted in Chennai, majority (86.3%) of the participants said that no one ever advised them to stop selling tobacco products, but 24.3% of the participants said that they did think of stop selling. Interestingly, 26.2% of the participants believed that a smoke free Chennai city is possible.²¹

In a study previously conducted in Belgaum, a whopping majority (94%) of the participants said that there should be a complete ban on tobacco products.²⁵ In the study conducted in Chennai, it was also reported that 34.5% of the participants said

that a complete ban on tobacco products is the most effective way to eliminate tobacco.²¹

In the current study, majority (76.6%) of the participants said that females don't buy tobacco products from them. On similar lines, the study conducted in Chennai reported that 19.5% of the participants said that women would hesitate to visit their shops.²¹

Table 35 to 38. Distribution of study participants according to their knowledge on smoking and its various ill effects on health.

In the current study, majority (79.72%) of the participants were aware that smoking had ill effects on health. Upon further questioning, 37.5% of the participants said that smoking can cause diseases other than cancer as well, and upon asking about implications of smoking in causation of cardiovascular diseases, 89.72% of the participants said that they were not aware of it and 13.06% of the participants were aware of the mortality associated with tobacco related diseases.

This shows that there is an urgent need to fill the knowledge gaps, that even 79.72% were aware of the ill-effects of smoking, they were not aware in alarming numbers, of the various diseases in specific that tobacco can cause.

In the study conducted in Chennai, it was reported that 49.9% were aware that smoking causes cancer but only 10.2% were aware of its implications in cardiovascular disease. Similar to the current study, only a less (11.4%) portion of the participants were aware of the mortality due to tobacco related disease.²¹

Table 39. Distribution of study participants according to their knowledge and attitude on less dangerous forms of tobacco consumption

In the current study, majority (70%) of the participants said that none of the forms of tobacco consumption are less dangerous, that they are all equally dangerous to health. However 20.83% of the participants were of the opinion that chewing was comparatively a less form of tobacco consumption. But, almost everyone (except 1.11%) were of the opinion that smoking was never a less dangerous form of tobacco consumption.

The study conducted in Chennai also showed that most (38.6%) of the participants said that all forms of tobacco consumption were equally harmful, followed by 26.3% saying that chewing was less dangerous.²¹

This calls in for educating tobacco retailers, and general population at large that not only smoking but various forms of tobacco consumption are equally dangerous. The observations in both the studies should be taken with alarming urgency as chewing tobacco causes oral cancer, which is the most common cancer in men, in India currently.

Table 40 and 41. Distribution of study participants according to their awareness on passive smoking and its ill effects on health

In the current study, majority (68.06%) of the participants were not aware of passive smoking. Only 31.94% of the participants were aware of passive smoking and were considered for further questioning. Among those who were aware of passive smoking to begin with, 71.30% said that passive smoking was also dangerous to

health, but on further pressing if passive smoking could cause cancer and cardiovascular diseases, 36.52% said yes.

The study conducted in Chennai showed that 44% of the participants were of an opinion that passive smoking was highly dangerous, 40.98% said it was less dangerous. Only 9.7% said it was not dangerous and rest 5.5% said they don't know. However 60% of the study participants said that passive smoking could also cause cancer and heart diseases.²¹

Table 42 to 45: Distribution of study participants according to their tobacco consumption habits.

In the current study, 52.50% of the participants said that they consume tobacco and rest 47.50% said that they don't. Among those who consume tobacco, majority (48.08%) smoke cigarettes alone, followed by 39.68% saying that they consume more than one type of tobacco product, Among those who exclusively smoked cigarettes, a majority (84.09%) said that they smoke less than a pack per day and among those who exclusively smoked beedis, most (65.38%) of them said they smoked less than three packs a day.

In the study conducted in Chennai, 30.2% of the participants admitted that they used tobacco at least once in their life. Majority (77%) of the participants said that they currently don't use tobacco but among those who still used tobacco, smoking cigarettes (13%) was the most common.²¹

In a study conducted previously in Belgaum, 68% of the participants said that they used one or the other form of tobacco at the time.²⁵

CONCLUSION

The current cross sectional study reported that 12.22% of the study participants heard of COTPA before. However most of the tobacco vendors were not gravely ignorant of COTPA rules and regulations, despite their less prevalent preliminary knowledge of COTPA. It is reflected in their knowledge on various sections under COTPA i.e., 69.72% of the study participants were aware that minors should neither sell nor buy tobacco products and 54.72% of the participants claimed that minors coming to buy tobacco products to be a rare phenomenon. Most (95.28%) were aware that smoking in public places is prohibited and 70.83% claimed that their POS's were not within 100 m radius of any educational institute.

However, only 11.94% were aware that it is prohibited to sell tobacco products around educational institutes, 37.23% were aware that it is prohibited to put up display of tobacco products, 19.72% were aware that health warning boards must be put up and only 17.22% practiced putting up a health warning board, 28.88% were aware that health warnings should be present on tobacco products and 18.05% were aware of the punishments for violations.

Most (57.5%) of the participants said that they would sell tobacco products to a minor looking customer and 98.33% that they don't practice asking for an age proof. However, all the participants said that none of them ever hired a minor to sell tobacco products. Most (65.56%) of the participants said that they would move away when they saw someone smoking in a public place, but when a customer smokes in front of their shop most (35.28%) said that they would stay quiet over losing the customer. Most (80.56%) felt that health warnings on tobacco products had no effect on sales.

Majority (79.72%) were aware that smoking had ill effects on health, but only 37.50% were aware that it can cause diseases other than cancer and only 10.28% were aware that it can cause cardiovascular diseases. Only 31.94% of the participants were aware of passive smoking and among that 71.30% believed that passive smoking is dangerous but only 36.52% were aware that it could also cause cancer and heart diseases.

Most (52.50%) of the participants consume tobacco products. Among them, cigarettes (48.08%) were the most consumed and majority (84.09%) smoked less than a pack per day.

Socio demographic factors like education, religion and gender were significantly associated with knowledge, attitude and practice regarding COTPA. Religion was also found to be significantly associated with the awareness on health hazards of tobacco. Significant associations were also found between awareness on health hazards and knowledge on COPTA, between knowledge and attitude-practice regarding COPTA, and between attitude-practice regarding COTPA and awareness on health hazards.

RECOMMENDATIONS

Based on the findings of our study, following recommendations are being suggested for better compliance of tobacco retailers with COTPA Act.

- 1) Educating tobacco retailers on various rules and regulations under COTPA Act.
- 2) Educating tobacco retailers on various health hazards of tobacco, with special emphasis on passive smoking.
- 3) Periodic assessment of tobacco retailer's compliance with COTPA Act by the officials.
- 4) Encourage tobacco users to quit the habit and educating them on various modalities to achieve that.
- 5) Strict surveillance of Point of Sales (POS) for any violations and clearance of POS's within 100 meters of any educational institute.

LIMITATIONS

- 1) The current study being a cross sectional study, some recall bias did exist.
- 2) More dedicated real time observation on various practices could have been done and detailed.
- 3) Pre and post tests could have been conducted to assess their changing awareness status, if any.

SUMMARY

The present study was conducted among 360 tobacco retailers operating within the field practice areas of four Primary Health Centers under J.N. Medical College, KAHER, Belagavi during the period of January 2020 to December 2020, to assess the awareness of COTPA Act.

In the present study, most (87.5%) of the study participants were male, and belonged to an age group of 26-30 years (31.39%). Majority (51.67%) of the participants were Muslim, married (77.78%), and had primary education (77.22%). Most belonged to nuclear families (83.06%), belonged to class III (63.44%) according to Modified B.G. Prasad classification and stayed in a pucca house (63.06%).

Most of the study participants were in the present occupation as tobacco retailers for more than five years (52.78%) and earned less than five thousand rupees per month through tobacco sales (53.89%). A majority (45.56%) of them felt that there was no change in sales trends of tobacco products. However, majority of the study participants felt that it was cigarettes (61.39%) which was on the rising sale status and Gutkha (11.11%) was on the declining sales status.

Many of the study participants had never heard of COTPA (87.78%), but were aware that it is prohibited for a minor to sell tobacco products (69.72%), were not aware that it is prohibited to sell tobacco products around an educational institute (85.27%), but were aware that their shops were not within 100 yards radius from any educational institute (70.83%). Majority were not aware that it was prohibited to put up display of tobacco products (62.77%), and were not aware that a health warning board must be put up (80.28%). However, all the participants were aware that it is

prohibited to smoke in public places. Most of them were not aware that there should be health warnings on the tobacco products packages (71.11%), and were not aware of the punishments offered for any violations of rules under COTPA (81.94%).

Majority of the study participants said that they would sell tobacco products to a minor looking customer (57.50%) without asking for an age proof (98.33%), however they said that minors buying tobacco products is a rare phenomenon (54.72%). Most of them said that they would move away if they saw someone in proximity smoking in a public place (65.56%) but would stay quiet over losing the customer if the customer smokes in front of the shop (35.28%). Many felt that there was no effect of health warnings (80.56%) and pictorial warnings (45.56%) on tobacco sales and said that they can't tell how strictly the tobacco control legislations were being implemented (84.44%), and neither would stop selling tobacco products (68.61%) nor felt that there should be a ban on sale of tobacco products (72.78%) and can't tell if India could ever be a smoke free nation (66.11%).

None of the study participants said that they ever hired a minor to sell tobacco products. Majority of the study participants did not display health warning boards (82.77%), and said that they don't see females buying tobacco products (76.67%).

Most of the study participants were aware of the fact that smoking had ill effects on health (79.72%) but were not aware that it could cause diseases other than cancer (62.50%) and cardiovascular disease (89.72%), were not aware of the mortality caused by tobacco (86.94%). However, majority of the study participants were aware that none of the tobacco forms are any less injurious to health (70%).

Majority of the study participants were not aware of passive smoking (68.06%). Only 31.94% of the participants were aware of passive smoking and among that 71.30% believed that passive smoking is dangerous but only 36.52% were aware that it could also cause cancer and heart diseases.

Most (52.50%) of the participants consume tobacco products. Among them, cigarettes (48.08%) were the most consumed and majority (84.09%) smoked less than a pack per day.

Socio demographic factors like education, religion and gender were significantly associated with knowledge, attitude and practice regarding COTPA. Religion was also found to be significantly associated with the awareness on health hazards of tobacco. Significant associations were also found between awareness on health hazards and knowledge on COPTA, between knowledge and attitude-practice regarding COPTA, and between attitude-practice regarding COTPA and awareness on health hazards.

REFERENCES

- 1) World Health Organization (WHO) Home/ Newsroom/ Fact sheets/ Detail/ Tobacco key facts [Internet]. Available from: <https://www.who.int/newsroom/fact-sheets/detail/tobacco> [Last accessed on 2021 Sep 30].
- 2) Devita V, Lawrence T, Rosenberg S. Cancer principles & practice of oncology. 11th ed. LWW; 2019.
- 3) CDC Tobacco free/ Health effects of cigarette smoking/ Cdc.gov.2020 [Internet]. Available from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm [Last accessed on 2021 Sep 15].
- 4) Rijhwani K, Mohanty VR, Balappanavar AY, Hashmi S. Compliance assessment of cigarette and Other Tobacco Products Act in public places in Delhi Government hospitals. *Asian Pac J Cancer Prev.* 2018;19(8):2097–102.
- 5) Singh PK. Tobacco control in the WHO South-East Asia Region. *Indian J Cancer.* 2012;49(4):319–20.
- 6) Fitted trends in current tobacco use among persons aged 15 years and older [Internet]. Who.int. [cited 2021 Jun 15]. Available from: https://cdn.who.int/media/docs/default-source/searo/tobacco/country-fact-sheets/india-who-tobacco-prevalence-trend-estimates-2019.pdf?sfvrsn=56164e2a_2 [Last accessed on 2021 Sep 30].
- 7) Chaudhary A, Thakur A, Chauhan T, Mahajan A, Barwal VK, Chamotra S, et al. COTPA 2003 compliance assessment of tobacco vendors and products: current status of an earliest smoke free Indian city. *Int J Community Med Public Health.* 2019;6(5):2157.

- 8) National family health survey/ Rchiips.org [Internet]. Available from: <http://rchiips.org/NFHS/nfhs4.shtml> [Last accessed on 2021 Jul 17].
- 9) Rchiips.org [Internet]. Available from: http://rchiips.org/nfhs/NFHS-5_FCTS/FactSheet_KA.pdf [Last accessed on 2021 Jul 17].
- 10) CDC Tobacco Free/ Smokefree policies reduce smoking/ Cdc.gov. 2020. [Internet] Available from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/protection/reduce_smoking/index.htm [Last accessed on 2021 Aug 21].
- 11) Who.int [Internet]. Available from: https://www.who.int/fctc/WHO_FCTC_summary.pdf?ua [Last accessed on 2021 Aug 9].
- 12) Goel S, Kumar R, Lal P, Tripathi J, Singh RJ, Rathinam A, et al. How compliant are tobacco vendors to india's tobacco control legislation on Ban of advertisements at point of sale? A three jurisdictions review. *Asian Pac J Cancer Prev.* 2014;15(24):10637–42.
- 13) Rath R, Krishnan A, Nongkynrih B, Misra P. Assessment of implementation status of Cigarettes and Other Tobacco Products Act (COTPA) and its awareness among residents in a block of Haryana. *Indian J Public Health.* 2018;62(2):100–3.
- 14) India/ Tobaccocontrollaws.org [Internet] Available from: <https://www.tobaccocontrollaws.org/legislation/country/india/summary> [Last accessed on 2021 Sep 21].
- 15) Pradhan A, Oswal K, Padhan A, Seth S, Sarin A, Sethuraman L, et al. Cigarettes and Other Tobacco Products Act (COTPA) implementation in

- education institutions in India: A cross sectional study. *Tob Prev Cessat.* 2020;6:51.
- 16) WHO/ Implementation and enforcement of legislation. [Internet] Available from: <https://www.who.int/tobacco/control/legislation/implementation/en/> [Last accessed on 2021 Aug 14].
- 17) Nidhi Sejpal Pouranik, Ryan David Kennedy. Tobacco retailer density and tobacco retailers near schools in two cities of East India, Ranchi and Siliguri. *Indian J Tuberculosis*, 2021; 68:14-22.
- 18) The Hindu/ Sale of tobacco products only through licensed shops. [Internet] Available from: <https://www.thehindu.com/sci-tech/health/sale-of-tobacco-only-through-licensed-shops/article19758391.ece> [Last accessed on 2021 Aug 16].
- 19) Phetphum and Noosorn. Tobacco Retailers near Schools and the Violations of Tobacco Retailing Laws in Thailand. *J Public Health Nov/Dec 2019.* 25(6), 537–542
- 20) Hoek J, Vaudrey R, Gendall P, Edwards R, Thomson G. Tobacco retailer displays: a comparison of industry arguments and retailers' experiences. *Tobacco Control* 2012; 21:497-501.
- 21) Venugopal DC, Vidhubala E, Sundaramoorthy C. Does Awareness on Tobacco Control Legislations Pertaining to Tobacco Sellers Lead to Compliance? – A Study from Chennai, India. *Asian Pac J Cancer Prev*, 18 (9), 2349-2354.
- 22) Jain ML, Chauhan M, Singh R. Compliance assessment of cigarette and other tobacco products act in public places of Alwar district of Rajasthan. *Indian J Public Health* 2016;60:107-11.

- 23) Mistry R, Pimple S, Mishra G, Gupta PC et al. Compliance With Point-of-Sale Tobacco Control Policies in School-Adjacent Neighborhoods in Mumbai, India. *Am J Health Promot.* 2016 Jul;30(6):433-440.
- 24) Ali I, Patthi B, Khan A. Assessment of implementation and compliance of (COTPA) Cigarette and Other Tobacco Products Act (2003) in open places of Delhi. *J Family Med Prim Care.* 2020 Jun; 9(6):3094-3099.
- 25) Ankola AV, Mehta PJ. Tobacco Retailers' Knowledge Regarding Tobacco Sales and Indian Tobacco Control Legislation in Belgaum City- A Cross Sectional Study. *Int J Oral Health Med Res* 2016;2(6):8-12.
- 26) D S A, Rajesh G, Mohanty VR. Insights into pictorial health warnings on tobacco product packages marketed in Uttar Pradesh, India. *Asian Pac J Cancer Prev.* 2010;11(2):539-43.
- 27) Mullapudi S, Britton J et al. A pilot study to assess compliance and impact of health warnings on tobacco products in the Udupi district of Karnataka State, India. *Tob Induc Dis.* 2019 May 25;17:45.
- 28) Chaudhary A, Thakur A, Chauhan T et al. Creation of a smoke-free environment for children: An assessment of compliance to COTPA 2003 legislation in an urban area. *Indian Pediatr.* 2019 Oct 15;56(10):837-840.
- 29) Panda B, Rout A, Pati S et al. Tobacco control law enforcement and compliance in Odisha, India – implications for tobacco control policy and practice. *Asian Pac J Cancer Prev.* 2012;13(9):4631-7.
- 30) Banandur PS, Kumar MV, Gopalkrishna G. Awareness and compliance to anti-smoking law in South Bengaluru, India. *Tob Prev Cessat.* 2017 Sep 14;3:123.

- 31) Hebbar PB, Bhojani U, Kennedy J et al. From policy to practice: Lessons from Karnataka about implementation of tobacco control laws. *Indian J Community Med.* 2017 Apr-Jun;42(2):77-80.
- 32) Ahuja N, Kathiresan J, Anand T et al. I have heard about it for the first time from you! Implementation of tobacco control law by police personnel in India. *Public Health Action.* 2018 Dec 21;8(4):194-201.
- 33) Thakur A, Chaudhary A et al. Assessment of compliance to the COTPA 2003 legislation in tertiary healthcare institutes of Shimla: A smoke free city in India. *Int J Community Med Public Health.* 2019 Mar;6(3):1229-1234.
- 34) Merriam-Webster. Simple Definition of Religion. [Internet]. (cited 2021 June 04); Available from: <https://www.merriam-webster.com/dictionary/religion>
- 35) Reviewing Indian education. Levels or Stages of Education in India today [Internet]. (cited 2021 June 04); Available from: <https://revivingindianeducation.wordpress.com/about/levels-or-stages-of-education-in-india-today/> [Last accessed on 2021 Sep 30].
- 36) Suryakanta AH. *Community Medicine with recent advance.* 3rd ed. New Delhi: Jaypee Brothers Medical; 2014.p.540.
- 37) Debnath DJ, Kakkar R. Modified BG Prasad Socio-economic Classification, Updated – 2020. *Indian J Comm Health.* 2020;32(1):124-125.
- 38) Statistical Year Book India – Housing [Internet]. (cited 2021 June 04); Available from: http://mospi.nic.in/sites/default/files/Statistical_year_book_india_chapters/HO_USING-WRITEUP_0.pdf [Last accessed on 2021 Sep 29].
- 39) Center for Disease Control and Prevention. Adult tobacco use information. Glossary. Available from:

https://www.cdc.gov/nchs/nhis/tobacco/tobacco_glossary.htm [Last accessed on 2021 Jul 26].

- 40) World Health Organization. Report on oral tobacco use and its implications in South-East Asia [Internet]. Available from:
http://searo.who.int/tobacco/topics/oral_tobacco_use.pdf [Last accessed on 2021 Sep 13].

ANNEXURES**ANNEXURE I – ETHICAL CLEARANCE LETTER**

K.J.SOMAIYA ACADEMY OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University)

Accredited 'A' Grade by NAAC (2nd Cycle)

Placed in Category 'A' by MHRD (Govt)

**JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)**

Website: <http://www.jnmc.edu>
E-Mail: adms@jnmc.edu

Phone: (+91-0831) 2471701
Principal: 2471701
Fax No. 491 01831 - 2470759

Ref: MDC/DOME/ 2 / 377

Date: 24/12/2019

To

REG NO. BD0119001

PG student in Community Medicine,
J.N.Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled "AWARENESS OF CIGARETTES AND OTHER TOBACCO PRODUCTS (COTPA) ACT AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A COMMUNITY BASED CROSS SECTIONAL STUDY", is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Anita Dalal)
Member Secretary

JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Koppu M. Bellud)
Chairman.

JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

ANNEXURE II – WRITTEN INFORMED CONSENT FORM

“Awareness of Cigarettes and Other Tobacco Products (COTPA) Act among tobacco retailers in a city of north Karnataka: A community based cross-sectional study.”

Principal Investigator: _____

PG Student, Dept of Community Medicine,
J. N. Medical College, KAHER, Belagavi-10.

Guide: _____

Associate Professor,
Department of Community Medicine,
J.N. Medical College, KAHER, Belagavi-10.

Introduction: You are being invited to participate in this study to find out “**Awareness of Cigarettes and Other Tobacco Products (COTPA) Act among tobacco retailers in a city of north Karnataka.**” The global tobacco epidemic continues to be one of the biggest public health threats, contributing to more than 8 million deaths. India is the second largest consumer of tobacco in any form. The ill effects of tobacco consumption on health has been well documented implicating in the diseases of lung, heart, vascular system, and others. Not only does active smoking can lead to these fatalities but it is also proved with concrete evidence that passive smoking can also lead to these ill effects. Keeping this in mind, Government of India has framed a tobacco legislation, Cigarettes and Other Tobacco Products Act (COTPA) to prohibit and regulate the tobacco consumption. Under this act, Government has laid down certain requirements and rules to sale or purchase the tobacco products. Hence it is important that the tobacco retailers be aware of these laws and implement them righteously, and that’s why the present study is undertaken. Participation in this study is completely voluntary.

Explanation of procedures: In this study, you will have to answer a few prepared questions about socio-demographic details, knowledge on tobacco products sale, rules of COTPA, and how far it is being implemented in a point of sale (POS). If you agree to participate, then only questions will be asked to you. At any moment, you can withdraw from the study.

Possible Benefits: The investigator does not promise that you will receive direct benefit in this study. It will benefit the whole community.

Possible Risks: There is no risk involved in this study.

Confidentiality: All the data collected will remain confidential and only aggregated data will be published. Your personal identity will not be revealed.

Withdrawal: Your participation in this study is purely voluntary. You may decide to participate or not. Even though you decide not to participate, you will not be deprived of the benefits of this study.

Costs of Participation: The cost of the study will be borne by the researcher. There will be no additional cost to you for participating in this study.

Payment of Participation: There will be no incentives to you for participating in this study.

Questions:

If you have any question about your rights as a study participant, you may contact **Dr. Roopa Bellad**, Chairman, Institutional Ethics Committee on Human Subjects' Research, J.N. Medical College, KAHER, Belgaum -590010, Ph. No 0831-2473777, Extn 4052, 4057.

Legal Rights: By signing this consent form; you are not waiving any of your Legal rights.

Consent statement:

“I volunteer and consent to participate in the study. I have read (or it has been read to me in the language known to me) the information sheet thoroughly. Full opportunity was given to me to ask questions. I am fully satisfied with the answers to the questions I wanted to ask. I hereby voluntarily agree to participate in this research project”.

Name of the Participant

Signature of the participant
or Left-Hand Thumb impression

Name of Investigator

Signature of investigator

Name of Witness

Signature of Witness

Date: _____

Place: _____

Assent (<18 years)

“Awareness of Cigarettes and Other Tobacco Products (COTPA) Act among tobacco retailers in a city of north Karnataka: A community based cross-sectional study.”

I have read the information in this form. After understanding all details about the study, I agree to give assent to be included as a volunteer in the study titled “Awareness of Cigarettes and Other Tobacco Products (COTPA) Act among tobacco retailers in a city of north Karnataka : A community based cross-sectional study.”

Name of the Participant

Signature of the participant
or Left-Hand Thumb impression

Name of the Parent

Signature of the parent

Name of Investigator

Signature of investigator

Name of Witness

Signature of Witness

Date: _____

Place: _____

ANNEXURE III – RESEARCH PROFORMA

**“AWARENESS OF CIGARETTES AND OTHER PRODUCTS (COTPA) ACT
AMONG TOBACCO RETAILERS IN A CITY OF NORTH KARNATAKA: A
COMMUNITY BASED CROSS SECTIONAL STUDY”**

Sl. No: _____

1. Sociodemographic details

a) Name:

b) Age: _____yrs.

c) Sex:

1)Male 2)Female

d) Occupation:

1)Employed 2)Unemployed

e) Religion:

1)Hindu 2)Muslim 3)Christian 4)Others

f) Education status:

1)Illiterate 2)Primary 3)High school 4)College

g) Marital status:

1)Married 2)Unmarried 3)Widow 4)Widower 5)Divorcee

h) Family:

1)Nuclear 2)Joint 3)Three generation 4)Others

i) Total income of family per month: Rs. _____

j) Total number of family members: _____

k) Socio economic status:

1)I 2)II 3)III 4)IV 5)V (Modified BGPC)

- l) Type of house:
1)Kacha 2)Semi-pucca 3)Pucca

- m) House well ventilated:
1)Yes 2)No

- n) Overcrowding
1)Yes 2)No

2. Occupational Data

- a) Do you have license to sell tobacco products?
1.Yes 2.No
- b) Since how many years are you selling tobacco products?
1. Less than 5 years 2. More than 5 years
- c) What is your monthly income through tobacco sale?
1. Less than 5000 rupees 2. More than 5000 rupees
- d) Did the sales of tobacco products increase or decrease now?
1. Increase 2. Decrease 3. No change
- e) According to you, which product's sale is diminishing?
1. Cigarettes 2. Beedi 3. Gutkha 4. Zarda 5. Khaini 6. Tobacco powder 7.
Others (Please specify _____)
- f) According to you, which product's sale is on rise?
1. Cigarettes 2. Beedi 3. Gutkha 4. Zarda 5. Khaini 6. Tobacco powder 7.
Others (Please specify _____)

3. COTPA awareness - Knowledge

- a) Are you aware of Government's COTPA act?
1.Yes 2.No
- b) Do you know that a minor can neither sell nor buy tobacco products?
1.Yes 2.No
- c) Do you know that it is prohibited to sell tobacco products within 100 metres of any educational institute?
1.Yes 2.No
- d) Is your shop within 100 metres of educational institute?
1.Yes 2.No 3.Don't know
- e) Do you know that it is prohibited to put up prominent/big/illuminated displays of tobacco products encouraging their sale?
1.Yes 2.No
- f) Do you know it is prohibited to smoke in public places?
1.Yes 2.No
- g) Do you know you should display health warning boards on smoking in your shop? 1.Yes 2.No
- h) Are you aware that there should be health warnings on cigarettes pack?
1.Yes 2.No
- i) Are you aware of the punishment if you wouldn't follow rules to sell tobacco products laid down under COTPA?
1.Yes 2.No

3) Awareness on health hazards - Knowledge

- a) Do you smoke/consume any tobacco products?
1.Yes 2.No
- b) If yes, please mention the type of product consumed.
1.Cigarettes 2.Beedi 3. Gutkha 4.Zarda 5.Khaini 6.Tobacco powder
7.Others (Please specify _____)
- c) If yes for cigarettes, please mention the frequency of consumption.
1.Less than a pack per day 2.More than a pack per day
- d) If yes for beedis, please mention the frequency of consumption
1.Less than 3 packs per day 2.More than 3 packs per day
- e) If yes for other products, please mention the frequency of consumption
1. Less than 5 sachets per day 2. 5-10 sachets per day 3. More than 10 sachets per day
- f) Do you know smoking can have ill effects on health?
1.Yes 2.No
- g) Can smoking only cause cancer or it does also cause other diseases?
1.Yes 2.No
- h) Do you know smoking can cause high blood pressure, heart diseases, stroke, and even infertility?
1.Yes 2.No
- i) Are you aware of the mortality due to tobacco related disease?
1.Yes 2.No
- j) Is there any form of consuming tobacco products less dangerous or all are equally dangerous?
1.Smoking 2.Chewing 3.Sniffing 4.all

k) Are you aware of passive smoking?

1.Yes 2.No

l) Is passive smoking also dangerous to health?

1.Yes 2.No

m) Can passive smoking cause cancer and heart diseases?

1.Yes 2.No

4) Attitude and Practice

a) How often do minors come to you to buy tobacco products?

1.Very often 2.Often 3.Rare 4.Not at all

b) Would you ask for age proof for a minor-looking customer?

1.Yes 2.No

c) What would you do if a minor comes to you to buy tobacco products?

1.Deny 2.Sell 3.Sell but advice to quit 4.Inform parent or teacher

d) Did you ever hire a minor to sell tobacco products?

1.Yes 2.No

e) Did you display a health warning board in your shop?

1.Yes 2.No

f) What will you do if your customer smokes in front of your shop?

1.Stay quiet as I have put up warning board 2.Stay quiet concerning about losing customer 3.Say politely to move away 4.Warn strictly 5.Ignore

g) Are you aware of the health risks imposed on you if you allow smoking in front of your shop?

1.Yes 2.No

h) What will you do if you see someone smoking in public places?

1. Move away
2. Call Police or toll free
3. Say politely to move away
4. Ignore

i) What do you think on the health warnings on tobacco products did to the sale?

1. Decreased
2. No effect

j) Do you think the sales have decreased due to the pictorial warnings or increased price or general health awareness of public?

1. Yes
2. No
3. No effect

k) Do any females buy tobacco products from your shop?

1. Yes
2. No

l) Do you think COTPA act is being implemented strictly?

1. Yes
2. No
3. Can't tell

m) Did anyone tell you to stop selling tobacco products/ Have you ever thought of it?

1. Yes
2. No

n) Do you think tobacco products should be banned?

1. Yes
2. No

o) Is a smoke free nation possible?

1. Yes
2. No
3. Can't tell

ANNEXURE IV – KEY TO MASTER CHART

SI No.	Items	Key Code
1	Age (in years)	
	18 – 24	1
	25 – 30	2
	31 – 35	3
	36 – 40	4
	41 – 45	5
	46 – 50	6
	51 – 55	7
2	Sex	
	Male	1
	Female	2
3	Occupation	
	Employed	1
	Unemployed	2
4	Religion	
	Hindu	1
	Muslim	2
	Christian	3
	Others	4
5	Education status	
	Illiterate	1
	Primary	2
	High school	3
	College	4
6	Marital status	
	Married	1
	Unmarried	2
	Widow	3
	Widower	4
	Divorcee	5
7	Family	
	Nuclear	1
	Joint	2
	Three generation	3
	Others	4
8	Socioeconomic Status (Modified B.G Prasad Classification)	
	Class I	1
	Class II	2
	Class III	3
	Class IV	4
	Class V	5
9	Type of house	
	Kacha	1
	Semi-Pucca	2

	Pucca	3
10	House well ventilated	
	Yes	1
	No	2
11	Overcrowding	
	Yes	1
	No	2
12	License to sell tobacco products	
	Yes	1
	No	2
13	Years in tobacco sale occupation	
	Less than 5 years	1
	More than 5 years	2
14	Monthly income through tobacco sale	
	Less than 5000 rupees	1
	More than 5000 rupees	2
15	Sale trends of tobacco products	
	Increase	1
	Decrease	2
	No change	3
16	Tobacco products in decreasing sale trends	
	Cigarettes	1
	Beedi	2
	Gutkha	3
	Zarda	4
	Khaini	5
	Tobacco powder	6
	Others	7
	Cigarettes & Beedi	8
	Cigarettes & Gutkha	9
	Cigarettes & Zarda	10
	Cigarettes & Khaini	11
	Cigarettes & Tobacco powder	12
	Beedi & Gutkha	13
	Beedi & Zarda	14
	Beedi & Khaini	15
	Beedi & Tobacco powder	16
	Gutkha & Zarda	17
	Gutkha & Khaini	18
	Gutkha & Tobacco powder	19
	Zarda & Khaini	20
	Zarda & Tobacco powder	21
	Khaini & Tobacco powder	22
17	Tobacco products in increasing sale trends	
	Cigarettes	1
	Beedi	2
	Gutkha	3
	Zarda	4

	Khaini	5
	Tobacco powder	6
	Others	7
	Cigarettes & Beedi	8
	Cigarettes & Gutkha	9
	Cigarettes & Zarda	10
	Cigarettes & Khaini	11
	Cigarettes & Tobacco powder	12
	Beedi & Gutkha	13
	Beedi & Zarda	14
	Beedi & Khaini	15
	Beedi & Tobacco powder	16
	Gutkha & Zarda	17
	Gutkha & Khaini	18
	Gutkha & Tobacco powder	19
	Zarda & Khaini	20
	Zarda & Tobacco powder	21
	Khaini & Tobacco powder	22
18	Heard of COTPA?	
	Yes	1
	No	2
19	Can a minor sell/ buy tobacco products	
	Yes	1
	No	2
20	Prohibition against tobacco sales around educational institute	
	Yes	1
	No	2
21	Is your shop within 100 meters of an educational institute?	
	Yes	1
	No	2
22	Prohibition against display of tobacco products	
	Yes	1
	No	2
23	Prohibition against smoking in public places	
	Yes	1
	No	2
24	Aware of health warning boards to be put up?	
	Yes	1
	No	2
25	Aware of health warnings on cigarette packs?	
	Yes	1
	No	2
26	Aware of punishment for violation of COTPA	
	Yes	1
	No	2
27	Do you consume tobacco products?	
	Yes	1

	No	2
28	If yes to the above, which product?	
	Cigarettes	1
	Beedi	2
	Gutkha	3
	Zarda	4
	Khaini	5
	Tobacco powder	6
	Others	7
	Cigarettes & Beedi	8
	Cigarettes & Gutkha	9
	Cigarettes & Zarda	10
	Cigarettes & Khaini	11
	Cigarettes & Tobacco powder	12
	Beedi & Gutkha	13
	Beedi & Zarda	14
	Beedi & Khaini	15
	Beedi & Tobacco powder	16
	Gutkha & Zarda	17
	Gutkha & Khaini	18
	Gutkha & Tobacco powder	19
	Zarda & Khaini	20
	Zarda & Tobacco powder	21
	Khaini & Tobacco powder	22
29	If yes for cigarettes, frequency of consumption?	
	Less than a pack per day	1
	More than a pack per day	2
30	If yes for beedis, frequency?	
	Less than 3 packs per day	1
	More than 3 packs per day	2
31	If yes for other products, frequency?	
	Less than 5 sachets per day	1
	5-10 sachets per day	2
	More than 10 sachets per day	3
32	Smoking has ill effects on health?	
	Yes	1
	No	2
33	Can smoking only cause cancer or other diseases also?	
	Yes	1
	No	2
34	Can smoking cause heart diseases, stroke, and infertility?	
	Yes	1
	No	2
35	Aware of mortality due to tobacco related disease?	
	Yes	1
	No	2
36	Is there any form of tobacco product less dangerous?	
	Smoking	1

	Chewing	2
	Sniffing	3
	All are equally dangerous	4
37	Aware of passive smoking?	
	Yes	1
	No	2
38	Is passive smoking dangerous to health	
	Yes	1
	No	2
39	Can passive smoking cause cancer and heart diseases?	
	Yes	1
	No	2
40	How often do minors come to buy tobacco products?	
	Very often	1
	Often	2
	Rare	3
	Not at all	4
41	Asking for age proof before selling?	
	Yes	1
	No	2
42	Would you sell tobacco products to a minor?	
	Deny	1
	Sell	2
	Sell but advice to quit	3
	Inform parent or teacher	4
43	Did you ever hire a minor to sell tobacco products?	
	Yes	1
	No	2
44	Did you display a health warning board?	
	Yes	1
	No	2
45	What will you do if a customer smokes in front of your shop?	
	Stay quiet as I have put warning board	1
	Stay quiet over losing customer	2
	Stay politely to move away	3
	Warn strictly	4
	Ignore	5
46	Are you aware of health risks if you allow them smoke in front of you?	
	Yes	1
	No	2
47	What will you do if you see someone smoking in a public place?	
	Move away	1
	Call police or toll free	2
	Say politely to move away	3
	Ignore	4

48	Effect of health warnings on sales?	
	Decreased	1
	No effect	2
49	Did pictorial health warnings decrease sales?	
	Yes	1
	No	2
	No effect	3
50	Do females buy tobacco products from your shop?	
	Yes	1
	No	2
51	Do you think COTPA is being implemented strictly?	
	Yes	1
	No	2
	Can't tell	3
52	Did anyone advise you to quit selling tobacco products?	
	Yes	1
	No	2
53	Do you think tobacco products should be banned?	
	Yes	1
	No	2
54	Is a smoke free nation possible?	
	Yes	1
	No	2
	Can't tell	3

ANNEXURE V – KEY TO MASTER CHART

S.no	Age	Sex	Occupation	Religion	Education	Marital status	Family	SES	Housing	Ventilation	Overcrowding	License	Years in sale	Income	Sales inc/dec	Product sale dec	Product sale inc	Aware of COTPA	Minors	Educational institute	100 meters within premises?	Big displays	Public spaces smoking	Health warning boards	Health warnings on cigarette pack	Punishment	Do you smoke	Product consumed	Cigarettes	Beedi	Others	Smoking ill effects	Cancer	CVS diseases	Mortality	Less dangerous consumption	Passive smoking	Is it dangerous	Cancer and CVS dis	Minors	Age proof	Sell/ not?	Hired minor?	Health warning board?	Customer smoking?	Health risks?	Smoking in public?	Health warnings to sales?	Sales decreased	Females tobacco products?	COTPA strict?	Stop sale?	Banned?	Smoke free nation?	
1	4	1	1	1	2	1	1	3	2	1	2	1	2	1	1	22	8	2	2	2	3	2	2	2	2	2	1	2	0	2	0	1	2	2	2	2	2	0	3	2	3	2	2	5	2	3	2	2	2	2	2	3	2	2	3
2	3	1	1	2	2	1	1	3	2	2	1	1	2	2	2	17	1	2	2	2	2	2	1	2	2	2	1	12	1	0	2	1	2	2	2	3	2	0	0	3	2	2	2	2	4	2	2	4	2	2	3	2	2	3	
3	2	1	1	1	2	2	1	3	2	2	1	1	1	2	1	15	1	2	2	2	3	2	1	2	2	2	2	0	0	0	1	1	2	2	4	2	0	0	4	2	1	2	2	3	2	1	2	2	2	2	2	1			
4	2	1	1	2	2	1	1	4	2	2	1	1	1	1	3	3	8	2	1	2	2	2	1	2	2	2	0	0	0	0	2	2	2	2	2	2	0	0	3	2	2	2	3	2	1	2	2	2	2	2	2	1	2		
5	4	2	1	1	1	1	1	3	2	2	1	1	2	1	2	4	2	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	1	2	2	5	2	1	2	2	2	3	2	2	3	
6	4	2	1	2	1	1	1	4	2	2	2	1	1	1	3	21	8	2	2	2	2	2	2	2	2	2	1	4	0	0	1	1	2	2	2	4	2	0	0	2	2	3	2	2	5	2	1	2	3	2	3	2	2	3	
7	2	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	2	2	2	2	2	2	1	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	1	1	2	2	3	2	1	2	2	2	3	1	1	1		
8	4	2	1	2	1	3	2	3	2	1	1	2	1	2	3	21	1	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	1	1	3		
9	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	4	2	2	3	2	2	4	3	2	3	2	2	3	
10	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3	2	2	3		
11	3	1	1	3	2	1	1	3	3	2	2	1	2	2	2	3	1	2	2	2	2	2	1	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	5	2	4	2	2	3	2	3	1	1	3		
12	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	2	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	3	2	2	3	2	2	3
13	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	21	0	2	2	2	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	3	2	3	1	1	3			
14	3	1	1	2	2	1	1	3	2	2	2	1	2	1	3	18	1	2	2	2	2	2	1	2	2	2	13	0	2	2	1	2	2	2	4	2	2	2	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3	
15	4	1	1	1	2	1	1	3	2	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	1	16	0	2	2	2	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	3	2	3	2	2	3			
16	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	2	2	3	2	4	1	1	2	3	1	2	3			
17	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	3	2	1	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	1	1	1	1	3	2	1	1		
18	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2	2	18	0	0	3	2	2	2	2	4	2	0	0	3	2	2	2	5	2	1	2	3	2	3	1	1	3			
19	2	1	1	1	2	1	1	3	2	2	2	1	2	1	2	22	2	1	1	2	2	2	1	2	2	2	1	1	1	0	1	2	2	2	4	2	0	0	3	2	3	2	2	5	2	4	2	3	1	3	2	2	3		
20	4	2	1	2	2	3	1	3	2	2	2	2	1	2	5	2	2	2	2	2	2	2	1	2	2	2	0	0	0	0	2	2	2	2	4	2	2	3	2	2	2	2	2	2	4	2	2	3	2	2	3	2	2	3	
21	2	1	1	2	2	1	1	3	2	2	2	1	1	2	4	8	2	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	3	2	0	0	4	2	4	2	2	5	2	1	2	3	2	3	2	2	3		
22	2	1	1	3	2	1	1	3	3	2	2	1	1	1	2	5	2	2	2	2	2	2	2	2	2	1	1	1	0	0	1	2	2	2	1	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	1	2	3		
23	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	1	1	3		
24	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	4	2	2	3	2	2	4	3	2	3	2	2	3	
25	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3	2	2	3		
26	3	1	1	3	2	1	1	3	3	2	2	1	2	2	3	1	2	2	2	2	2	2	1	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	3	2	3	1	1	3			
27	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	1	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	3	2	2	3			
28	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	2	0	2	2	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	2	3	2	3	1	1	3			
29	3	1	1	2	2	1	1	3	2	2	2	1	1	3	18	1	2	2	2	2	2	2	1	2	2	2	13	0	2	1	2	2	2	4	2	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3				
30	4	1	1	1	2	1	1	3	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	2	1	16	0	2	2	2	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	3	2	3	2	2	3			

31	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	4	1	1	2	3	1	2	3		
32	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	3	2	1	2	2	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	1	1	1	1	3	2	1	1	
33	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2	2	2	18	0	0	3	2	2	2	2	4	2	0	0	3	2	2	2	2	5	2	1	2	3	2	3	1	1	3		
34	2	1	1	1	2	1	1	3	2	2	2	1	2	1	2	22	2	1	1	2	2	2	1	2	2	2	1	1	1	0	1	2	2	2	4	2	0	0	3	2	3	2	2	5	2	4	2	3	1	3	2	2	3			
35	4	1	1	2	2	1	1	3	3	1	2	1	2	2	3	6	1	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	1	1	2	2	1	2	3			
36	3	1	1	3	2	1	1	3	2	2	2	1	1	1	2	4	1	2	2	2	3	2	1	2	2	2	2	0	0	0	0	1	1	1	1	4	1	1	2	3	2	3	2	2	3	1	1	1	1	2	3	2	1	3		
37	3	1	1	2	2	4	2	3	1	2	1	1	2	1	2	21	8	2	2	2	2	2	1	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	3	2	3	2	2	2	2	4	2	2	2	2	2	3			
38	6	1	1	2	2	1	1	3	2	2	2	1	2	2	2	3	8	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	2	4	2	0	0	2	2	3	2	2	3	2	4	1	1	2	3	1	1	1		
39	3	1	1	1	1	1	1	4	2	2	1	1	1	1	2	22	1	2	2	2	3	2	1	1	2	2	2	14	0	1	1	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
40	4	1	1	3	2	1	1	3	3	2	2	1	2	2	2	4	8	2	2	2	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	3	2	1	2	3	2	3	2	2	3			
41	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
42	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2		
43	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3		
44	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	1	1	2	2	2	1	2	3		
45	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3		
46	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	2		
47	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	1	1	1			
48	2	1	1	1	2	1	1	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
49	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	2	1	1	
50	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	2	0	0	0	1	1	1	2	4	1	1	2	2	2	2	2	2	2	1	1	1	1	1	3	2	2	1	1	
51	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	1	1	2	3	1	3	1	3	1	1	3
52	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	2	1	2	3	2	3	1	1	2	
53	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	
54	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	2	2	
55	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2	2	
56	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3	
57	2	1	1	2	2	2	1	3	3	2	2	1	1	1	1	11	1	2	2	2	2	2	1	1	1	2	2	0	0	0	0	2	2	2	2	4	2	0	0	3	2	2	2	2	2	2	2	1	2	3	2	3	1	2	3	
58	6	1	1	2	2	1	1	2	3	1	2	1	2	2	3	20	1	2	1	1	2	2	1	2	1	2	1	10	1	0	1	1	2	2	2	4	1	2	2	3	2	2	2	2	2	2	2	3	2	3	2	3	2	2	3	
59	4	1	1	3	2	1	1	3	2	2	2	1	2	2	1	21	8	2	2	2	3	2	1	2	2	2	1	11	1	0	1	1	2	2	2	2	1	1	2	2	2	2	2	2	3	2	1	2	3	1	3	2	2	3		
60	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3	19	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	2	2	2	5	2	1	1	1	1	3	2	2	3		
61	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	1	13	0	1	1	1	2	2	2	4	1	1	2	3	2	3	2	2	2	2	2	3	2	2	2	2	2	2	3	
62	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	2	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
63	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	2	3	1	1	1	1	1	3	1	1	3		
64	3	1	1	1	2	1	1	3	3	1	2	1	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	3	2	0	0	3	2	3	2	2	5	2	4	2	3	2	3	2	2	3		
65	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
66	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	2		
67	4	1	1	1	2	1	1	3	2	1	2	1	2	1	1	22	8	2	2	2	3	2	2	2	2	2																														

72	4	2	1	2	1	1	1	4	2	2	2	1	1	1	3	21	8	2	2	2	2	2	2	2	2	2	2	2	1	4	0	0	1	1	2	2	2	4	2	0	0	2	2	3	2	2	5	2	1	2	3	2	3	2	2	3
73	2	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	2	2	2	2	2	2	1	2	2	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	1	1	2	2	3	2	2	2	3	1	1	1		
74	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	3	2	2	3	1	1	3			
75	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	2	2	3	2	2	4	3	2	2	3			
76	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	2	1	1	2	0	0	1	2	2	2	4	2	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3			
77	3	1	1	3	2	1	1	3	3	2	2	1	2	2	2	3	1	2	2	2	2	2	1	2	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	1	1	3	
78	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	2	1	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	2	3	2	2	3		
79	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	2	21	0	0	2	2	2	2	2	4	2	0	0	2	2	2	2	2	2	5	2	4	2	3	2	3	1	1	3	
80	3	1	1	2	2	1	1	3	2	2	2	1	2	1	3	18	1	2	2	2	2	2	1	2	2	2	2	13	0	2	2	1	2	2	2	4	2	2	2	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3	
81	4	1	1	1	2	1	1	3	2	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	2	1	16	0	2	2	2	2	2	2	4	2	0	0	2	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3	
82	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	4	1	1	2	3	1	2	3	
83	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	2	2	1	2	2	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	1	1	1	1	3	2	1	1	
84	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2	2	2	2	18	0	0	3	2	2	2	2	4	2	0	0	3	2	2	2	2	5	2	1	2	3	2	3	1	1	3	
85	2	1	1	1	2	1	1	3	2	2	2	1	2	1	2	22	2	1	1	2	2	2	1	2	2	2	1	1	1	0	1	2	2	2	2	4	2	0	0	3	2	3	2	2	5	2	4	2	3	1	3	2	2	3		
86	4	2	1	2	2	3	1	3	2	2	2	2	1	2	5	2	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	2	2	2	2	4	2	2	2	3	2	2	2	2	2	2	4	2	2	2	3	2	2	3		
87	2	1	1	2	2	1	1	3	2	2	2	1	1	1	2	4	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	3	2	0	0	4	2	4	2	2	5	2	1	2	3	2	3	2	2	3		
88	2	1	1	3	2	1	1	3	3	2	2	1	1	1	2	5	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	1	2	2	2	1	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	1	2	3		
89	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	1	1	3	
90	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	2	3	2	2	4	3	2	3	2	2	3			
91	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3				
92	4	1	1	3	2	1	1	3	3	2	2	2	1	2	2	4	8	2	2	2	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	3	2	1	2	3	2	3	2	2	3			
93	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
94	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2		
95	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3		
96	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3		
97	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3		
98	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	2	
99	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	1		
100	2	1	1	1	2	1	1	1	2	2	2	1	2	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
101	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	1		
102	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	2	1	1	1	1	2	3	2	1	1	
103	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3		
104	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	2	1	2	3	2	3	1	1	2	
105	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	1	2	2	2	2	2	2		
106	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	2		
107	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2		
108	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2																													

113	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	1	13	0	1	1	1	1	2	2	2	4	1	1	2	3	2	3	2	2	2	2	2	3	2	2	2	2	2	3	
114	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	2	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
115	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	3	1	1	1	1	3	1	1	3				
116	3	1	1	1	2	1	1	3	3	1	2	1	2	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	2	2	2	0	3	2	3	2	2	5	2	4	2	3	2	2	3			
117	4	1	1	1	2	1	1	3	2	1	2	1	2	1	1	22	8	2	2	2	3	2	2	2	2	2	1	2	0	2	0	1	2	2	2	2	2	2	0	3	2	3	2	2	5	2	3	3	2	2	3	2	1	3		
118	3	1	1	2	2	1	1	3	2	2	1	1	2	2	2	17	1	2	2	2	2	2	1	2	2	2	1	12	1	0	2	1	2	2	2	3	2	0	0	3	2	2	2	2	2	2	4	2	3	2	3	2	2	3		
119	2	1	1	1	2	2	1	3	2	2	1	1	1	2	1	15	1	2	2	2	3	2	1	2	2	2	2	0	0	0	0	1	1	2	2	4	2	0	0	4	2	1	2	2	3	2	1	2	2	2	3	2	2	1		
120	2	1	1	2	2	1	1	4	2	2	1	1	1	1	3	3	8	2	1	2	2	2	1	2	2	2	2	0	0	0	0	2	2	2	2	2	2	2	0	0	3	2	2	2	2	3	2	1	2	2	2	3	2	2	2	
121	4	2	1	1	1	1	1	3	2	2	1	1	2	1	2	4	2	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	1	2	2	5	2	1	2	2	2	3	2	2	3		
122	4	2	1	2	1	1	1	4	2	2	2	1	1	1	3	21	8	2	2	2	2	2	2	2	2	2	1	4	0	0	1	1	2	2	2	4	2	0	0	2	2	3	2	2	5	2	1	2	3	2	3	1	2	3		
123	2	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	2	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	1	1	2	2	3	2	1	2	2	2	3	2	2	1		
124	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	3	2	1	3	
125	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	2	2	3	2	2	4	3	2	3	1	2	3		
126	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3	2	2	3		
127	3	1	1	3	2	1	1	3	3	2	2	1	2	2	2	3	1	2	2	2	2	2	1	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	1	3		
128	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	2	1	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	2	3	2	1	3		
129	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	2	21	0	0	2	2	2	2	4	2	0	0	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3		
130	3	1	1	2	2	1	1	3	2	2	2	1	2	1	3	18	1	2	2	2	2	2	1	2	2	2	2	13	0	2	2	1	2	2	2	4	2	2	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3		
131	4	1	1	1	2	1	1	3	2	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	2	1	16	0	2	2	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	2	1	3		
132	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	2	2	0	0	0	1	2	2	2	4	2	2	0	0	3	2	2	2	2	3	2	4	1	1	2	3	2	2	3	
133	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	3	2	1	2	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	2	1	1	1	1	3	1	1	1	
134	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2	2	2	18	0	0	3	2	2	2	2	4	2	0	0	3	2	2	2	2	5	2	1	2	3	2	3	2	2	3		
135	2	1	1	1	2	1	1	3	2	2	2	1	2	1	2	22	2	1	1	2	2	2	1	2	2	2	1	1	1	0	1	2	2	2	2	4	2	0	0	3	2	3	2	2	5	2	4	2	3	1	3	1	2	3		
136	4	2	1	2	2	3	1	3	2	2	2	2	2	1	2	5	2	2	2	2	2	2	1	2	2	2	2	0	0	0	0	2	2	2	2	4	2	2	2	3	2	2	2	2	2	2	4	2	2	2	3	2	2	3		
137	2	1	1	2	2	1	1	3	2	2	2	1	1	1	2	4	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	3	2	0	0	4	2	4	2	2	5	2	1	2	3	2	3	2	1	3		
138	2	1	1	3	2	1	1	3	3	2	2	1	1	1	2	5	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	1	2	2	2	1	2	0	0	3	2	3	2	2	3	2	1	2	3	2	1	3				
139	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	2	2	3
140	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	2	2	3	2	2	4	3	2	3	2	2	3		
141	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3	1	2	3	
142	3	1	1	3	2	1	1	3	3	2	2	1	2	2	2	3	1	2	2	2	2	2	1	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
143	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	2	1	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	2	3	2	1	3		
144	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	2	21	0	0	2	2	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
145	3	1	1	2	2	1	1	3	2	2	2	1	2	1	3	18	1	2	2	2	2	2	1	2	2	2	2	13	0	2	2	1	2	2	2	4	2	2	2	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
146	4	1	1	1	2	1	1	3	2	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	2	1	16	0	2	2	2	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
147	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	4	1	1	2	3	2	2	3		
148	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	3	2	1	2	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	2	1	1	1	1	3	2	2	1	
149	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2																															

154	6	1	1	2	2	1	1	3	2	2	2	1	2	2	2	3	8	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	2	4	2	0	0	2	2	3	2	2	3	2	4	1	1	2	3	1	1	1	
155	3	1	1	1	1	1	1	4	2	2	1	1	1	2	2	22	1	2	2	2	3	2	1	1	2	2	2	14	0	1	1	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
156	4	1	1	3	2	1	1	3	3	2	2	1	2	2	4	8	2	2	2	2	2	1	2	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	3	2	2	3			
157	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
158	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	
159	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3		
160	3	2	1	2	2	3	1	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3		
161	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3	
162	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	2	3	2	2	2		
163	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	1	
164	2	1	1	1	2	1	1	1	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
165	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	1	3	2	1	1	1		
166	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	1	1	1	1	2	3	2	1	1	
167	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3	
168	2	1	1	2	3	2	1	4	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	1	2	3	2	3	1	1	2		
169	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	1	2	2	2	2	2	2		
170	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	2		
171	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2	
172	4	2	1	1	2	1	1	3	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3	
173	2	1	1	2	2	2	1	3	3	2	2	1	1	1	11	1	2	2	2	2	2	1	1	1	2	2	2	0	0	0	0	2	2	2	4	2	0	0	3	2	2	2	2	2	2	2	1	2	3	2	3	1	2	3	
174	6	1	1	2	2	1	1	2	3	1	2	1	2	2	3	20	1	2	1	1	2	2	1	2	1	2	1	10	1	0	1	1	2	2	2	4	1	2	2	3	2	2	2	2	2	2	2	3	2	3	2	3	2	2	3
175	4	1	1	3	2	1	1	3	2	2	2	1	2	2	1	21	8	2	2	2	3	2	1	2	2	1	11	1	0	1	1	2	2	2	2	1	1	2	2	2	2	2	2	3	2	1	2	3	1	3	2	2	3		
176	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3	19	1	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	2	2	2	5	2	1	1	1	1	3	2	2	3		
177	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	1	13	0	1	1	1	2	2	2	4	1	1	2	3	2	3	2	2	2	2	3	2	2	2	2	2	2	3	
178	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	2	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3	
179	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	2	3	1	1	1	1	1	3	1	1	3	
180	3	1	1	1	2	1	1	3	3	1	2	1	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	3	2	0	0	3	2	3	2	2	5	2	4	2	3	2	3	2	2	3	
181	3	1	1	2	2	1	1	3	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	2	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
182	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2		
183	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3		
184	3	2	1	2	2	3	1	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3		
185	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3	
186	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	2	
187	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	2	1	1	2	2	1	1	1		
188	2	1	1	1	2	1	1	1	2	2	2	1	2	2	2	1	1	2	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
189	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	3	1	1	2	2	1	3	2	2	1	1	
190	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	2	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2											

195	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2				
196	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	2	1	2	1	2	2	3	2	2	3
197	5	2	1	2	2	1	2	3	2	2	2	1	2	2	3	3	1	2	1	2	2	2	1	2	2	2	2	1	8	1	1	0	1	1	2	2	2	1	1	2	3	2	2	2	2	2	2	2	2	1	2	2	2	3	2	2	1	
198	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	1				
199	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	2	1	2	3			
200	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3				
201	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	3				
202	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	2			
203	2	1	1	1	2	1	1	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3				
204	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	3				
205	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	2	1	1	1	1	2	3	2	1	3			
206	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	2	1	1	2	3	1	3	1	3	1	1	2	
207	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	1	2	3	2	3	1	1	1	1			
208	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	1	2	2	2	2	2	3				
209	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	1					
210	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	1				
211	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3				
212	2	1	1	2	2	2	1	3	3	2	2	1	1	1	1	11	1	2	2	2	2	2	1	1	1	2	0	0	0	0	2	2	2	2	4	2	0	0	3	2	2	2	2	2	2	2	1	2	3	2	3	1	2	2				
213	6	1	1	2	2	1	1	2	3	1	2	1	2	2	3	20	1	2	1	1	2	2	1	2	1	2	1	10	1	0	1	1	2	2	2	4	1	2	2	3	2	2	2	2	2	2	2	3	2	3	2	3	2	2	2			
214	4	1	1	3	2	1	1	3	2	2	2	1	2	2	1	21	8	2	2	2	3	2	1	2	2	2	1	11	1	0	1	1	2	2	2	1	1	2	2	2	3	2	2	2	3	2	1	2	3	1	3	2	2	2				
215	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3	19	1	2	2	2	2	2	1	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	2	2	2	5	2	1	1	1	1	3	2	2	2	2				
216	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	1	13	0	1	1	1	2	2	2	4	1	1	2	3	2	3	2	2	2	2	2	3	2	2	2	2	2	3				
217	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3					
218	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	2	3	1	1	1	1	1	3	1	1	3					
219	3	1	1	1	2	1	1	3	3	1	2	1	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	3	2	0	0	3	2	3	2	2	5	2	4	2	3	2	3	2	2	3				
220	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3				
221	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	3				
222	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3				
223	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	2	1	1	2	2	1	2	2			
224	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	1				
225	6	1	1	2	2	1	1	3	2	2	2	1	2	2	2	3	8	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	2	4	2	0	0	2	2	3	2	2	3	2	4	1	1	2	3	1	1	1				
226	3	1	1	1	1	1	1	4	2	2	1	1	1	1	2	22	1	2	2	2	3	2	1	1	2	2	2	14	0	1	1	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3				
227	4	1	1	3	2	1	1	3	3	2	2	1	2	2	2	4	8	2	2	2	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	3	2	1	2	3	2	3	2	2	3					
228	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3				
229	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2				
230	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3				
231	3	2	1	2	2	3	1	2	2	2	2	1	1	3	22																																											

236	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	1		
237	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	1	1	1	2	3	2	1	1		
238	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3	
239	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	2	1	2	3	1	1	2			
240	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	1	2	2	2	2	2		
241	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	2		
242	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2		
243	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3	
244	2	1	1	2	2	2	1	3	3	2	2	1	1	1	1	11	1	2	2	2	2	2	1	1	1	2	2	0	0	0	0	2	2	2	2	4	2	0	0	3	2	2	2	2	2	2	1	2	3	2	3	1	2	3		
245	3	2	1	2	3	2	1	3	3	1	3	2	2	1	3	17	8	2	1	2	2	2	1	2	1	2	2	9	2	0	1	1	2	2	2	4	2	0	0	3	2	2	2	1	2	2	1	1	3	2	3	1	2	3		
246	4	2	1	3	2	1	1	4	3	2	2	2	1	1	3	22	1	2	2	2	2	2	2	2	2	2	2	0	0	0	0	1	1	2	2	2	2	0	0	2	2	3	2	2	2	2	2	3	1	1	1	3	2	2	3	
247	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	4	1	1	2	3	2	2	2	2	2	1	1	1	1	2	3	2	1	1			
248	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3		
249	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	1	2	3	2	3	1	1	2		
250	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	1	2	2	2	2	2	2		
251	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	2		
252	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	2		
253	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3	
254	5	2	1	2	2	1	2	3	2	2	2	1	2	2	3	3	1	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	1	1	2	3	2	2	2	2	2	2	2	1	2	2	2	3	2	2	1	
255	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	1		
256	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	1	1	2	2	2	1	2	3	
257	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3		
258	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	3		
259	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	2		
260	2	1	1	1	2	1	1	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3		
261	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	3	
262	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	2	1	1	1	1	2	3	2	1	3	
263	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	2	
264	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	2	1	2	3	2	3	1	1	1	
265	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	2	2	1	2	2	2	2	2	3	
266	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2	10	1	0	1	2	2	2	2	2	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	2	2	1		
267	3	1	1	1	2	1	1	2	3	1	2	1	2	2	2	17	8	2	2	2	3	2	1	2	1	2	1	9	1	0	1	1	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	3	1	2	1	2	1		
268	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	2	1	2	1	2	3	2	2	3
269	2	1	1	2	2	2	1	3	3	2	2	1	1	1	1	11	1	2	2	2	2	2	1	1	1	2	2	0	0	0	0	2	2	2	2	4	2	0	0	3	2	2	2	2	2	2	2	1	2	3	2	3	1	2	2	
270	6	1	1	2	2	1	1	2	3	1	2	1	2	2	3	20	1	2	1	1	2	2	1	2	1	2	1	10	1	0	1	1	2	2	2	4	1	2	2	3	2	2	2	2	2	2	2	2	3	2	3	2	3	2	2	2
271	4	1	1	3	2	1	1	3	2	2	2	1	2	2	1	21	8	2	2	2	3	2	1	2	2	2	1	11	1	0	1	1	2	2	2	2	1	1	2	2	2	2	3	2	1	2	3	1	3	2	2	2	2			
272	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3</																																									

277	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3			
278	3	1	1	3	2	1	1	3	3	2	2	1	2	2	2	3	1	2	2	2	2	2	1	2	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	1	1	3
279	2	1	1	2	1	1	2	3	2	2	2	1	1	1	3	3	1	2	2	2	2	1	2	2	2	2	1	16	0	2	1	2	2	2	2	4	2	0	0	4	2	1	2	2	5	2	4	2	2	3	2	2	3		
280	4	1	1	2	1	4	2	3	2	2	2	1	2	1	3	21	1	2	2	2	3	2	1	2	2	2	2	21	0	0	2	2	2	2	4	2	0	0	2	2	2	2	5	2	4	2	3	2	3	1	1	3			
281	3	1	1	2	2	1	1	3	2	2	2	1	2	1	3	18	1	2	2	2	2	2	1	2	2	2	2	2	13	0	2	2	1	2	2	2	4	2	2	2	2	2	2	2	5	2	4	2	3	2	3	1	2	3	
282	4	1	1	1	2	1	1	3	2	2	2	2	1	1	3	17	1	2	2	2	3	2	1	2	2	2	1	16	0	2	2	2	2	2	4	2	0	0	2	2	2	2	2	5	2	4	2	3	2	3	2	2	3		
283	3	1	1	1	2	1	1	3	2	2	2	1	2	1	3	21	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	2	2	3	2	4	1	1	2	3	1	2	3		
284	2	1	1	1	2	1	1	4	2	2	2	1	1	2	2	3	1	2	2	2	3	2	1	2	2	2	1	9	1	0	1	2	2	2	2	4	2	0	0	2	2	2	2	2	2	2	1	1	1	1	3	2	1	1	
285	3	1	1	2	1	1	1	3	2	2	2	1	1	2	2	18	1	2	2	2	3	2	1	2	2	2	2	18	0	0	3	2	2	2	2	4	2	0	0	3	2	2	2	2	5	2	1	2	3	2	3	1	1	3	
286	2	1	1	1	2	1	1	3	2	2	2	1	2	1	2	22	2	1	1	2	2	2	1	2	2	2	1	1	1	0	1	2	2	2	2	4	2	0	0	3	2	3	2	2	5	2	4	2	3	1	3	2	2	3	
287	4	2	1	2	2	3	1	3	2	2	2	2	1	2	5	2	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	2	2	2	2	4	2	2	2	3	2	2	2	2	2	2	2	4	2	2	2	3	2	2	3
288	2	1	1	2	2	1	1	3	2	2	2	1	1	1	2	4	8	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	2	2	2	3	2	0	0	4	2	4	2	2	5	2	1	2	3	2	3	2	2	3
289	2	1	1	3	2	1	1	3	3	2	2	1	1	1	2	5	2	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	1	2	2	2	1	2	0	0	3	2	3	2	2	3	2	1	2	3	2	3	1	2	3
290	4	2	1	2	1	3	2	3	2	1	1	2	1	3	3	21	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	1	1	3
291	1	1	1	3	2	1	1	3	2	2	2	1	1	2	2	22	8	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	2	2	2	4	1	2	2	4	2	2	2	2	3	2	2	4	3	2	3	2	2	3	
292	2	1	1	1	3	1	2	3	2	2	2	1	1	2	3	4	1	2	2	2	2	2	1	2	2	2	1	1	2	0	0	1	2	2	2	4	2	0	0	4	2	1	2	2	3	2	2	3	2	2	3	2	2	3	
293	5	1	1	2	2	2	2	4	2	2	2	1	2	1	3	20	1	2	1	2	3	1	1	2	2	2	1	2	0	1	0	1	1	2	2	2	1	1	2	3	2	2	2	2	3	2	1	2	2	1	3	2	2	2	
294	4	1	1	2	2	1	1	3	3	1	2	1	2	2	3	6	1	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3	
295	3	1	1	3	2	1	1	3	2	2	2	1	1	1	2	4	1	2	2	2	3	2	1	2	2	2	2	0	0	0	0	1	1	1	1	4	1	1	2	3	2	3	2	2	3	1	1	1	1	2	3	2	1	3	
296	3	1	1	2	2	4	2	3	1	2	1	1	2	1	2	21	8	2	2	2	2	2	1	2	2	2	2	1	9	1	0	2	1	2	2	2	4	2	0	0	3	2	3	2	2	2	2	4	2	2	2	2	2	3	
297	6	1	1	2	2	1	1	3	2	2	2	1	2	2	2	3	8	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	2	4	2	0	0	2	2	3	2	2	3	2	2	4	1	1	2	3	1	1	1
298	3	1	1	1	1	1	1	4	2	2	1	1	1	1	2	22	1	2	2	2	3	2	1	1	2	2	2	14	0	1	1	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
299	4	1	1	3	2	1	1	3	3	2	2	1	2	2	2	4	8	2	2	2	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	2	3	2	1	2	3	2	3	2	2	3	
300	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
301	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	
302	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3	
303	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3	
304	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3	
305	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	2	
306	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	1	
307	2	1	1	1	2	1	1	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
308	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	1	
309	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	2	1	1	1	1	2	3	2	1	1
310	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3
311	2	1	1	2	3	2	1	4	2	2	2	2	1	2	2	20	8	2	1	2	2	2	1	1	2	2	2	0	0	0	0	1	1	1	2	4	1	2	2	3	2	3	2	2	2	2	2	1	2	3	2	3	1	1	2
312	5	1	1	3	2	1	1	2	2	2	2	1	2	1	3	17	8	2	1	2	2	2	1	2	2	2	1	9	1	0	1	1	1	2	1	4	2	0	0	3	2	2	2	2	2	2	1	2	2	2	2	2	2	2	
313	4	1	1	2	1	1	1	2	2	2	2	1	2	1	3	4	1	2	2	2	3	2	1	2	2	2	2																												

318	4	1	1	3	2	1	1	3	2	2	2	1	2	2	1	21	8	2	2	2	3	2	1	2	2	2	1	11	1	0	1	1	2	2	2	2	1	1	2	2	2	2	2	3	2	1	2	3	1	3	2	2	3		
319	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3	19	1	2	2	2	2	2	1	2	2	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	2	2	2	5	2	1	1	1	1	3	2	2	3
320	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	2	1	13	0	1	1	1	2	2	4	1	1	2	3	2	2	2	2	2	2	2	2	3	2	2	2	3		
321	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	2	0	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3
322	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	2	3	1	1	1	1	3	1	1	3		
323	3	1	1	1	2	1	1	3	3	1	2	1	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	3	2	0	0	3	2	3	2	2	5	2	4	2	3	2	3	2	2	3	
324	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
325	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	
326	4	2	2	3	2	1	2	3	2	2	2	1	2	2	2	17	1	2	1	1	2	1	1	2	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	3	2	2	2	2	2	2	1	1	2	2	2	1	3
327	2	1	1	2	2	1	2	3	3	2	2	1	1	2	3	19	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	4	1	1	2	3	2	2	2	2	5	2	1	1	1	1	3	2	2	2	
328	5	1	1	1	1	1	1	2	3	1	2	1	2	2	2	20	8	2	2	2	2	2	1	2	2	2	2	1	13	0	1	1	1	2	2	4	1	1	2	3	2	3	2	2	2	2	2	2	3	2	2	2	2	2	3
329	2	1	1	2	2	1	1	2	3	2	2	1	1	2	2	20	1	2	2	2	2	2	1	1	1	2	2	2	0	1	0	1	1	2	1	2	2	0	0	3	2	2	2	2	5	2	4	2	3	2	3	2	2	3	
330	2	1	1	3	2	1	1	1	3	2	2	1	2	2	1	20	1	2	2	2	2	2	1	2	1	2	2	0	0	0	0	1	1	2	1	3	1	1	2	2	2	2	2	2	3	1	1	1	1	3	1	1	3		
331	3	1	1	1	2	1	1	3	3	1	2	1	2	2	3	17	1	2	1	2	2	2	1	2	2	2	1	2	0	2	0	1	2	2	2	3	2	0	0	3	2	3	2	2	5	2	4	2	3	2	3	2	2	3	
332	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
333	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	3	
334	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3	
335	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	2	1	1	2	2	1	2	2
336	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	1	
337	6	1	1	2	2	1	1	3	2	2	1	2	2	2	3	8	2	2	2	3	2	1	2	2	2	2	1	14	0	1	2	1	1	2	2	4	2	0	0	2	2	3	2	2	3	2	4	1	1	2	3	1	1	1	
338	3	1	1	1	1	1	1	4	2	2	1	1	1	1	2	22	1	2	2	2	3	2	1	1	2	2	2	14	0	1	1	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
339	4	1	1	3	2	1	1	3	3	2	2	1	2	2	2	4	8	2	2	2	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	2	1	1	2	2	2	2	2	2	2	3	2	1	2	3	2	3	2	2	3
340	3	1	1	2	2	1	1	3	2	2	2	1	2	1	2	17	1	1	1	2	2	2	1	2	2	2	1	1	1	0	0	1	1	1	2	4	1	1	1	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
341	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	
342	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3	
343	3	2	1	2	2	3	1	2	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3
344	5	1	1	2	2	4	1	3	3	2	2	1	2	2	3	3	8	2	2	2	3	2	1	2	2	2	1	15	0	1	2	1	2	2	2	2	2	0	0	2	2	3	2	2	5	2	4	2	1	2	3	2	2	2	
345	2	1	1	1	2	2	1	3	2	1	2	2	1	1	2	21	1	2	2	2	3	2	1	1	2	2	2	11	1	0	1	2	2	2	2	4	2	0	0	3	2	2	2	2	3	2	1	2	1	1	3	2	2	3	
346	3	2	1	2	2	3	1	2	2	2	2	1	1	3	22	8	2	1	2	2	2	1	2	2	2	2	1	8	1	1	0	1	1	2	2	2	2	0	0	2	2	2	2	2	2	2	2	2	1	1	2	2	1	2	3
347	2	1	1	2	2	1	1	2	3	1	2	1	1	1	2	17	1	2	2	1	2	2	1	1	2	2	2	0	0	0	0	1	1	2	1	4	2	0	0	4	2	1	2	2	5	2	1	2	1	2	3	2	2	3	
348	4	1	1	2	2	1	1	3	3	2	2	1	2	2	3	20	8	1	1	2	2	2	1	1	2	2	1	3	0	0	2	1	2	2	2	2	2	0	0	3	2	3	2	1	1	2	1	1	1	2	3	2	2	2	
349	5	1	1	1	2	1	1	3	3	2	2	1	2	1	3	13	1	2	1	2	2	2	1	2	1	2	1	2	0	1	0	1	1	2	2	4	1	1	2	2	2	2	2	2	2	1	1	2	2	1	2	1	1	1	
350	2	1	1	1	2	1	1	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	1	1	2	2	2	0	0	0	0	1	2	2	2	4	2	0	0	3	2	3	2	1	1	2	1	2	3	2	3	2	2	3	
351	5	1	1	2	1	1	2	3	2	2	3	1	2	1	2	17	1	1	1	1	2	2	1	2	2	2	1	1	1	0	0	1	2	2	2	4	1	2	2	2	2	2	2	2	2	3	1	1	2	2	1	3	2	1	1
352	3	1	1	1	2	1	1	3	3	2	2	1	1	2	3	22	1	2	2	2	2	2	1	2	2	2	2	0	0	0	0	1	1	1	2	4	1	1	2	3	2	2	2	2	2	2	1	1	1	1	2	3	2	1	1
353	5	1	1	2	2	1	2	4	2	2	2	1	2	1	1	22	1	2	2	2	3	2	1	2	2	2	1	14	0	1	2	1	1	2	1	4	1	1	2	2	2	2	2	2	2	2	1	1	2	3	1	3	1	1	3
354	2	1	1	2	3	2	1	4	2	2	2	1	2	2	2	20	8	2	1	2																																			

359	4	2	1	1	2	1	1	3	2	2	2	2	1	1	3	20	1	2	1	2	2	2	1	2	2	2	2	0	0	0	0	1	1	2	2	3	2	0	0	3	2	3	2	2	2	2	2	1	2	1	2	3	2	2	3
360	2	1	1	2	2	2	1	3	3	2	2	1	1	1	1	11	1	2	2	2	2	2	1	1	1	2	2	0	0	0	0	2	2	2	2	4	2	0	0	3	2	2	2	2	2	2	1	2	3	2	3	1	2	2	

Age

Sex

Occupation

Religion

Education

Marital status

Family

SES

Housing

Ventilation

Overcrowding

License

Years in sale

Income

Sales inc/dec

Product sale dec

Product sale inc

Aware of COTPA

Minors

Educational institute

100 meters within premises?

Big displays

Public spaces smoking

Health warning boards

Health warnings on cigarette pack

Punishment

Do you smoke

Product consumed

Cigarettes

Beedi

Others

Smoking ill effects

Cancer

CVS diseases

Mortality

Less dangerous consumption

Passive smoking

Is it dangerous

Cancer and CVS dis

Minors

Age proof

Sell/ not?

Hired minor?

Health warning board?

Customer smoking?

Health risks?

Smoking in public?

Health warnings to sales?

Sales decreased

Females tobacco products?

COTPA strict?

Stop sale?

Banned?

Smoke free nation?

Age

Sex

Occupation

Religion

Education

Marital status

Family

SES

Housing

Ventilation

Overcrowding

License

Years in sale

Income

Sales inc/dec

Product sale dec

Product sale inc

Aware of COTPA

Minors

Educational institute

100 meters within premises?

Big displays

Public spaces smoking

Health warning boards

Health warnings on cigarette pack

Punishment

Do you smoke

Product consumed

Cigarettes

Beedi

Others

Smoking ill effects

Cancer

CVS diseases

Mortality

Less dangerous consumption

Passive smoking

Is it dangerous

Cancer and CVS dis

Minors

Age proof

Sell/ not?

Hired minor?

Health warning board?

Customer smoking?

Health risks?

Smoking in public?

Health warnings to sales?

Sales decreased

Females tobacco products?

COTPA strict?

Stop sale?

Banned?

Smoke free nation?



Introduction



Aim and Objectives



Review of Literature



Methodology



Results



Discussion



Conclusion



Recommendations



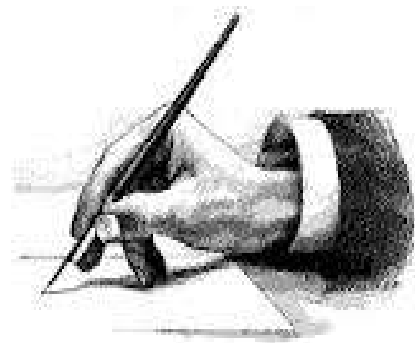
Limitations



Summary



Bibliography



Annexures
