Cancer Awareness and Media Habit of College Students of Rural Tripura, in North East India

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Abstract:
Cancer is a disease characterized by several prominent symptoms. Early recognition of these symptoms enables early diagnosis, which increases chances of recovery. Knowledge about its symptoms, hence is an important part of cancer related health communication. One needs to know about the media habit of a particular population for a more successful cancer communication. Hence it is important to know the media habits of the people. Students of general degree colleges are in a way, the largest body of the most highly educated people available in the rural society who often takes the lead in spreading new awareness in the rural societies. This study examines the media of choice for this group of people under study. The result is Internet and social media like Whatsappand Facebook are the most important source of information to these people, though they use television and newspaper to a lower extent.

Keywords: Media habit, Cancer Communication, College students, Internet, social media

Introduction:

Cancer, a serious non-communicable disease with features of devastating characters, is often diagnosed at a late stage. Early diagnosis is the main factor for achieving better results in treatment. Due to factors like lifestyle changes and longer survival have brought forth a rise in the incidence of non-communicable diseases including cancer. The problem is more in developing countries. (Singh M, 2018)(Ferlay J, 2015)As per ICMR Report of Population Based and Hospital Cancer Registries; 2012-14 at Bengaluru, India, 1.45 million newly diagnosed cancer patients were predicted to be present by 2016 and this figure was told to be double the next 20 years after that.

There is regional variation in different cancer incidences and some cancers are of higher incidence in NorthEast India. It is observed that as high as 75 to 80 per cent of the cancer patients present with advanced stage of disease. Among the important causes one is poor awareness about the disease and the condition is further bad in rural areas. It is even seen that there is a difference between urban and rural area cancers from various aspects like incidence, pattern, etc. Disparity in language and culture suggest adopting a separate policy in rural areas of cancer communication and cancer detection (Sullivan R, 2014) (Mallath MK, 2014). Health Communication is the communication or transmission of information to the target population with the intention to improve or influence health practices for uplifting Health condition in that particular population. Interventions with a definite aim for health promotion found to effective for cancer detection. (Stacey, 2017)(Dougherty, 2018). The success of any communication, including Health Communication is dependent largely on the choice of the media suitable for that particular target community. So, for a successful Health Communication, media habit of that particular population must be known clearly. In the present age, people are using various media to keep them appraised on everything, including health communication. Mass media is also very effective in forming the health policies and awareness (Stead M, 2019, Apr).

On the other hand, we see that most of the cancer cases detected in our country are in advanced condition - with stage III or stage IV. Also, there is a gradual increase in the incidence of cancer patients together with the increase in the use of tobacco and alcohol consumption which are known risk factors for cancer. Health Communication targeted to increase cancer awareness, therefore, did not show much effective result yet.

Students, particularly those who are studying in Colleges, are a very important part of the rural society. They shoulder most of the difficult and tough problems of the society and they are Also harbinger of new knowledge. It is also observed that there is increased energy and determination found in the post teen offers college students. Hence, a Health Communication passed on to them will tremendously influence the society where they stay. As already stated, for a successful campaign of Health Communication, understanding the media habit of the target population is vital. But very few studies addressed this issue in particular.

In the present study, Knowledge about cancer symptoms and media habit of the college students of a General Degree College, situated in a rural area was assessed so that remedial cancer communication for health promotion can be provided to them effectively.

Methodology:

The study envisaged an online survey using Google Form among the college students of a General Degree College, situated in a rural area, namely Teliamura. Out of 1174 total students of the college 108 students were selected based on the feasibility of getting answers from the samples. Thus, it was essentially a non-randomized study as only willing students were included in the study.

Questions were framed to assess the level of knowledge of the students regarding symptoms of cancers. A set of widely accepted seven numbers of symptoms of cancer was presented and students were asked to reply whether they recognize this symptom as a cancer symptom(Cleveland Clinic).

The opinion of the students about a dedicated toll free "cancer helpline" was asked in Likert's scale to know their opinion regarding the utility and usefulness of a helpline.

To understand the socio-economic condition of the students, two closed ended questions were framed. One is the monthly income range of the family and another is the profession of the Head of the family.

Results and Analysis:

Regarding the symptoms that may denote cancer: (1) any abnormal bleeding; and (2) non healing ulcer could denote cancer was identified by 29.6% and 27.7% students respectively. Only 25.9% said that a lump with continuous enlargement may be a sign of cancer. Difficulty in swallowing food was flagged by 24.0%, chronic cough and hoarseness was flagged by 21.2%, altered habit of urination & motion by 12.9%, and sudden increase in size of birth mole was identified by 12.0%of the students. Further, in depth analysis shows that the knowledge of the students on cancer symptoms is poor. Less than one third students could mark even a symptom as a cancer symptom. The range of answers was from 12 to 29.6%.

Table 1Identificationof Symptoms of Cancer by the sample students

Sl	Symptoms of Cancer	Students who could identify (%)
1	Any abnormal bleeding	29.6
2	Non healing ulcer	27.7
3	Lump with continuous enlargement	25.9
4	Difficulty in swallowing food	24.0

5	Chronic cough and hoarseness	21.2
	Altered habit of urination & motion	12.9
7	Sudden increase in size of birth mole etc.	12.0

Identification of Symptoms of Cancer by the sample students

Symptom	Value
Any abnormal bleeding	29.6
Non healing ulcer	27.7
Lump with continuous enlargement	25.9
Difficulty in swallowing food	24
Chronic cough and hoarseness	21.2
Altered habit of urination & motion	12.9
Sudden increase in size of birth mole etc.	12
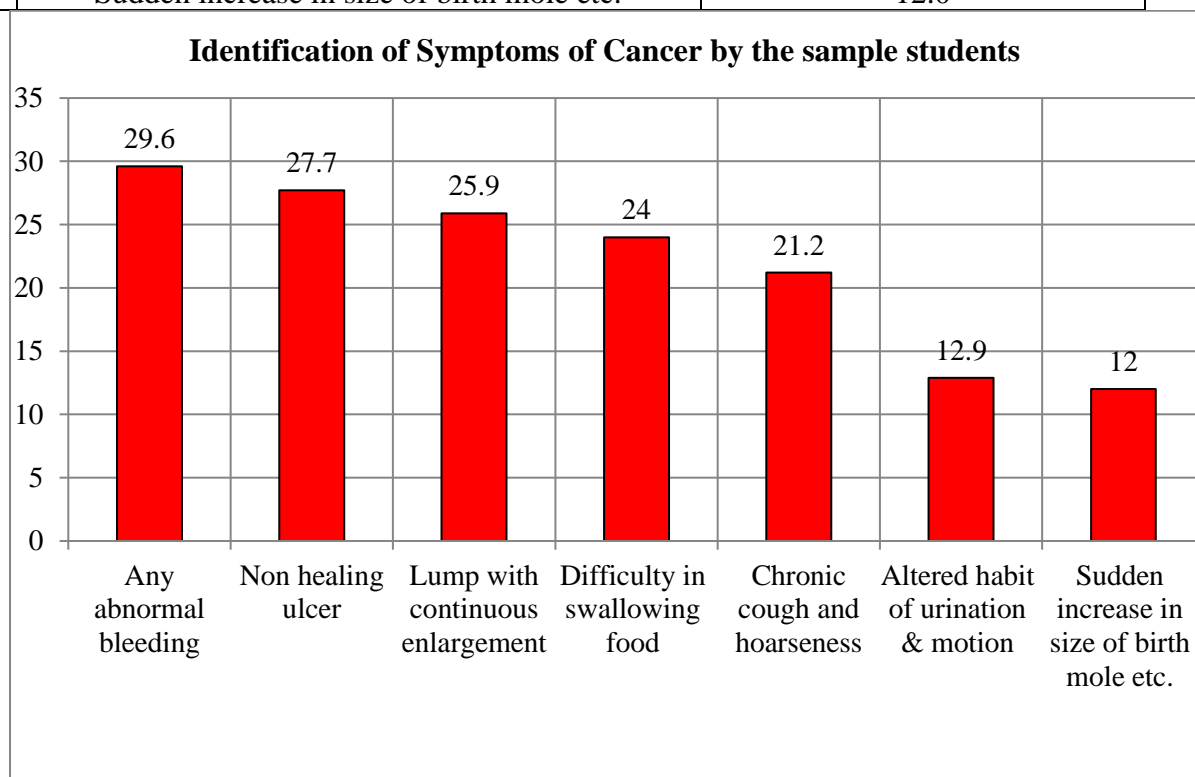
Maximum number of sample students (89.8%) said yes about the opening of a toll free cancer help line. This result is encouraging as most of the students are in favor of a toll free helpline about cancer. That means they feel that there should be a fallback mechanism if they require to take help at some point of time in future.

Table 2 Opinion about toll free cancer helpline

Opinion about toll free cancer helpline	Students saying yes (%)
Very much necessary and very good step	31.4
Very good step	33.3
May be it will be good	25
No benefit	8.3

Hence, the result of this study shows that a help line to tell about cancer disease is necessary. This may improve detection of cancer by providing positive and customized health information to the caller.

The data regarding the profession' of the 'Head of the family' of the samples show that the majority of the students are from small businessman, employees, ordinary labor or cultivator (79.6%). Only 9.2% are in a medium, earning profession and 3.7% are in the higher income profession.As such, profession is also associated with the educational level of earlier generations and often earnings as well. In this study around 79.6% students are from lower income families.

Table 3 Profession description

Sl.	Profession of Head of Family	(%)
1	Small businessman/ lowly paid employee/ ordinary labor/cultivator	79.6

| 2 | Medium income, profession | 9.2 |
| 3 | Higher income, profession | 3.7 |

Data on stated Income of the family shows that for 86.1% samples, family income is stated to be 10-15 thousands per month, 9.2% told that it is 15-25 thousands, and only 4.6% families are above that. The stated income and professional background of the head of the family is corroborating each other.

Table 4 Family income groups

Sl.	Family income groups	Results in percent
a)	Rupees 10-15,000 per month	86.1
b)	Rupees 15-25,000 per month	9.2
c)	Above Rupees 25,000 per month	4.6

A lower awareness level about cancer symptoms and the chance of getting cancer are seen associated with low income and education level (Hvidberg L, 2014).

Data of the study shows that the internet is used by maximum (37.2%) followed by social media 33.3%, Television 17.3%, Newspaper 10.2%. This is clearly directing the media choice of the students under study. As expected, the young generation population is more attracted to the Internet and Social Media, though they have not stopped using old media like Television and Newspaper. Therefore, social media campaign on cancer communication may be beneficial. Even behavioral changes, health inequalities related to cancer may be brought forth using social media (Plackett R, 2020).

Table 5 Media Preferences

| Sl.	Name of the Media	Media Preferences (%)
1	Television	25
2	Newspaper	14.8
3	Social Media (WhatsApp, Facebook, etc.)	48.1
4	Internet	53.7
5	Radio	0
6	Others	0
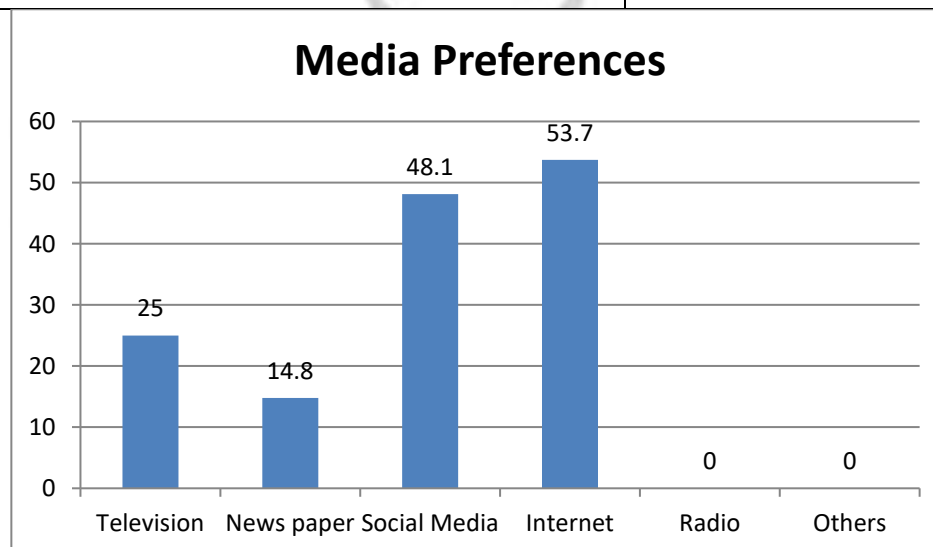
Collected data shows that most of the students view Entertainment channels (55.5%), and next comes News Channels 38.8%, Sports Channels 18.5%, Infotainment Channels like National Geographic Channels 13.8%. But Divine and Academic Channels are viewed very less: 1.8% and 0.9% respectively.

Table 6 Channels viewed on Net

Sl.	Name of the Channels	Viewed by %
1	Entertainment channels	55.5
2	News Channels	38.8
3	Sports Channels	18.5
4	Infotain Channels (like National Geographic Channels etc.)	13.8
5	Divine Channels	1.8
6	Academic Channels	0.9

The choice of the channels viewed on the Internet was found to be interesting. Most of the people like media for their capacity to entertain people. Anyway, News channels were also popular but the sports channels seem to have lost the status.

Figure 5-Channels viewing preference through the Internet
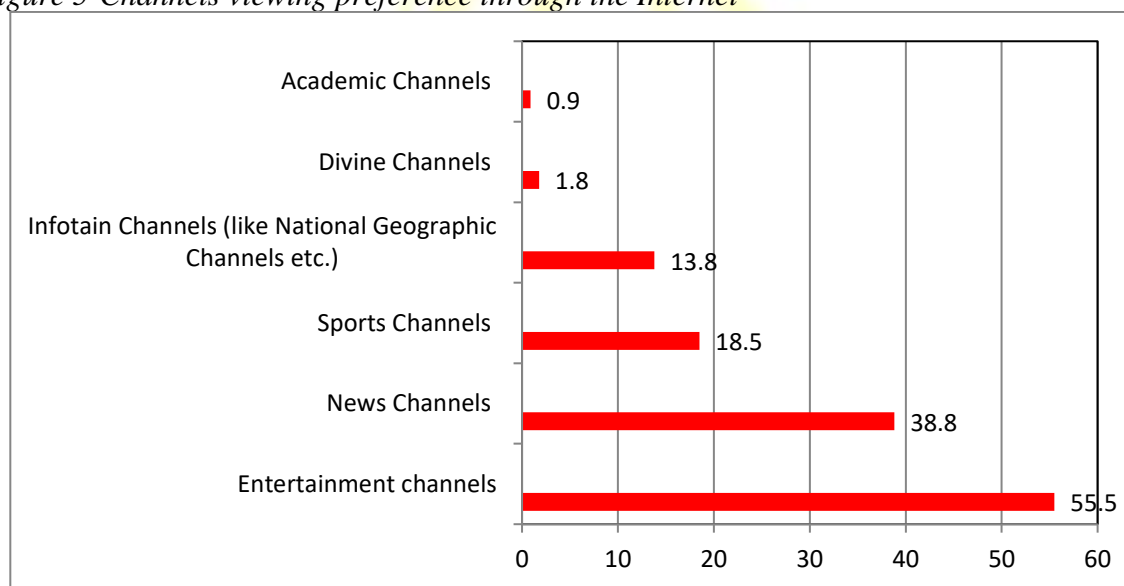
A total of 77.7% samples use the Internet on a daily basis, while12.9% and 5.5%, respectively use 1-3 days per week and 4-6 days per week.

Table 7Internet Viewed: Days per Week

Sl. No.	Internet Viewed: Days per Week	Viewed by %
a)	Everyday	77.7
b)	1-3 days per week	12.9
c)	4-6 days per week	5.5

Duration of viewing on the Internet at a stretch survey was conducted. It was found that 57.4% student view Internet for less than an hour and 28.7% students view for 2 to3 hours at a stretch. Data showed that 10.8% students of the sample view Internet for 4-5 hours continuously.

Table 8 Duration of Internet usage

Sl.	Duration of Internet viewing	(%)
1	Less than one hour	57.4
2	2-3 hours	28.7
3	4-5 hours	10.8

Regarding Social Media, the study showed that WhatsApp is used by a number of samples (69.4%) and next is Facebook use, which is 51.8%, Instagram 12.9% and other media only by 6.4%.

Table 9 Use of Social Media

Sl. No	Name of the Social Media	Percentage of users
a)	Whatsapp	69.4
b)	Facebook	51.8
c)	Instagram	12.9
d)	Others	6.4

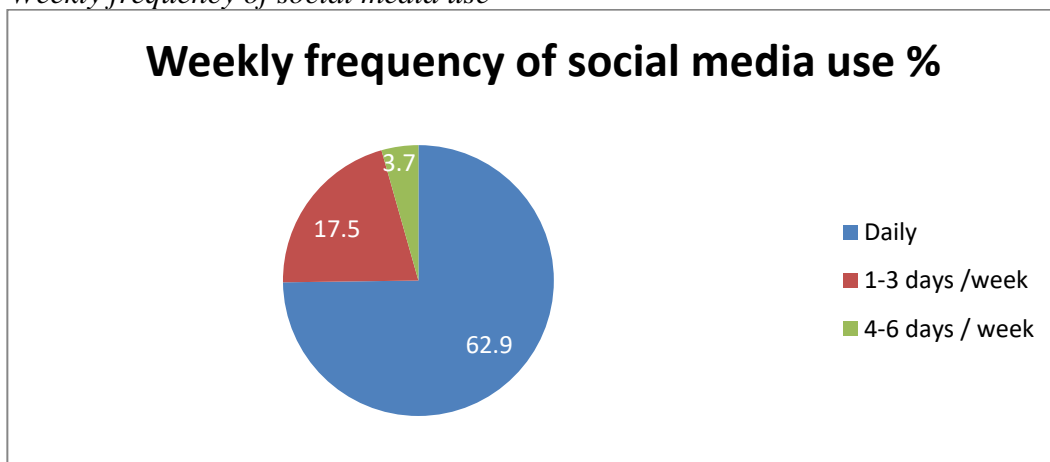*Figure 6 Use of social media*
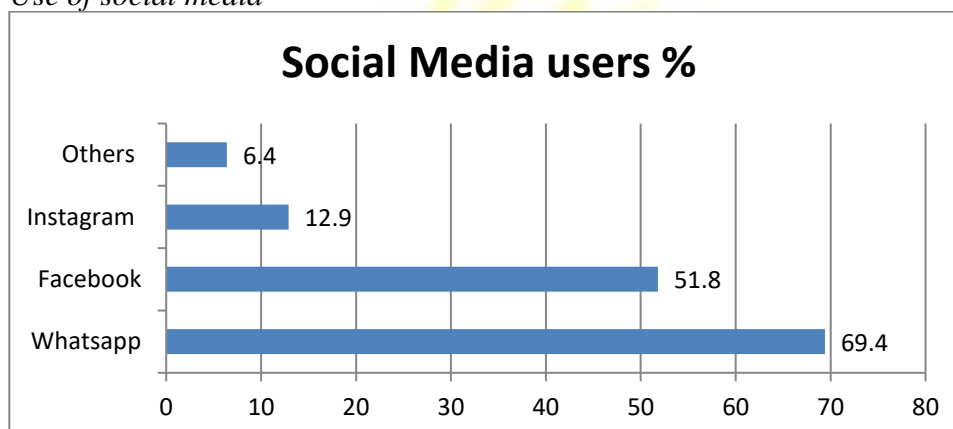
Most of the students use Social Media on a daily basis (62.9%), 1-3 days per week by 17.5%, 4-6 days by 3.7% of the sample students.

Table 10 Weekly frequency of social media use

Sl.	Weekly frequency of social media use	Results in percent
1	Daily	62.9
2	1-3 days per week	17.5
3	4-6 days per week	3.7

*Figure 7 Weekly frequency of social media use*

It was found that 52.7% student use Internet for less than an hour and 26.8% students view for 2 to3 hours at a stretch. Data showed that 8.3% students of the sample use the Internet for 4-5 hours continuously.

Table 11 Duration of Social media usage

| Sl.	Duration of Social media usage	%
1	Less than one hour	52.7
2	2-3 hours	26.8
3	4-5 hours	8.3

Figure 8 Duration of Social media usage
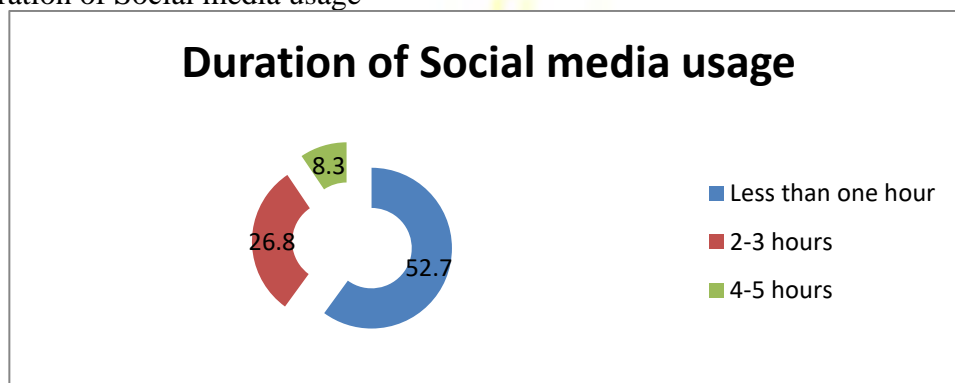
News Channel/ Programs are viewed by 29.6%, followed by Entertainment Channel/ Programs 23.1%, Sports Channels /Program & Infotainments like National Geographic Channels are viewed by 17.5% and Devotional Program/ Channel are viewed by 5.5%.

Table 12 Type of Television program viewed

Sl.	Type of Television program	%
a)	News Channel/ Programs	29.6
b)	Entertainment Programs	23.1
c)	Sports	17.5
d)	Infotains (National Geographic etc)	17.5
e)	Devotional	5.5

*Figure 9 Type of Television program viewed*
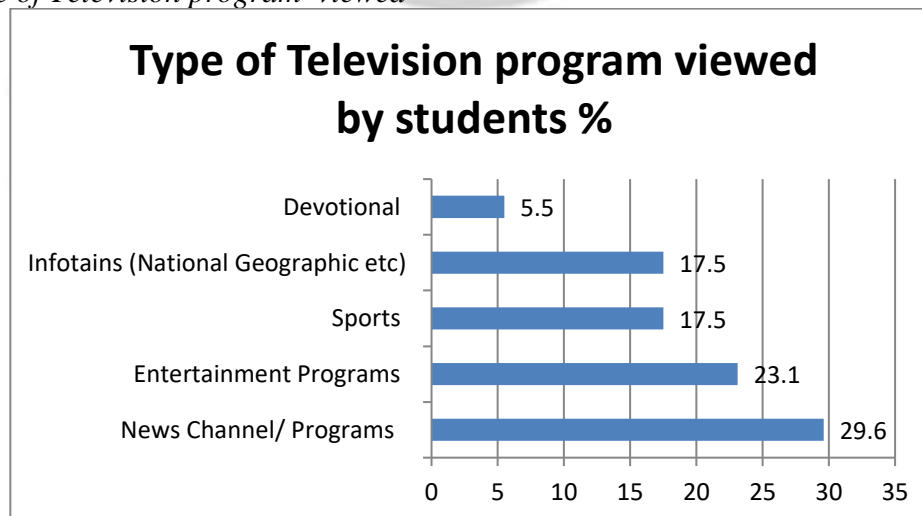
A total of 30.5% watches television on a daily basis, viewing 1-3 days per week is the habit of 28.7% and 4-6 days per week viewing is done by 5.5%

Table 13 Frequency of Television viewing

Sl. No.	Frequency of Television viewing per week	Results in %
a)	Viewing daily	30.5
b)	1-3 days per week	28.7
c)	4-6 days per week	5.5

Figure 10 Frequency of Television viewing

Frequency of Television viewing per week results in %

- Viewing daily
- 1-3 days per week
- 4-6 days per week
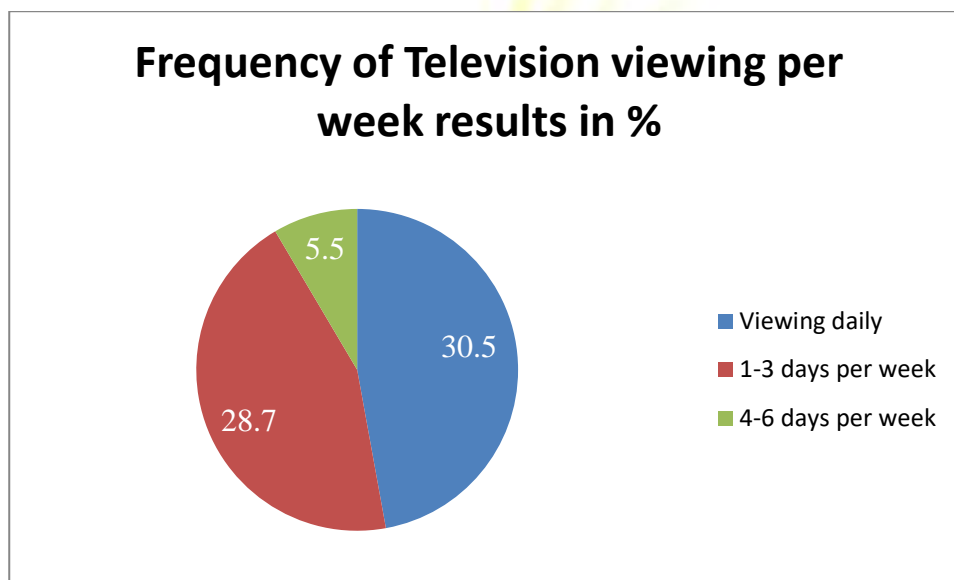
Only 40.7% students view Television for less than 1 hour at a stretch, 2-3 hours viewed by 18.5% and 4-5 hours are viewed by only 6.4% students.

Table 14 Time of viewing at a stretch

Sl. No.	Time of viewing at a stretch	Results in percent
a)	Less than 1 hour	40.7
b)	2-3 hours	18.5
c)	4-5 hours	6.4

Figure 11 Time of viewing at a stretch

Time of viewing at a stretch

- Less than 1 hour
- 2-3 hours
- 4-5 hours
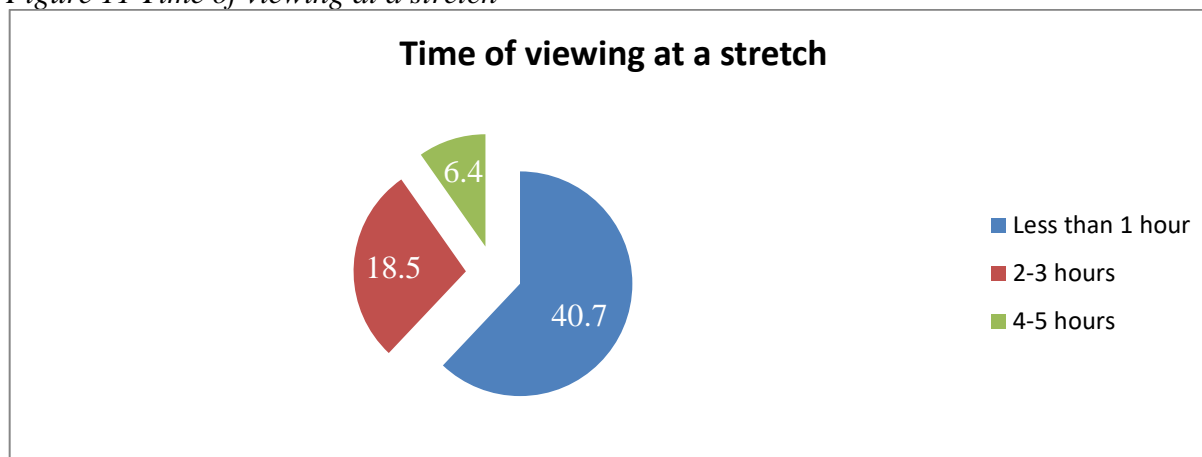
Regarding Newspaper, it was found that 37% students read common or regular newspapers, 27.7% read academic journal, sports, newspaper is read by 7.4% and 6.4% read entertainment.

Table 15 Type of Newspaper read

Sl. No	Type of Newspaper	%
a)	Common or regular newspapers	37
b)	Academic or scientific journals	27.7
c)	Sports Newspaper	7.4
d)	Entertainment/Cinema etc Newspapers	6.4

Figure 12 Type of Newspaper read

Type of Newspapers read
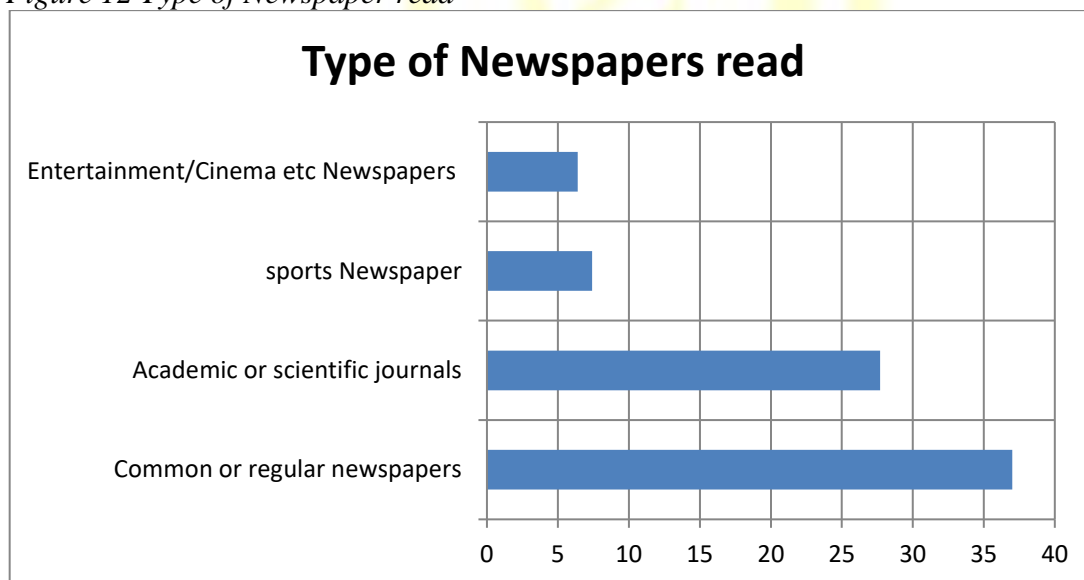
A total of 29.6% is a daily reader of Newspapers, 31.4% read newspapers 1-3 days a week, and only 2.7% read 4-6 days a week.
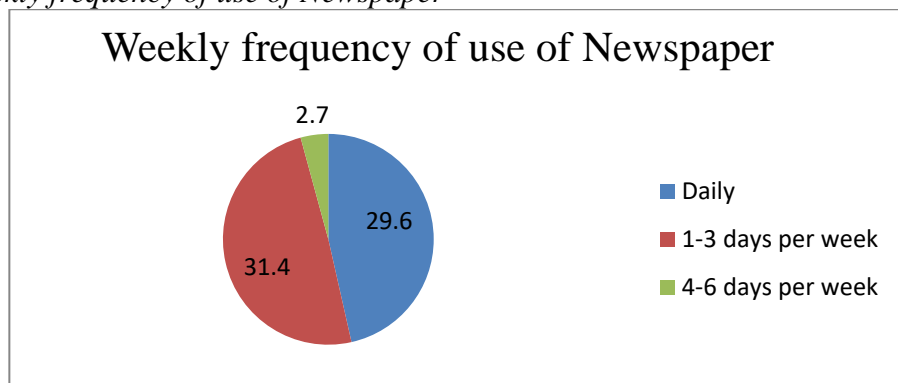
Table 16 Weekly frequency of use of News

Sl.	Weekly frequency of use of Newspaper	%
1	Daily	29.6
2	1-3 days per week	31.4

3	4-6 days per week	2.7

Figure 13 Weekly frequency of use of Newspaper

Weekly frequency of use of Newspaper

Duration of Newspaper reading at a stretch was evaluated and found that 54.6% read for less than 1 hour, 8.3% students read for 2-3 hours and only 1.8% students read for 4-5 hours.

Table 17 Duration of Newspaper reading

Sl. No	Duration of Newspaper reading continuously	Result in percent
a)	less than 1 hour	54.6
b)	2-3 hours	8.3
c)	4-5 hours	1.8

Conclusion

Prior knowledge of cancer symptoms is one of the most factors for suspecting cancer. A person with a basic knowledge of cancer symptoms can often identify the disease at an early stage when treatment results are expected to be better. This study showed that knowledge about cancer symptoms even among the general degree college students of rural Tripura is low. The degree students of rural Tripura use various media, though the Internet is the most preferred media for them. Social media, particularly WhatsApp and Facebook are very popular among them. They also view Television and Newspaper, to a lesser extent. Not a single sample listens to radio. In order to raise the level of their knowledge of cancer, Social media should be emphasized followed by Television and Newspaper. Another finding which could be derived from the study is that a toll free helpline for cancer may be a useful tool for the community to alley any doubt and identifying any potential patient in collaborating with Social Media campaign.

Bibliography

1. (2020, August 11). Retrieved June 15, 2021, from Expess Healthcare: https://www.expresshealthcare.in/news/mumbai-pune-get-toll-free-helpline-for-cancer-patients-and-their-families/424055

2. Cleveland Clinic, C. (n.d.). *Symptoms & Warning Signs of Cancer*. Retrieved June 15, 2021, from Cleveland Clinic Cancer: https://my.clevelandclinic.org/departments/cancer/patient-education/wellness-prevention/warning-signs

3. Dougherty, M. B.-S. (2018). Evaluation of interventions intended to increase colorectal cancer screening rates in the United States: a systematic review and meta-analysis. *JAMA Intern Med. 2018; 178: 1645–1658., 178* , 1645–1658.

4. Ferlay J, S. I. (2015). Cancer incidence and mortality worldwide: Sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer, 136:E*, 359–86.

5. Hvidberg L, P. A. (2014). Cancer awareness and socio-economic position: results from a population-based study in Denmark. *BMC Cancer, 14:581*.

6. Mallath MK, T. D. (2014). The growing burden of cancer in India: Epidemiology and social context. *Lancet Oncol., 15*, e205–12.

7. Plackett R, K. A. (2020). Use of Social Media to Promote Cancer Screening and Early Diagnosis: Scoping Review. *J Med Internet Res.* (22(11)), e21582.

8. Singh M, P. C. (2018). Cancer research in India: Challenges & opportunities. *Indian J Med Res. 2018 Oct; 148(4): ., 148(4)*, 362–365.

9. Stacey, D. L. (2017). Decision aids for people facing health treatment or screening decisions. *Cochrane Database Syst Rev., 4*.

10. Stead M, A. K. (2019, Apr). *Mass media to communicate public health messages in six health topic areas: a systematic review and other reviews of the evidence.* Southampton (UK): NIHR Journals Library.

11. Sullivan R, B. R. (2014). Cancer research in India: National priorities, global results. *Lancet Oncol., 15*, e213–22.