ECONOMICS OF HEALTH CARE SERVICE SECTOR RELATED PUBLIC SERVICE OUTDOOR MEDIA ADVERTISING IN TRIPURA, INDIA

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ABSTRACT

Management of the economics of public service advertising of health care service sector shall be followed very efficiently and effectively by any nation proactive to human beings or society in general. In this context the main objective of this study is to understand the effectiveness of the economics of selected health care service sector related public service outdoors advertising, specifically pertaining to the internal and external elements that make them effective and successful for both publics or consumers and the government in Tripura. Secondly, to find out the overall reach of the recent government sponsored health care service sector related public service advertising among public in Tripura. Finally, to find out the right media for telecasting the health care service sector related public service advertising to make it more effective. This study is mainly based on the primary and secondary data. Primary data collected through pre-tested questionnaire and secondary data collected from the various sources like Published report, Web Articles, Journals and research report etc. Chi square (χ^2) tests, Phi & Cramer's V Value and Pearson Correlations were applied through SPSS. However, from the whole analysis of the study it can be strongly conclude that the public service advertising related to advertising on health care service sector through Outdoor Media is effective and it is observed that all the study have provided some positive outcome and further expansion of field study frequently basis may give more effective and efficient social wellbeing's.

Keywords: Economics, Public Service Ad, Health Care Industry, Outdoor Media

INTRODUCTION

Health Economics covers the branch of economics concerned with problems associated to effectiveness, efficacy, value and behavior in the creation and use of healthcare service sector. Broadly, health economists study the operation of overall healthcare systems and health-moving manners such as smoking, Immunization etc. Health economists need to appraise various categories of financial information like costs and expenditures. Health economics also deals with the promotion of health through the study of health care service providers, hospitals and clinics Ads and public health promotion activities.

In India, Public service advertising related to health care service sector regularly carried out by the Central and State Government. Some important health care service sector related public awareness campaign are Dengue, Women health, Smoking, Swine Flu, HIV / AIDS, don't drink and drive, Anti-Alcohol, Cancer, Polio, Typhoid, Thalassemia, Drinking and smoking, Family Planning, Malaria, Iodine salt, Immunization for kids in government Hospital etc.

To promote these philanthropic causes central and state government spends lot of money every year, but it needs to be measure that these public service advertisements related to health care service sector produces what nature of effective and efficient result.

Objectives of the study: The research works is an attempt to investigate the following objectives:

I. To understand the effectiveness of the economics of selected health care service sector related public service outdoors advertising, specifically pertaining to the internal and external elements that make them effective and successful for both publics or consumers and the government in Tripura.

II. To find out the overall reach of the recent government sponsored health care service sector related public service advertising among public in Tripura.

III. To find out the right media for telecasting the health care service sector related public service advertising to make it more effective.

Formulation of hypotheses:

Based on the objectives of thesis, the following main hypotheses were formulated to know the association between overall health care service sector related public service advertising observation experiences and general socio-economic characteristics of respondents in the study area.

A. There is a relationship between general socio-economic characteristics of respondents and overall health care service sector related public service advertising observation experiences in the study area (are associated).

B. There is a relationship between general socio-economic characteristics of respondents and overall health care service sector related public service advertising given in outdoor media observation experiences in the study area.

Research Questions: The research questions for the research works are as follows:

a) What is the effectiveness of the economics of selected health care service sector related public service outdoors advertising, specifically pertaining to the internal and external elements that make them effective and successful for both publics or consumers and the government in Tripura?

b) What is the overall reach of the recent government sponsored health care service sector related public service advertising among public in Tripura?

c) What is the right media for telecasting the health care service sector related public service advertising to make it more effective?

LITERATURE REVIEW

In order to build up an appropriate perception of the research problem recognition and to expand a theoretical structure to carry out the assessment of existing literature for the economics of public service advertising of health care service sector from the secondary sources, the following literature have been reviewed.

The article of Martin (2016) 'Word-of-mouth in the Health Care Sector: A Literature Analysis of the Current State of Research and Future Perspectives' revealed that Word-of-mouth (WOM) might spread in networks and influence large groups of people, stakeholder theory further proposes considering Word-of-mouth (WOM) as a possible way to distribute specific health care recommendations.

The study by Islam & Sheikh (2016) & McAlister *et al.*,

(2004) on college students revealed that in Korea students pay much more attention on clarity of the emotional advertisements and found more effective in changing people mind quitting smoking and recommended that Government should play vital role to select emotional ads and broadcast frequently to reduce number of smoker and improve health condition of its citizen.

Hinde *et al.*, (2015) concluded that Subject to the accessible proof, the analysis on Modeling the cost-effectiveness of public awareness campaigns for the early detection of non-small-cell lung cancer advocates that early consciousness movements in lung cancer have the possibility to be cost-effective. In addition to that the projected ordinary history model presents before was unavailable to forecast of the occurrence and speed of disease development in the undiagnosed populace (Hutubessy, Chisholm & Edejer, 2003).

The study by Thomas (2015) proved that there are common internal and external elements on billboards which brands strategically implement for them to receive a large return on their investment.

Clayforth *et al.*, (2014) accomplished a study on cost-effectiveness analysis of online, radio and print tobacco control advertisements targeting 25-39-year-old males and found out that online advertising may be a highly cost-effective channel for low-budget tobacco control media campaigns. This finding is contrary to the current assumption that the use of a consistent message across multiple media simultaneously is the most cost-effective way of reaching and affecting target audiences.

The study by Hsu *et al.*, (2012) on 'Comparative Costs and Cost-effectiveness of Behavioral Interventions as Part of HIV Prevention Strategies' suggested that while individual involvements are an attractive use of resources to raise awareness, this may not translate into a cost-effective impact on behavior change. The study found that the extensive reach of public outreach events did not seem to influence behavior change as cost-effectively when compared with magazines or radio broadcasts. Behavioral interventions are context-specific, and their effectiveness influenced by a multitude of factors. Further analyses using a quasi-experimental design would be useful to programme implementers and policy makers as they face decisions regarding which HIV prevention activities to prioritize.

Unlike television and print ads, in outdoor advertising

billboards advertising cannot be turned off or leave out. Iveson (2011) mentioned that how billboards have become the only mass medium capable of reaching consumers as they go about their everyday lives.

RESEARCH METHODOLOGY

This study is mainly based on the primary and secondary data. Primary data collected through pre-tested questionnaire with sample size 240 covering all districts in Tripura and secondary data collected from the various sources like Published report, Web Articles, Journals and research report etc. Comparative study for this research has been done through the assessment of existing research report, articles related to the literature for the economics of public service advertising of health care service sector. Chi square (χ^2) tests, Phi & Cramer's V Value and Pearson Correlations were applied through SPSS.

RESULTS

General socio-economic characteristics of respondents in the Study area

Background

This part mainly deals with the socio-economic profile of the 240 sample respondents from all districts in Tripura, India. It is based on the analysis of field level study data collected in the year 2017 and 2018. As stated earlier, all districts in Tripura, India namely West Tripura district, Sipahijala district, Dhalai district, North Tripura district, Gomati district, Khowai district, Unakoti district, and South Tripura district were selected for the study. As the study is focused on the effectiveness of the economics of the selected public service advertising of health care service sector in Tripura, India covering the area or subject matter like the effectiveness of the economics of selected health care service sector related public service outdoors advertising, overall reach of the recent government sponsored health care service sector related public service advertising among public in Tripura and right media for telecasting the health care service sector related public service advertising to make it more effective, hence in this regard collection of the socio-economic profile sample respondents are essential. Further, sixteen demographic variables and socio-economic characteristics of respondents considered for the study are gender of the respondents, age of the respondents, education, category or caste,

nature of family, occupational status, marital status, resident location, Public service advertising observation experiences related to advertising on health care service sector, Health care service sector related public service advertising given in outdoor media observation experiences, family monthly income, annual expenditure, land ownership in area and types of property holding has been discussed here.

Gender of the Respondents:

The table 1 specifies that, most of the respondents were male married (37.1%) and unmarried (33.3%). The percentage of the female married and female unmarried was 15.4 percent and 12.9 percent respectively. The percentage of the Transgender and Widow was 0.4 percent each.

Table 1: Gender of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female - Married	37	15.4	15.4	15.4
	Female - Unmarried	31	12.9	12.9	28.3
	Male	1	0.4	0.4	28.8
	Male - Married	89	37.1	37.1	65.8
	Male - Unmarried	80	33.3	33.3	99.2
	Transgender	1	0.4	0.4	99.6
	Widow	1	0.4	0.4	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Age of the Respondents:

The table 2 specifies that, most of the respondents covered in the research work were young respondents between 18 to 30 years age group (44.6 %), followed by middle aged between 31 to 50 years age group were 35.4 percent. The percentage of Old (Above 51 years) respondents engaged in survey was reasonably very less (20.0 %).

Table 2: Age of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Middle (31 to 50 years)	85	35.4	35.4	35.4
	Old (Above 51 years)	48	20.0	20.0	55.4
	Young (18 to 30 years)	107	44.6	44.6	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Education or Literacy Status of the Respondents:

From the table 3, it reveals that nearly 34.6% of the

respondents had received educated up to graduation level. 32.5 percent of the respondents had received Post graduation level education. 17.5 percent of the respondents had received Undergraduate level education. 9.6 percent of the respondents had received High school (11 to 12) level education. 2.9 percent of the respondents had received Secondary/ Middle school (6 to 10) level education. 2.1 percent of the respondents had received Doctorate level education. 0.8 percent of the respondents had received Primary school (Up to 5) level education. In total, practically 69.2 percent of the respondents had received graduation and above level of education out of the total 240 respondents.

Table 3: Education or Literacy Status of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doctorate	5	2.1	2.1	2.1
	Graduate	83	34.6	34.6	36.7
	High school (11 to 12)	23	9.6	9.6	46.3
	MA. political science	1	0.4	0.4	46.7
	Postgraduate	77	32.1	32.1	78.8
	Primary school (Up to 5)	2	0.8	0.8	79.6
	Secondary/ Middle school (6 to 10)	7	2.9	2.9	82.5
	Undergraduate	42	17.5	17.5	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Category /Caste of the Respondents:

From table 4, it was observed that all caste presence in sample size were competitive in nature like General caste percent were 37.9 followed by Other backward caste 25.0%, the scheduled caste 22.1% and scheduled tribe presence were 15.0 percent.

Table 4: Category /Caste of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	General caste	91	37.9	37.9	37.9
	Other Backward Caste	60	25.0	25.0	62.9
	Schedule Caste	53	22.1	22.1	85.0
	Scheduled Tribe	36	15.0	15.0	
	Total	240	100.0	100.0	

Source: Field Survey

Family Size / Structure of the Respondents:

From the survey, it was found that 47.9 percent of the respondents belonged Nuclear (Up to 4 family members) family structure. The percentage of respondents living in Joint family (Above 4 members)

were 33.8 percent, Married couple (02 Person) family size were 9.6 percent and Single (01 Person) family size were 8.8 percent.

Table 5: Family Size / Structure of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Joint (Above 4)	81	33.8	33.8	33.8
	Married couple (02 Person)	23	9.6	9.6	43.3
	Nuclear (Up to 4)	115	47.9	47.9	91.3
	Single (01 Person)	21	8.8	8.8	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Occupational status or Type of Job of the Respondents:

Out of the total 240 sample size, it was found that 22.5 percent respondents were salaried from State Government, 20.8 percent respondents were students of different colleges and universities in Tripura, 19.3 percent respondents were self-employed covering profession like private tutor, farmer, business men etc., 18.3 percent respondents were salaried persons with private companies, 7.5 percent respondents were retired persons from different organizations, 5.1 percent respondents were educated housewife, 4.5 percent respondents were salaried with different Central Government organizations, 1.2 percent respondents were educated unemployed. The same can be noticed from the table 6.

Table 6: Occupational status or Type of Job of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business	1	0.4	0.4	0.4
	Farmer	2	0.8	0.8	1.3
	Home maker	2	0.8	0.8	2.1
	Home maker	3	1.3	1.3	3.3
	House Wife	4	1.7	1.7	5.0
	House Wife	3	1.3	1.3	6.3
	NHM	1	0.4	0.4	6.7
	NHM Contractual	1	0.4	0.4	7.1
	Pensioner	1	0.4	0.4	7.5
	Private tutor	1	0.4	0.4	7.9
	Public	1	0.4	0.4	8.3
	Retired Person	17	7.1	7.1	15.4

	Salaried - Central Government	8	3.3	3.3	18.8
	Salaried - Private	44	18.3	18.3	37.1
	Salaried - State Government	54	22.5	22.5	59.6
	Self-employed	44	18.3	18.3	77.9
	Student	50	20.8	20.8	98.8
	Un employed	1	0.4	0.4	99.2
	Un employed	2	0.8	0.8	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Marital Status of the Respondents:

In the district of Tripura e.g. West Tripura district, Sipahijala district, Dhalai district, North Tripura district, Gomati district, Khowai district, Unakoti district, and South Tripura district from the total sample size of 240, it was found that 49.6 percent respondents were married, 45.8 percent respondents were single, 3.3 percent respondents were widow, 1.3 percent respondents were divorced. The same can be observed from the table 7.

Table 7: Marital Status of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Divorced	3	1.3	1.3	1.3
	In a Relationship	1	0.4	0.4	1.7
	Married	119	49.6	49.6	51.3
	Single	109	45.4	45.4	96.7
	Widow	8	3.3	3.3	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Resident Location of the Respondents:

The data presented in table 8 on resident location of the respondents shows that nearly 52.1 percent of respondents stay in rural areas, 30.0 percent of respondents stay in urban areas, 17.9 percent of respondents stay in Semi Urban areas.

Table 8: Resident Location of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	125	52.1	52.1	52.1
	Semi Urban	43	17.9	17.9	70.0
	Urban	72	30.0	30.0	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Public service advertising observation experiences related to advertising on Health care service sector of the Respondents:
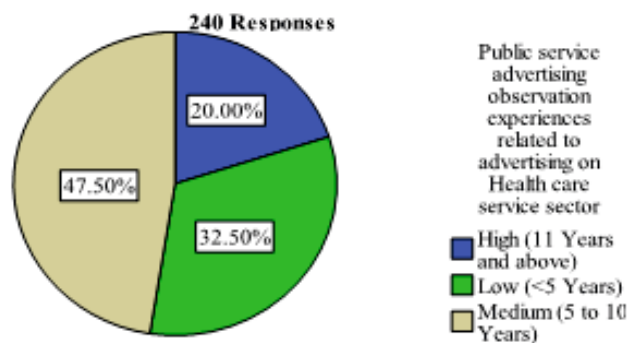
Overall, 47.5 percent of the respondents have medium (5 to 10 years) Public service advertising observation experiences related to advertising on health care service sector, 32.5 percent of the respondents have below five 5 years (low) of Public service advertising observation experiences related to advertising on health care service sector and 20.0 percent of the respondents have high (11 Years and above) Public service advertising observation experiences related to advertising on health care service sector which is negligible and exceptionally less throughout the whole survey areas from the total 240 sample size (refer to table 9 & figure 1).

Table 9: Public service advertising observation experiences related to advertising on Health care service sector of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High (11 Years and above)	48	20.0	20.0	20.0
	Low (<5 Years)	78	32.5	32.5	52.5
	Medium (5 to 10 Years)	114	47.5	47.5	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Figure 1: Public service advertising observation experiences related to advertising on Health care service sector of the Respondents

Health care service sector related public service advertising given in outdoor media observation experiences of the Respondents:

In health care service sector related public service advertising given in outdoor media observation experiences throughout the study areas respondents have Medium (5 to 10 Years) observation experiences which is 45.4 percent, Low (<5 Years) observation experiences of health care service sector related public service advertising given in outdoor media is 34.2 percent and High (11 Years and above) observation experiences of health care service sector related public service advertising given in outdoor media is 20.4 percent (refer to table 10 & figure 2).

Table 10: Health care service sector related public service advertising given in outdoor media observation experiences of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High (11 Years and above)	49	20.4	20.4	20.4
	Low (<5 Years)	82	34.2	34.2	54.6
	Medium (5 to 10 Years)	109	45.4	45.4	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Figure 2: Health care service sector related public service advertising given in outdoor media observation experiences of the Respondents
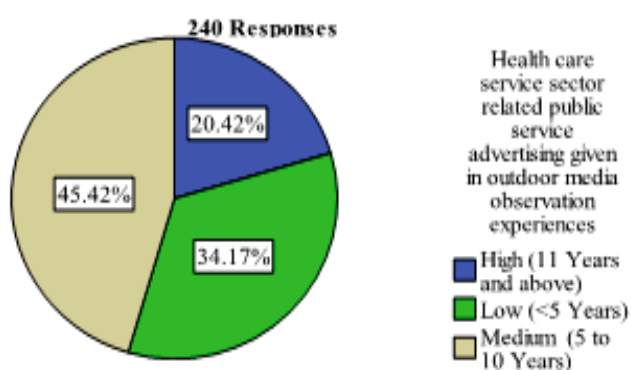
Family Monthly Income of the Respondents:

In case of respondent's family monthly income in all the study areas majority was falling in Medium (10,000 above-25,000 monthly family income) income group which is 45.9 percent, High (25,000 above monthly family income) income group is 27.5 percent and Low (Up to 10,000 monthly family income) income group is 26.6 percent only. The same can be seen in table 11.

Table 11: Family Monthly Income of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High (25,000 above)	66	27.5	27.5	27.5
	Low (Up to 10,000)	64	26.6	26.6	54.1
	Medium (10,000 above-25,000)	110	45.8	45.8	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Land Ownership in Area of the Respondents:

Majority (46.3 percent) of the respondents from all district in Tripura owned Small (1 hectare) land. Percent of respondents holding medium size land (2 hectare) was 28.80 percent, Landless (0 hectare) respondents' percentage was 14.2 and Large (Above 2 hectare) landholdings respondents' percentage was 10.8 percent (refer to table 12).

Table 12: Land Ownership in Area of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Landless 0 hectare	34	14.2	14.2	14.2
	Large Above 2 hectares	26	10.8	10.8	25.0
	Medium 2 hectare	69	28.8	28.8	53.8
	Small 1 hectare	111	46.3	46.3	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Types of Property Holding of the Respondents:

From table 13, it appears that 46.3 percent of the respondents were holding both movable property and immovable property. 38.7 percent of the respondents were holding only Immovable Property. 13.8 percent of the respondents were holding only Movable Property, but one interesting finding was that 1.2 percent of the respondents indicates that they were having nothing as movable property and immovable property.

*Table 13: Types of Property Holding of the Respondents*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Both	111	46.3	46.3	46.3
	Immovable Property	92	38.3	38.3	84.6
	Movable Property	33	13.8	13.8	98.3
	No	1	0.4	0.4	98.8
	Nothing	1	0.4	0.4	99.2
	NOTHING	1	0.4	0.4	99.6
	We don't have any movable property	1	0.4	0.4	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Maximum Annual Expenditure

From figure 3 on maximum annual expenditure, it is very clearly emerge that the respondents' maximum expenditure takes places on medical or health care issues which was 85 percent. 83.3 percent expenditure takes places for food purpose, 69.6 percent expenditure takes places for clothing and 68.8 percent expenditure takes places for education. Apart from these expenditures, 2.00 percent expenditure takes places on transportation, travelling and social service etc. Again 1.00 percent expenditure takes places on expenditure headings like tourism, newspaper, household items, helping poor for education etc. But it was observed that maximum annual expenditure takes places medical or health care issues.

Figure 3: Maximum Annual Expenditure on 240 Responses
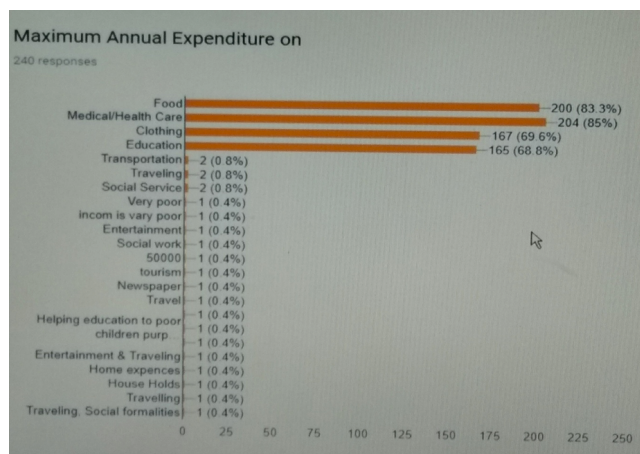
Hypotheses Analysis:

The important demographic profile and socio-economic characteristics data of the 240 respondents from all eight districts which were corresponding to Gender of the respondents, Age of the respondents, Education or Literacy Status, Occupational status or Type of Job, Family Monthly income, Land Ownership in Area and Types of Property Holding were cross-tabulated [Chi-square (χ^2) with the four main nature of observation of Public service advertising observation experiences of the respondents related to advertising on Health care service sector, Health care service sector related public service advertisement telecasted in television observation experiences of the respondents, Health care service sector related public service advertising published in the print media observation experiences of the respondents and Health care service sector related public service advertising given in outdoor media observation experiences of the respondents. For this purpose, Chi-square (χ^2) tests of independence were used. These tests establish whether two or more attributes are associated or not. The calculated value of Chi-square (χ^2) was compared at 5% (0.05) level of significance. If the *p* value is less than the alpha value (0.05) then null hypotheses is rejected i.e. the attributes are associated or related but if the *p* value is greater than the alpha value (0.05) then alternative hypothesis is accepted i.e. the attributes are not associated or related. The phi coefficient ranges from 0 to 1 with smaller relationships being closer to 0 and larger relationships being closer to 1. Like the phi coefficient, Cramér's V statistic ranges from 0 to 1, with higher values indicating larger strengths of associations, or effect sizes. Hence, Phi & Cramer's V were calculated to know the effectiveness, as the research objective is to examine the effectiveness of public service advertising related to advertising on health care service sector.

Table 14: Important Socio-economic characteristics of the respondents from the study areas were Cross-tabulated [Chi square (χ^2) tests] with Public service advertising observation experiences of the respondents related to advertising on Health care service sector and calculation of Phi & Cramer's V to measure the effect

Sl. No.	Socio-economic characteristics	*P*-Value	5% (0.05) level of significance Ho is	Phi & Cramer's V Value	Status of Effectiveness
1	Gender of the respondents	0.000	Rejected	0.398 & 0.282	Strong and Positive Effect
2	Age of the respondents	0.000	Rejected	0.398 & 0.282	Very Strong and Positive Effect
3	Education or Literacy Status	0.001	Rejected	0.386 & 0.273	Strong and Positive Effect
4	Occupational status or Type of Job	0.000	Rejected	0.568 & 0.401	Very Strong and Positive Effect
5	Family Monthly income	0.046	Rejected	0.256 & 0.181	Positive Effect
6	Land Ownership in Area	0.000	Rejected	0.343 & 0.243	Strong and Positive Effect
7	Types of Property Holding	0.000	Rejected	0.422 & 0.298	Strong and Positive Effect

Source: Field Survey

Interpretation: Table 14 depicts that all the selected demographic profile and socio - economic characteristics like Gender of the respondents, Age of the respondents, Education or Literacy Status, Occupational status or Type of Job, Family Monthly income, Land Ownership in Area and Types of Property Holding are significantly related or associated with Public service advertising observation experiences of the respondents related to advertising on Health care service sector. From table 14, it also appears that the strengths of associations or effect sizes are very strong, strong and positive.

Table 15: Important Socio-economic characteristics of the respondents from the study areas were Cross-tabulated [Chi square (χ²) tests] with Health care service sector related public service advertising given in outdoor media observation experiences of the respondents and calculation of Phi & Cramer's V to measure the effect

Sl. No.	Socio-economic characteristics	*P*-Value	5% (0.05) level of significance Ho is	Phi & Cramer's V Value	Status of Effectiveness
1	Gender of the respondents	0. 001	Rejected	0.376 & 0.266	Strong and Positive Effect
2	Age of the respondents	0.000	Rejected	0.554 & 0.392	Very Strong and Positive Effect
3	Education or Literacy Status	0. 024	Rejected	0.331& 0.234	Strong and Positive Effect
4	Occupational status or Type of Job	0. 000	Rejected	0.559 & 0.396	Very Strong and Positive Effect
5	Family Monthly income	0. 049	Rejected	0.255 & 0.180	Positive Effect
6	Land Ownership in Area	0.000	Rejected	0.350 & 0.248	Strong and Positive Effect
7	Types of Property Holding	0. 000	Rejected	0.381 & 0.269	Strong and Positive Effect
8	Maximum Annual Expenditure on	0.046	Rejected	0.601 & 0.425	Very Strong and Positive Effect

Source: Field Survey

Interpretation: Table 15 depicts that all the selected demographic profile and socio-economic characteristics for the cross-tabulation like Gender of the respondents, Age of the respondents, Education or Literacy Status, Occupational status or Type of Job, Family Monthly income, Land Ownership in Area, Maximum annual expenditure on and Types of Property Holding are significantly related or associated with Health care service sector related public service advertising given in outdoor media observation experiences of the respondents. From table 15, it also comes forwarded that the strengths of associations or effect sizes are very strong, strong and positive.

Pearson Correlations involving Public service advertising observation experiences and socio-economic characteristics of the respondents:

Table 16(a): Pearson Correlations involving Public service advertising observation experiences and socio-economic characteristics of the respondents

	Gender of the Respondents	Age of the Respondents	Education or Literacy Status	Marital Status	Public service advertising observation experiences related to advertising on Health care service sector	Health care service sector related public service advertisement telecasted in television observation experiences	Health care service sector related public service advertising published in the print media observation experiences	Health care service sector related public service advertising given in outdoor media observation experiences	Family Monthly income	Land Ownership in Area	Types of Property Holding
Gender of the Respondents	1	-0.398**	-0.028	-0.272**	-0.288**	-0.282**	-0.224**	-0.228**	-0.290**	0.039	-0.057
Age of the Respondents	-0.398**	1	0.070	0.694**	0.463**	0.372**	0.351**	0.389**	0.263**	0.244**	0.233**
Education or Literacy Status	-.028	0.070	1	-0.012	0.168**	0.166*	0.155*	0.129*	0.357**	0.149*	0.080
Marital Status	-0.272**	0.694**	-0.012	1	0.299**	0.232**	0.231**	0.272**	0.204**	0.092	0.145*
Public service advertising observation experiences related to advertisig on Health care service sector	-0.288**	0.463**	0.168**	0.299**	1	0.805**	0.719**	0.747**	0.192**	0.259**	0.365**
Health care service sector related public service advertisement telecasted in television observation experiences	-0.282**	0.372**	0.166*	0.232**	0.805**	1	0.695**	0.698**	0.197**	0.239**	0.352**

*Note: **. Correlation is Significant at the 0.01 level (2-tailed), *. Correlation is Significant at the 0.05 level (2- tailed) and Sample Size=240*

Source: Field Survey

Table 16(b): Pearson Correlations involving Public service advertising observation experiences and socio-economic characteristics of the respondents

	Gender of the Respondents	Age of the Respondents	Education or Literacy Status	Marital Status	Public service advertising observation experiences related to advertising on Health care service sector	Health care service sector related public service advertisement telecasted in television observation experiences	Health care service sector related public service advertising published in the print media observation experiences	Health care service sector related public service advertising given in outdoor media observation experiences	Family Monthly income	Land Ownership in Area	Types of Property Holding
Health care service sector related public service advertising published in the print media observation experiences	-0.224**	0.351**	0.155*	0.231**	0.719**	0.695**	1	0.704**	0.218**	0.256**	0.274**
Health care service sector related public service advertising given in outdoor media observation experiences	-0.228**	0.389**	0.129*	0.272**	0.747**	0.698**	0.704**	1	0.158*	0.288**	0.319**
Family Monthly income	-0.290**	0.263**	0.357**	0.204**	0.192**	0.197**	0.218**	0.158*	1	0.253**	0.082
Land Ownership in Area	0.039	0.244**	0.149*	0.092	0.259**	0.239**	0.256**	0.288**	0.253**	1	0.330**
Types of Property Holding	-0.057	0.233**	0.080	0.145*	0.365**	0.352**	0.274**	0.319**	0.082	0.330**	1

*Note: **. Correlation is Significant at the 0.01 level (2-tailed), *. Correlation is Significant at the 0.05 level (2- tailed) and Sample Size=240*

Source: Field Survey

Interpretation: Table 16(a) & 16(b) represent the Pearson Correlations involving Public service advertising observation experiences and socio-economic characteristics of the respondents. It was found that socio-economic characteristics of the respondents and Public service advertising observation experiences were very positively or negatively and significantly correlated. Table 16(a) & 16(b) indicated that Gender of the respondents were very negatively perfect and significantly correlated with Age of the respondents, Marital Status, Public service advertising observation experiences related to advertising on Health care service sector, Health care service sector related public service advertising given in outdoor media observation experiences and family monthly income at 1 percent level. Age of the respondents were very negatively perfect and significantly correlated with Gender of the respondents at 1 percent level and Age of the respondents were very positively and significantly correlated with Marital Status, Public service advertising observation experiences related to advertising on Health care service sector, Health care service sector related public service advertising given in outdoor media observation experiences, family monthly income, Land ownership in area and types of property holding at 1 percent level.

Education or Literacy Status were very positively and significantly correlated with Public service advertising observation experiences related to advertising on Health care service sector and family monthly income at 1 percent level. Health care service sector related public service advertising given in outdoor media observation experiences and Land ownership in area correlated at 5 percent level.

Marital Status were very negatively perfect and significantly correlated with Gender of the respondents at 1 percent level and Marital Status were very positively and significantly correlated with Age of the respondents, Public service advertising observation experiences related to advertising on Health care service sector. Health care service sector related public service advertising given in outdoor media observation experiences and family monthly income at 1 percent level. Marital Status also very positively and significantly correlated with types of property holding at 5 percent level.

Public service advertising observation experiences related to advertising on Health care service sector were very negatively perfect and significantly correlated with Gender of the respondent's at 1 percent level and were very positively and significantly or highly correlated with all other variable under study at 1 percent level.

Health care service sector related public service advertising given in outdoor media observation

experiences were very negatively perfect and significantly correlated with Gender of the respondent's at 1 percent level and were very positively and significantly or highly correlated with all other variable under study at 1 percent level except education or literacy status and Family Monthly income which is correlated at 5 percent level. Family Monthly income were very negatively perfect and significantly correlated with Gender of the respondent's at 1 percent level and were very positively and significantly or highly correlated with all other variable under study at 1 percent level except Health care service sector related public service advertising given in outdoor media observation experiences which is correlated at 5 percent level and only there is no relation with types of property holding.

Similarly, Land ownership in area were very positively and significantly or highly correlated with all variable under study at 1 percent level except Education or Literacy Status which is correlated at 5 percent level and only there is no relation with Gender of the respondent's and Marital Status.

Lastly, types of property holding were very positively and significantly or highly correlated with all variable under study at 1 percent level except Marital Status which is correlated at 5 percent level and there is no relation with Gender of the respondent's, Education or Literacy Status and Family Monthly income. Hence, from these analysis and interpretation Public service advertising observation experiences and socio-economic characteristics of the respondents were significantly or highly correlated.

Figure 4: Overall reach ability is good of the recent government sponsored health care service sector related public service advertising among public
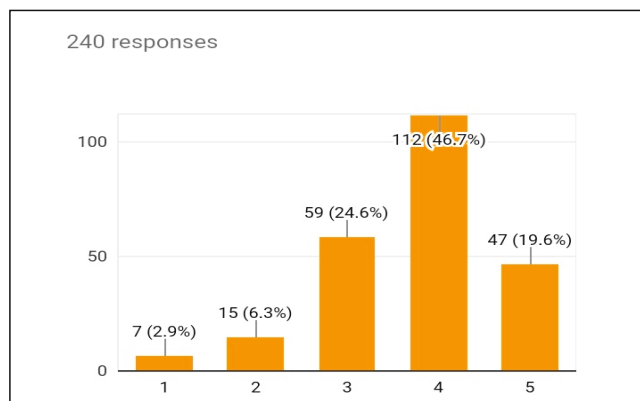
Note: 1= Strongly Disagree, 2= Disagree, 3=Neither Agree nor Disagree, 4= Agree and 5= Strongly Agree

Interpretation: Figure 4 point up the respondents' opinion about the overall reach ability is good of the recent government sponsored health care service sector related public service advertising among public and it was found that 46.7 percent respondents were agreed with the statement,19.6 percent respondents were

strongly agree with the statement, 24.6 percent respondent were neither agree nor disagree with the statement, 6.3 percent respondents were disagree with the statement and only 2.9 percent respondents were strongly disagree with the statement which authenticates that the overall reach ability is good of the recent government sponsored health care service sector related public service advertising among public.

Table 17: Right media for telecasting the health care service sector related public service advertising to make it more effective

|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Electronic Media, Outdoor Media	15	6.3	6.3	6.3
	Electronic Media, Print Media	14	5.8	5.8	12.1
	Electronic Media, Print Media, Outdoor Media	165	68.8	68.8	80.8
	Electronic Media, Print Media, Outdoor Media	31	12.9	12.9	93.8
	Print Media, Outdoor Media, Electronic Media	15	6.3	6.3	100.0
	Total	240	100.0	100.0	

Source: Field Survey

Figure 5: Right media for telecasting the health care service sector related public service advertising to make it more effective
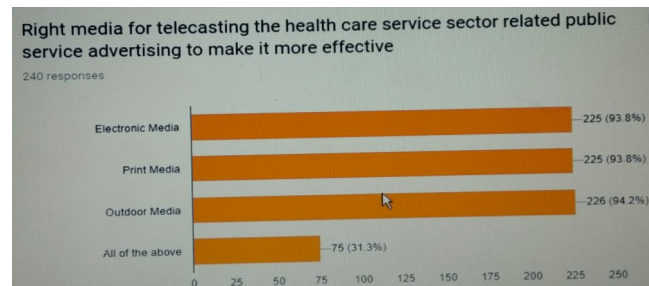

Interpretation: Table 17 & Figure 5 noticeably signify that the electronic media, print media and outdoor media is popular in disseminating the public service advertising related to health care service sector. All these media contribution is significantly required.

Figure 6: Selection of Five (05) media that delivers more public service or public awareness advertisement, or campaign related to healthcare service sector from the electronic, print and outdoor media
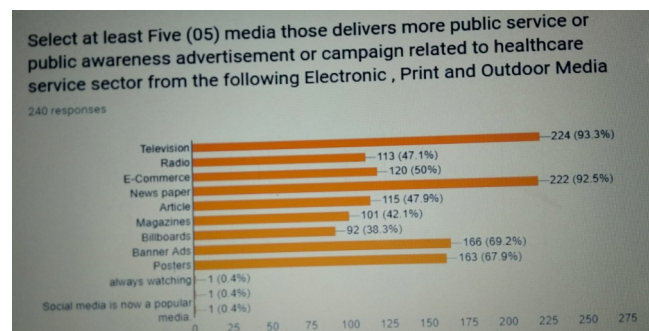
Interpretation: Figure 6 highlights the respondents' opinion about the media that delivers more public service or public awareness advertisement or campaign related to healthcare service sector from the electronic, print and outdoor media and it was establish that respondents preferred Television (with 93.3 percent preference and ranked one) as most media that delivers more public service or public awareness advertisement or campaign related to healthcare service sector from the electronic media. Newspaper, Banner Ads, Posters, E-Commerce, Article, Radio and Magazines were also coming out as important media that delivers more public service or public awareness advertisement or campaign related to healthcare service sector with 92.5%, 69.2%, 67.9%, 50.0%, 47.9%, 47.1% and 42.1 respondent's preference respectively.

Figure 7: Selection of Ten (10) effective and efficient media from the Television Channels, Newspapers and Outdoor media which publicized more public service or public awareness advertisement, or campaign related to healthcare service sector in comparison to other channels and newspapers in Tripura
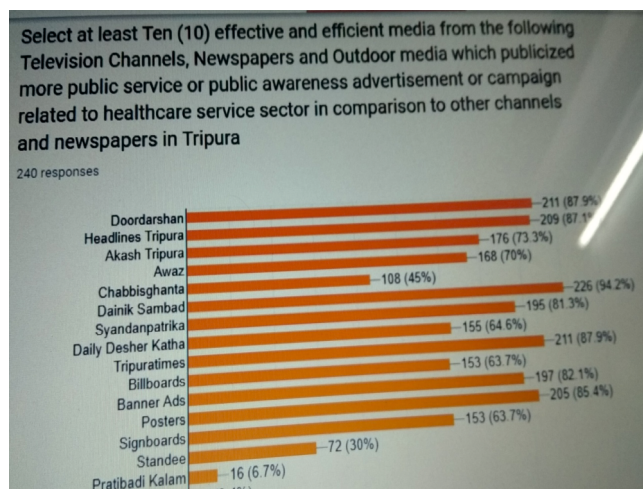
Interpretation: Figure 7 draws attention to the respondents' opinion about the effective and efficient media from the Television Channels, Newspapers and Outdoor media which publicized more public service or public awareness advertisement or campaign related to healthcare service sector in comparison to other channels and newspapers in Tripura and it was found that respondents preferred Dainik Sambad Newspaper (with 94.2 percent preference and ranked one) as most effective and efficient media from the Television Channels, Newspapers and Outdoor media which publicized more public service or public awareness advertisement or campaign related to healthcare service sector in comparison to other channels and newspapers

in Tripura. Doordarshan, Tripura Times, Headlines Tripura, Posters, Banner Ads, Syandanpatrika, Akash Tripura, Awaz, Daily Desher Katha, Billboards, Signboards, Chabbisghanta, Standee and Pratibadi Kalam were also came out as important media those were effective and efficient media from the Television Channels, Newspapers and Outdoor media which publicized more public service or public awareness advertisement or campaign related to healthcare service sector in comparison to other channels and newspapers in Tripura with 87.9%, 87.9%, 87.1%, 85.4%, 82.1% 81.3%, 73.3%, 70.00%, 64.6%, 63.7%, 63.7%, 45.00%, 30.00% and 6.7% respondents preference respectively. Private Channels were having 2.00% respondent's preference. Kok Tipura, News Venguads, Satelite Cable TV, Star Gold, FB Pages, and National Television each were having 1.00% respondent's preference.
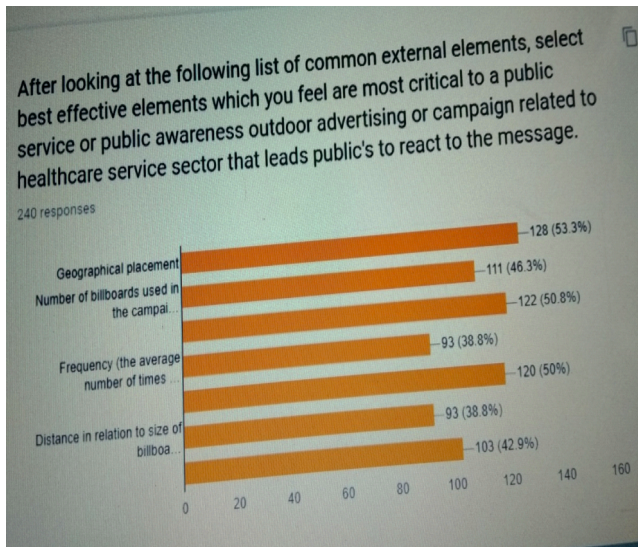
Figure 8: Common best effective internal elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads publics to react to the message
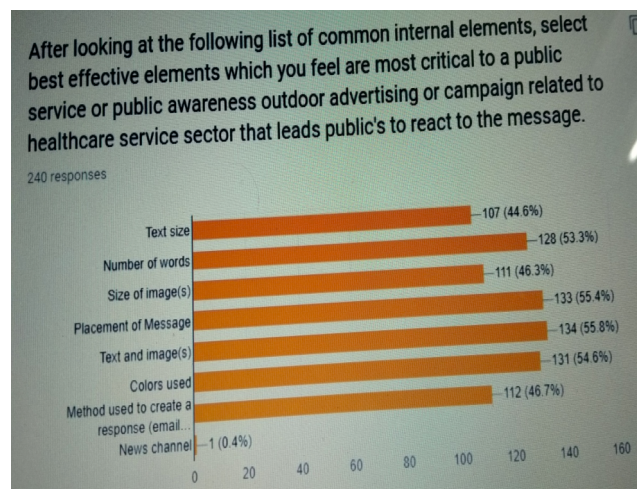
Interpretation: Figure 8 point out the respondents' opinion about the common best effective internal elements, which respondents feel were the most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message and it was originate that respondents preferred text and image(s) (with 55.8 percent preference and ranked one) as most common best effective internal elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message. Placement of the message, Colors used, Number of words, Method used to create a

response (email, phone, website, app), Size of image(s) and Text size were also coming out as important effective internal elements with 55.4%, 54.6%, 53.3% and 46.7%, respondents' preference respectively.

Figure 9: Common best effective external elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads publics to react to the message

Interpretation: Figure 9 points out the respondents' opinion about the common best effective external elements, which respondents feel were the most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message and it was originated that respondents preferred geographical placement of the message (with 53.3 percent preference and ranked one) as most common best effective external elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message. Reach (the percentage of a target audience population which has had an Opportunity to see the billboard at least once), Size of the board in relation to distance, Number of billboards used in the campaign, Demographical market the billboard is targeting, Frequency (the average number of times during a specified reach period that an individual has the opportunity to see the billboard) and distance in relation to size of billboard were also came out as important effective external elements with 53.3%, 50.8%, 50.0%, 46.3%, 42.9%, 38.8% and again 38.8% respondents preference respectively.
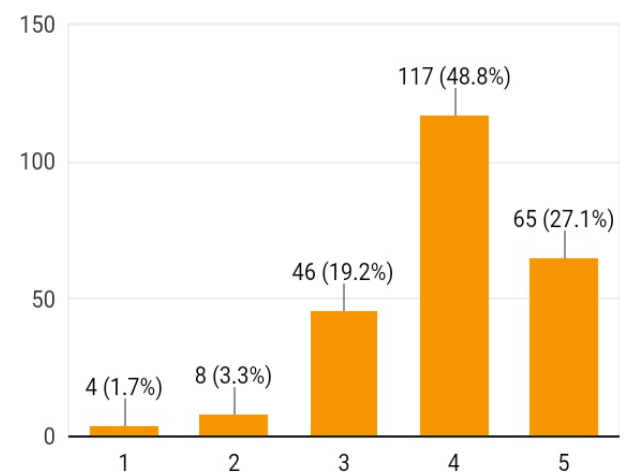
Figure 10: Health Care Service Sector Related Public Service Advertising Given in Outdoor Media
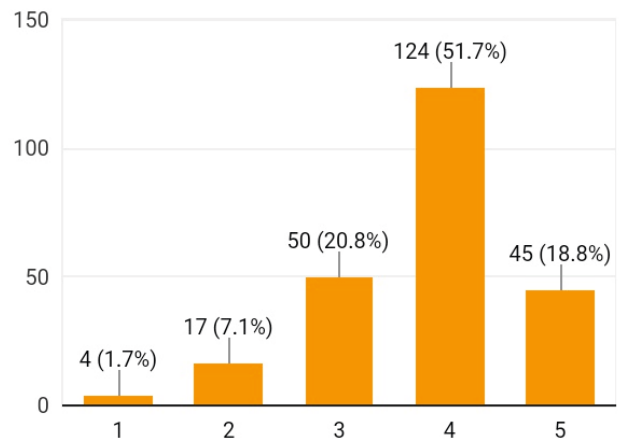
Note: 1=Highly Ineffective, 2=Ineffective, 3=Neutral, 4=Effective and 5= Highly Effective

Interpretation: Figure 10 exemplify the respondents' view about the effectiveness of health care service sector related public service advertising given in outdoor media and it was establish that 51.7 percent respondents indicate that health care service sector related public service advertising given in outdoor media were effective, 18.8 percent respondents indicate that health care service sector related public service advertising given in outdoor media were highly effective, 20.8 percent respondents were neutral, 7.1 percent respondents indicate that the advertisements were ineffective and only 1.7 percent respondents specify that the advertisements were highly ineffective which validates the effectiveness of health care service sector related public service advertising given in outdoor media.

Figure 11: Overall Public Service Advertising Related to Health Care Service Sector

Note: 1=Highly Ineffective, 2=Ineffective, 3=Neutral, 4=Effective and 5= Highly Effective

Interpretation: Figure 11 shows the respondents' opinion about the overall effectiveness of public service advertising related to health care service sector and it was found that 48.8 percent respondents mention that overall public service advertising related to health care service sector were effective, 27.1 percent respondents indicate that overall public service advertising related to health care service sector were highly effective, 19.2 percent respondents were neutral, 3.3 percent respondents point out that the advertisements were ineffective and only 1.7 percent respondents indicate that the advertisements were highly ineffective which substantiates the overall effectiveness of public service advertising related to health care service sector.

DISCUSSION

Figure 4 points up the respondents' opinion about the overall reach ability is good of the recent government sponsored health care service sector related public service advertising among public and it was found that 46.7 percent respondents were agreed with the statement, 19.6 percent respondents were strongly agreed with the statement, 24.6 percent respondents were neither agree nor disagreed with the statement, 6.3 percent respondents were disagreed with the statement and only 2.9 percent respondents were strongly disagreed with the statement which authenticates that the overall reach ability is good of the recent government sponsored health care service sector related public service advertising among public.

Table 17 & figure 5 noticeably signify that the electronic media, print media and outdoor media is popular in disseminating the public service advertising related to health care service sector. All these media contribution is significantly required.

Figure 8 points out the respondents' opinion about the common best effective internal elements, which respondents feel were the most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message and it was originated that respondents preferred text and image(s) (with 55.8 percent preference and ranked one) as most common best effective internal elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message. Placement of the message, Colors used, Number of words, Method used to create a response (email, phone, website, app), Size of image(s) and Text size were also coming out as important effective internal elements

with 55.4%, 54.6%, 53.3% and 46.7%, respondents' preference respectively.

Figure 9 points out the respondents' opinion about the common best effective external elements, which respondents feel were the most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message and it was originated that respondents preferred geographical placement of the message (with 53.3 percent preference and ranked one) as most common best effective external elements, which respondents feel are most critical to a public service or public awareness outdoor advertising or campaign related to healthcare service sector that leads public's to react to the message. Reach (the percentage of a target audience population which has had an Opportunity to see the billboard at least once), Size of the board in relation to distance, Number of billboards used in the campaign, Demographical market the billboard is targeting, Frequency (the average number of times during a specified reach period that an individual has the opportunity to see the billboard) and distance in relation to size of billboard were also came out as important effective external elements with 53.3%, 50.8%, 50.0%, 46.3%, 42.9%, 38.8% and again 38.8%, respondents preference respectively. Chi-square (χ^2) test, Phi & Cramer's V analysis through table 14 depicts that all the selected demographic profile and socio-economic characteristics like Gender of the respondents, Age of the respondents, Education or Literacy Status, Occupational status or Type of Job, Family Monthly income, Land Ownership in Area and Types of Property Holding are significantly related or associated with Public service advertising observation experiences of the respondents related to advertising on Health care service sector (Pechmann & Reibling, 2000). From table 14, it also appears that the strengths of associations or effect sizes are very strong, strong and positive.

Table 15 depicts that all the selected demographic profile and socio-economic characteristics for the cross-tabulation like Gender of the respondents, Age of the respondents, Education or Literacy Status, Occupational status or Type of Job, Family Monthly income, Land Ownership in Area, Maximum annual expenditure on and Types of Property Holding are significantly related or associated with Health care service sector related public service advertising given in outdoor media observation experiences of the respondents (Thomas, 2015). From table 15, it also comes forwarded that the strengths of associations or effect sizes are very strong, strong and positive.

CONCLUSION

The Pearson Correlations' Analysis and Interpretation makes it clear that Public service advertising observation experiences and socio-economic characteristics of the respondents were significantly or highly correlated. Hence, from the whole analysis of the study it can be strongly concluded that the public service advertising related to advertising on health care service sector through outdoor media is effective and it is observed that all the study have provided some positive outcome and further expansion of field study frequently basis may give more effective and efficient social wellbeing.

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REFERENCES

Clayforth, C., Pettigrew, S., Mooney, K., Lansdorp-Vogelaar, I., Rosenberg, M. & Slevin T. (2014). A Cost-Effectiveness Analysis of Online, Radio and Print Tobacco Control Advertisements Targeting 25-39-Year-Old Males. *Australian and New Zealand Journal of Public Health*, 38(3), pp 270-274.

Hinde, S., McKenna, C., Whyte, S., Peake, M.D., Callister, M.E.J., Rogers, T. & Sculpher, M. (2015). Modeling the Cost-effectiveness of Public Awareness Campaigns for the Early Detection of Non-Small-Cell Lung Cancer. *British Journal of Cancer*, 113(1), pp 135–141.

Hsu, J., Zinsou, C., Parkhurst, J., N'Dour, M., Foyet, L. & Mueller, D.H. (2012). Comparative Costs and Cost-effectiveness of Behavioral Interventions as Part of HIV Prevention Strategies. *Health Policy and Planning*, 28(1), pp 20-29.

Hutubessy, R., Chisholm, D. & Edejer, T.T. (2003). Generalized Cost-effectiveness Analysis for National-level Priority-setting in the Health Sector. *Cost Effectiveness and Resource Allocation*, 19(1), pp 1-31.

Islam, M. & Sheikh, S.A. (2016). Effect of Emotional Advertisement on quitting smoking: A Case of Korean College Students. *IRA-International Journal of Management & Social Sciences*, 5(1), pp 10-16.

Iveson, K. (2011). Branded Cities: Outdoor Advertising, Urban Governance, and the Outdoor Media Landscape. *Antipode,* 44(1), pp 151-174.

Martin, S. (2016). Word-of-mouth in the Health Care Sector: A Literature Analysis of the Current State of Research and Future Perspectives. *International Review on Public and Nonprofit Marketing*, 14(1), pp 35-56.

McAlister, A.L., Rabius, V., Geiger, A., Glynn, T.J., Huang, P. & Todd, R. (2004). Telephone Assistance for Smoking Cessation: One Year Cost Effectiveness Estimations. *Tob Control*, 13(1), pp 85-86.

Pechmann, C. & Reibling, T.E. (2000). Anti-smoking Advertising Campaigns Targeting Youth: Case Studies from USA and Canada. *Tob Control*, 9(2), pp 18-31.

Thomas, A. (2015), The Economics of Successful Billboard Advertising. Graphic Communication Department, College of Liberal Arts, California Polytechnic State University, San Luis Obispo. Retrieved From: https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1143&context=grcsp