



KNOWLEDGE, ATTITUDES AND PRACTICES TOWARDS GREEN TEA (*CAMELLIA SINESIS*) POPULATION OF KHYBER PAKHTOOKHWA

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ABSTRACT

Tea is the second greatest drink use all over the world. This investigation is intended to discover a survey of knowledge, attitudes, and practices towards green tea (*Camellia sinensis*) population of Khyber Pkhtookhwa. A cross sectional examination was designed. Information was gathered from 200 individual through questionnaire. Most of respondents were males having a place with various ages and like milk tea. The proportion of illiterate described high. The local population has increasingly adequate information about advantages of green tea and furthermore utilized it for various determinations.

1. INTRODUCTION

Tea (*Camellia*) is the most second mainstream consumable 3 drinks. After water tea is the greatest drinkable beverage in Pakistan and other nations of the world because of its great Health benefits. (Cheng)^[1]. Green tea (*Camellia sinensis* L.) is a little size angio-spermic and dicotyledonous, perennial shrub having a place with the family Theaceae. Green tea plant is slow developing shrub like plant having little, serrate and dull green leaves and it is originated from china 5000 year ago (Yanagimoto *et al.*)^[10]. Green tea contains various sorts of natural components caffeine, theanine, polyphenols, and nutrients, (Yamamoto *et al.*)^[9]. The polyphenolic natural parts make up 30% of the complete green tea substance arrangement, which are flavanols, flavandiols flavonoids and phenolic acid (Cheng)^[11].

Flavonoids are the fundamental substance of polyphenol and catechins found in green tea and reliable to about 7% of their combinations. Catechins and flavonoids are referred to for their properties, for example, cancer prevention agent, hypersensitive and anticarcinogenic impacts (Dulloo *et al.*)^[8]. It has likewise been reported for that the green tea is best brew all through the country. Green tea is a non-oxidized drink green tea is prepared from fresh leaf and bud of a shrub *Camellia sinensis* and un-oxidized form of brew which is pale in looking with severe smell. It is set up by normal natural practices (Jazani)^[3]. In this way contains high measure of bioactive natural regular compound, for example, Epigallocatechin gallate (EGCG), flavanols, flavandiols, and phenolic acids and the most dynamic substance which is 12% of dry weight (Yamamoto)^[9]. There for Much force has been paid on its utilization because of its improving health characteristics, for example, bringing down glucose level, lessening cholesterol level, advancing oral wellbeing, keeping up body weight, skin health,

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bringing down pulse, decreasing the danger of disease, keeping bone solid and battling against maturing. (Jazani) [3]. Natural part of green Tea like polyphenols reduce and prevent the development of malignant growth cell by making bonds between amino acids it inactivates the action of hurtful catalysts and inactivates the infections when they present in low concentration. Apoptosis is a cell damaged that happens normally in every life form known as modified cell death. During apoptosis various Changes morphological change and cell shrinkage, atomic discontinuity, chromatin buildup while in necrosis, the body cell and tissue experience irritation, break and swelling occur (Isemura et al.,) [2].

Catechins are natural part in green tea have properties to repress the anti-apoptotic Bcl-2 family proteins. Polyphenols also show anticancer action and assume an essential job in anti-apoptotic pathway, which is known as the inducer of numerous human, malignancies. The heavy tea consumer who drink more than 9 cups for every day expending around one gram of green tea catechins every daytime. in this manner , there for the constant green tea customer had low cholesterol level, LDL, triglycerides, and an expanded proportion of HDL as contrasted and that of the less anxiously client (Imai and Nakachi) [4]. Chemical Compound of green tea relies upon season and atmosphere variety, place of collection of leaf, shoot and agriculture rehearses Among the impacts credited to the green tea are incorporated avoidance of malignancy and cardiovascular infection, cancer prevention agent, antibacterial, antiviral, neuroprotective impacts, cholesterol reducer, fat reducer and help with the treatment and control obesity and related sicknesses, for example, diabetes and dyslipidemia (Cheng) [1].

The purpose of present survey to find out a survey of knowledge, attitudes, and practices towards green tea (*Camellia sinensis*) population of Khyber Pakhtunkhwa.

2. MATERIALS AND METHODS

Study area

The present survey of knowledge, attitudes, and practices towards green tea (*Camellia sinensis*) population of Khyber Pakhtunkhwa was performed in union council Badwan is in lower dir. on the bank of river swat toward west. It is situated from sea level at height of 2192 feet (668 meters). The total population of union council bad wan is about 27000 approximately.

Study plan

An illustrative observational investigation was plan. The participants were interrogated from 9:30 to 4:30 during day time.

Data collection

The demographic and practice of green tea information of the respondent were collected through questionnaire randomly.

Data analysis

XL stat 2015 version were used for data analysis.

3. RESULTS AND DISCUSSION

This current study was carried out on survey of knowledge, attitudes, and practices towards green tea (*Camellia sinensis*) population of Khyber Pakhtunkhwa and data were collected from total of 200 respondents from the five selected villages Ramyal, Chatpat, Gadar Baghkandi and Shamli of union council Badwan Khyber Pakhtunkhwa Pakistan.

Distribution of the participant

The distribution of respondent from different villages of said area, 30% from village Ramyal, 25% from Chat pat, 20% from village Shamli , 15% from Gadar and 10% were interweaved from local population were cross examined from the village Baghkandi as shown in Figure 1.

Demographic wise distribution

The demographic wise distribution was presented in Table 1, among the total interviewed the males 160 /80% and 40/20% were females.

The education wise ratio

The ratio of illiterate in the study area were very high. The 120/ 60 % respondent were illiterate while the 80/40% were literate as shown in Table 1.

Distribution on the base of age

the population was distributed into five age groups includes group I, 12-21years10%; group II, 22-31years 22%; group III, 32-42 year 25% and group IV, 43-60 35% although group V >60 years 8%. Group 4 were 35% high in percentage then all; all groups were represented in Table 1

Occupation of the participant

Majority of the respondent occupation were farmers which is about 120/60% followed by business man 50/25% , and the students ratio were 24/12% while only 6/3% were employees the data is show in Figure 2.

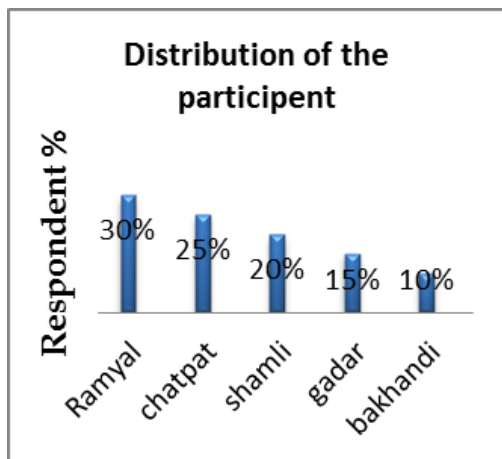


Figure 1. Distribution of the participant

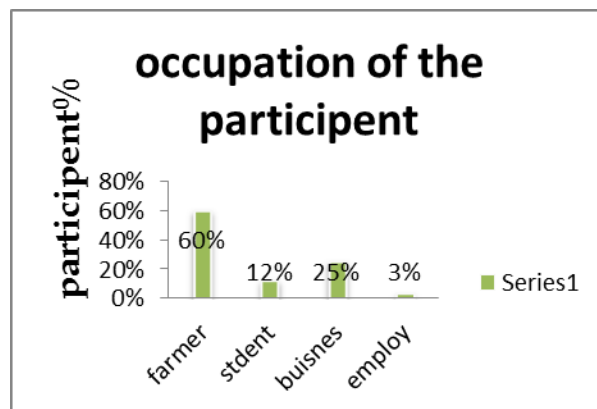


Figure 2. Occupation of the participant

Table 1. Demographic information about the Green Tea consumers

1	Age /year	%
	12-21	10
	22-31	22
	32-42	25
	43-60	35
	>60	8
2	Sex	%
	Male	80
	Female	20
3	Education	%
	Primary	22
	Matriculation	10
	Intermediate	5
	Graduate	3
	Illiterate	60

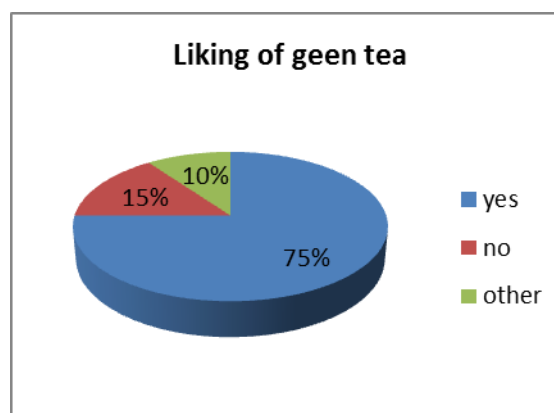


Figure 3. liking of green tea Use of green tea

The 150/75% of the participant used milk tea all time and the 34/17% of respondent green tea and the remaining 16/8% population use other types of tea (Figure 4).

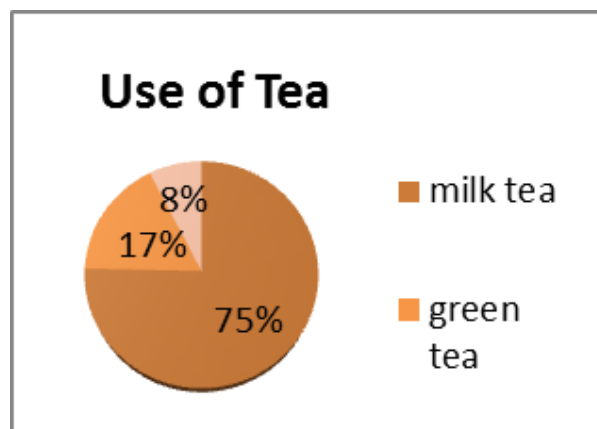


Figure 4. Use of green tea Frequency of consumption green tea

Liking of green tea the participant of local population of union council Badwan were asked about the liking of green tea among them 150/75% were give response in Yes that they like green tea while 30/15% were answer in No and 20/10% other the data was presented bellow in Figure 3.

The respondent were investigate about drinking frequency of green tea among them 100/50% participant use one cup a day followed by 54/27% respondent used two cup a day and 36/18% used three cups while 10/5% of participant drink more than three cups in a day. The data is shown in following Figure 5.

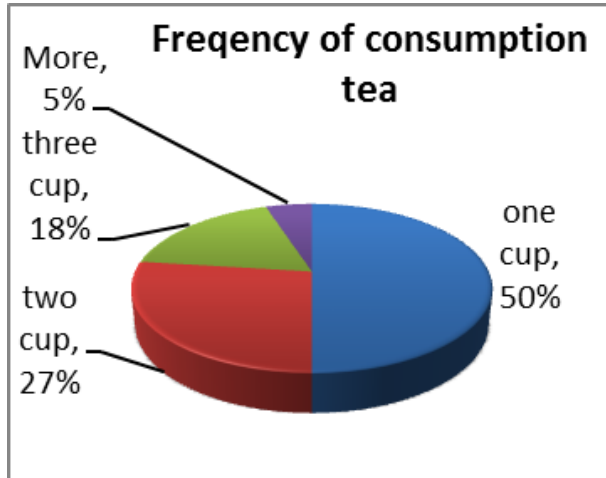


Figure 5. Frequency of consumption green tea

Season of use green tea Out of total interviewee 80/40% response that used green tea was in winter season followed by 50/25% in autumn season, 40/20% respondent consumed green tea in spring while 20/10% of interweaver consumed green tea in any time of year Show in Figure 6.

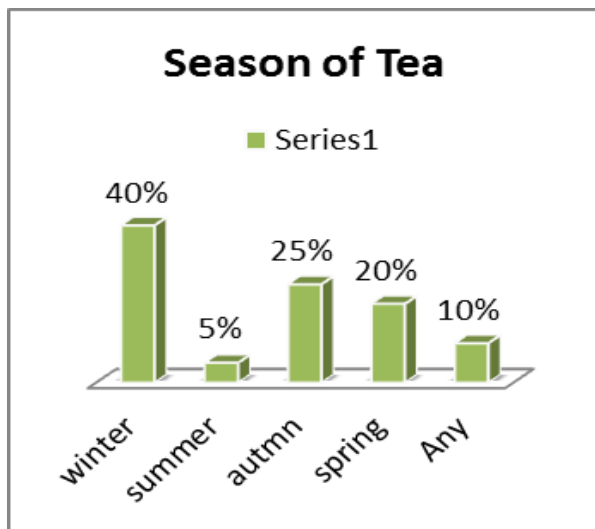


Figure 6. Season of green tea use

Knowledge about green tea.

The respondent was inquiry about the knowledge of the green tea. the present data indicate that 100/50% of respondent believed that use of green has beneficial for human health followed by 60/30% participant use green tea work anticancer agent and 30/15% consider has no side effects although only 10/5% consider use of green tae has side effects. The data has been represented bellow in Figure 7.

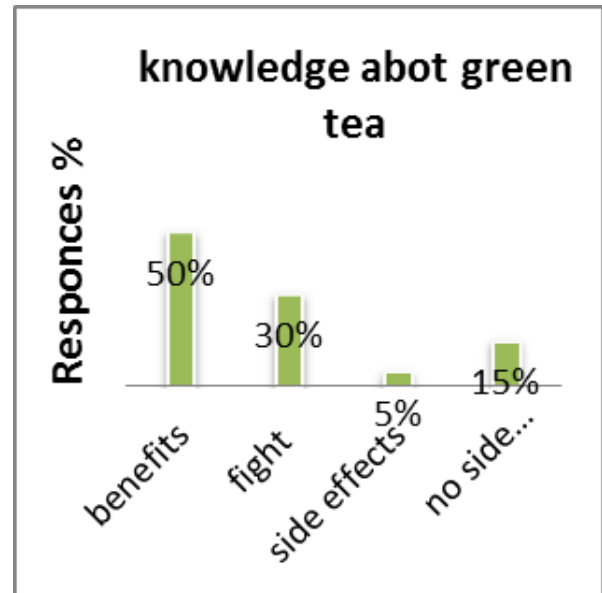


Figure 7. Knowledge, green tea Knowledge Source of green tea

The knowledge source about green tea was also asked from the people and it was Revealed that 80/40 % participant of the local population hear from other different sources, and 70/35% from print media while the 50/25% from electronic media (Figure 8).

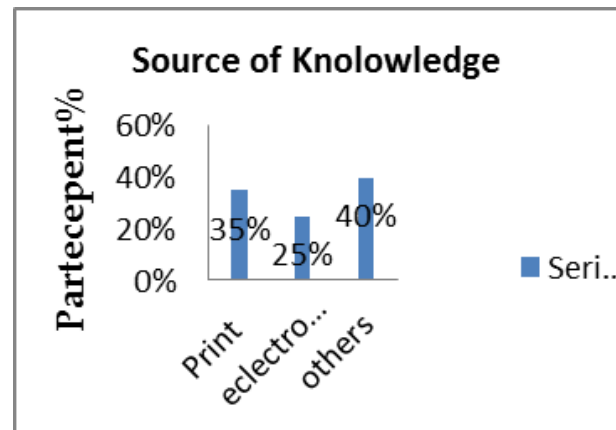


Figure 8. Source of knowledge of green tea

4. DISCUSSION

The current results of our present study clearly signposted that the green tea consumption is very low as associate to milk tea in population. The common participant likes milk or mix tea. They only utilized green tea for cure and prevention of numerous sicknesses which includes body weight reduction, anticancer activity is also reported.

Beside these numerous investigations revealed that the green tea has malignant growth protective activity. The cancer proportion in the inhabitants in japan is very low as compared to other nation due to regularly drinking of green tea.

The organic substances EGCG which is present in green tea plays a significant important character in the control of malignancy r. EGCG with catechins likewise repress the declaration of tumor necrosis alpha factor outcomes destroy tumor development (Qin, *et al.*)^[7].

Previous studies prescribe that the oral utilization of green tea polyphenols repress harmful radiation initiated skin cancer-causing agents in various experimental animals (Kada, *et al.*)^[5]. An exploratory research was completed in japan university (Kyushu) revealed that Epigallocatechin gallate (EGCG) green tea worked against malignancy like prostate and lung disease (Dulloo *et al.*)^[8]. Normal utilization of green tea ensures and lower 36% hazard against heart disorder (Chacko, *et al.*)^[6]. It is observable from previous literature that the green tea has potential against numerous diseases.

Recommendation Further advance research, required to search the anticancer competency of green tea.

5. CONCLUSION

It is established that participant of Union Council Badwan has sufficient knowledge about green tea.

6. ACKNOWLEDGEMENT

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7. CONFLICT OF INTEREST

All authors have declared that there is no conflict of interests regarding the publication of this article.

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