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Effective Sources of information in Winter Seasonal Diseases: The Perception Of Residents of District Buner, KP

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Abstract

The present study discusses the problem of seasonal disease unconsciousness in communication and identifying the most successful sources of information in District Buner seasonal diseases. The research is qualitative in nature, and data was collected from 500 respondents using a questionnaire. Respondents were asked different questions regarding their demographic status, knowledge about winter seasonal diseases and according to them effective sources of knowledge. The study also aimed to identify places where respondents can get adequate knowledge of seasonal diseases, use precautionary steps, and government value in seasonal diseases and assess the behavioral change in respondents after the campaigns. The research found that social media and friends & relatives were successful sources of knowledge for summer and winter diseases, whereas in District Buner, Hujra and Masjids were suitable places to notify. For the correlation test between effective information tools and lack of effective information tools, it was shown that there is association as (n=500), p=.028 that is less than.05. That means that the proportion of precautionary measures knowledge is significantly associated with successful information resources. The statistical analysis provided significant relationship support to the hypothesis. Effective sources of information are Newspapers, posters & banners and social media for cold / flue and cough, while posters & banners, radio , TV and social media are for Asthma seasonal disease. Local media , friends & family, and radio are important sources of information for itch skin, while for chest infection, Television, posters, and social media. The findings explored that the effective source of information in Bunir District are friends & relatives and social media, while masjids, hujras, and hospitals are appropriate places of knowledge of the winter diseases. Second Hypothesis was supported by the results that interpersonal communication is more effective than other media. Even the results backed the theory of a two-step flow of communication.

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1) INTRODUCTION

The salient transmissible diseases of human beings, having malaria, influenza, diaries, asthma, itchy and skin diseases, sometimes these diseases become peaking at a specific time of the year which gives way to communicable positions. Buckee, Tatem & Metcalf (2017). The dynamic of seasonal is operates through human being's influence, similarly convert the human pattern which appeals level of population and sensitivity of importation and infection of bacterium which flare seasonal diseases and illness for the community, also favourable climate for disease layout the variable of species. The illness and diseases affect the daily life of a human being Buckee, Tatem & Metcalf (2017).

Ferguson, 2007 latterly the infectious seasonal disease has been acquiring enlarge concentration because of the succession of self-initiated steps of people. Most importantly, the epidemic of fate can be modifying by individual self-initiated action and the affiliation with dynamic seasonal disease requisite appropriate conception. If people completely understand the sensitivity of seasonal disease, what would occur when the seasonal disease blowout across the community. To comprehend the human action indication toward seasonal diseases, there have been two separate procedures at play; it would be helpful to realize it clearly (Ferguson, 2007). The behavior of humans is standing on belief, awareness and opinion and attitude of seasonal diseases, and these elements completely modified according to time, both in population and in individuals on all.

This kind of information called local obtainable knowledge and information. The cause of information Salathe & Bonhoeffer (2008) stand for whether the single person stands on their appropriate publicly accessible news and information all over the world, the information and news that obtain from their neighbors and local communities are called a piece of local news and information. Salathe & Bonhoeffer 2008, the accessible knowledge and information have an important distinction between globally and locally, in geospatial or socially the news and information can happen into bundles that have a powerful impact on dynamic seasonal diseases. For instance, the assemble incidents of human being vulnerable to those seasonal diseases.

2) CAUSES OF SEASONALITY

Martinez, M. E. (2018)the inherent feature of ecological system is seasonality; seasonal is considered the prevalence factor of both chronic and acute transmissible diseases. While it is significant to conceive the calendar of epidemic by the viewpoint of "everything is seasonal." This viewpoints influence people to understand the method which is beyond the seasonal disease, which obstruct in some cases,Martinez, M. E. (2018) which is set up the misunderstanding of combined connection between transmissible disease incidence and seasonal phenomena.

Pascual, 2000, 2002, closely, the seasonal expand in diarrhea, asthma and influenzas prevalence happen when the growth of the bacterium has been favoured by microenvironment. While, there is a complicated connection between bacterial

growth and micro-environment, which rely on areas temperature, complete level of water and freshness in surrounding. The diarrhea prevalence is therefore hard to speculate details upon atmosphere. To survive externally, introduce to be a significant source of seasonal occurrence because of virus which is transferred by vomits, droplets and aerosols.

Lowen, Mubareka & Palese, (2007), the impact of climate on cold coughs carrying, to express the impact of humidity and temperature on transference. While the condition of climate changes unclearly play role in a directly many carrying diseases. The seasonal weather impact direction of seasonality and the seasonality vector have a latest influence on exposure of seasonal diseases, like diarrhea, cold cough, dengue and asthma (Martinez, 2018).

Additionally, in numerous situations, Grassly & Fraser, (2006) said that the connection of the dynamics of non-linear diseases by seasonal constrain of incidents consequence in many complicatedly go ahead, as well as various yearly series with different repetition. Nonlinearities of this type perform action to unclear connection between behavioural or climatic element and yearly various in infectious transmissions.

Element of environment, particularly condition of climate are seasonal operator which have to acquire much concentration. This also happen by reason of them sometimes covers with incidence of seasonal diseases. The factors of environmental operator are unclear situation which effect the spreading through their influence a infectious diseases variation Altizer, Sonia, Andrew Dobson, Parviez Hosseini, Peter Hudson, Mercedes Pascual, and Pejman Rohani.(2006), although another instance comprise no climatic seasonal abiotic situation of environment, like as salinity water, that may influence pathogen of water-born. The pathogen continuity has been affected by environmental element throughout transformation between hosts. The effect of germs drives environmental factor which can also impact the host vulnerability to population dynamic vector or infection.

3) CLASSIFICATION OF DISEASES

Widely, the classification of transmissible diseases can be categorized within two mode of transference, the summer disease such as Dengue, Diaries, Asthma indirectly spread from (mosquito, water), and winter seasonal diseases such as Influenza (cold cough), Itchy, Skin diseases directly transfer from person to person. The classification of transmissible diseases maybe also they are contained by nature such as the human being contained and animal contained. Patz, Githeko, McCarty, Hussein, Confalonieri & De Wet, (2003).

The infectious diseases have been one of the significant factors of climate which influence the occurrence of transmissible diseases. Patz, Githeko, McCarty, Hussein, Confalonieri & De Wet, (2003) on another hand the significant analysis added the socio-demographic impact on people transportation and migration; nutrition and drug restriction, furthermore the impact of deforestation and environment;

urbanization and water project. In the global development era, and also changes of land use, which mostly dissimilar changes of climate apply separate influence on disease; instead to influence is likely to rely upon the expansion that people survive with or encounter the movement of other altered diseases which influence.

4) WINTER SEASONAL DISEASES

Some transmissible diseases increased when cold weather and where the people live in houses which are closed and contract in the warmer season, (Hechler, Chau, Giesecke & Vocks, 2004). The people ventilate their house and get out of the door. The reason for infectious diseases seasonally may present the probability to obstruct estimate, which can assist the progress of successful policies and permitting to use the reservoir successfully and efficiently.

The factor of the environment affects the pathogens, the information of environmental elements such as cold cough, itchy, and skin diseases can be utilized to enhance educational strategies and estimate, particularly in communities through dangerous of infections (Martinez, M. E. 2018).

1.1) Influenza (cold /cough)

Normally people improve their health after having uncomplicated influenza but the one got the complex level of disease results in serious sickness and death, mainly it affects the people of a very young age, older adults, pregnant and postpartum women. Seasonal influenza which causes respiratory deaths happens annually worldwide.

"Influenza season" points out to the monitoring period when influenza action becomes prominent to occur, such as from October to May, in the United States. Zambon, Hays, Webster, Newman & Keene, (2001) "Influenza activity" refers to the transmission of seasonal influenza A and B viruses in the people of the local community". "High influenza activity" is when the circulation or flow of seasonal influenza A and B increases and it refers to the peak weeks of circulation of seasonal influenza A and B

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1.2) Itchy Skin

Seasonal disease itchy has been created a general situation for itchy patients, and it rejected the impact of their quality life which related to health. The itchy increased more regularly in the victim who observes variation in season. Instead of this, the itchy disease has been more observed in the winter season, especially in those people who observed only itchy sometimes. On another hand, the circumstance in which worsens itchy has ablaze, which is not good and becomes too hot. In worsening itchily the inflammation increased and the patient's condition becomes worse (Shrestha, Jha, Thapa & Bhattarai, 2014).

The syndrome of oral allergy has a different response of allergy toward food that is based on spreading between fresh fruits, proteins, pollen, and vegetable. The allergic symptoms generally consist of burning throat and mouth and itching,

eyes, sneezing and runny nose. Although in some situations, (Shrestha, Jha, Thapa & Bhattarai, 2014) reaction of the severe allergic condition has been noted like bronchial asthma, diarrhea and vomiting, usually anaphylaxis system and hives. The symptoms of itching generally happen in a few minutes of food consumption in the winter season. Patients with seasonal itchy disease are significantly having itched all or most of the time in the winter season. These types of seasonal diseases communicate through community gatherings, which have a great impact on people.

1.3) Skin diseases

The research scholar establishes and explains the influence of environmental elements on skin diseases over the years, and the condition of skin seasonality has been perceived in numerous communities in the winter season. Although, to broad the climatic and environmental differences all over the world, it is pleased the pattern of seasonal skin diseases would alter in a distinct section of the globe. According to, Jha, & Gurung, D. (2006) although, it is understandable that disease of skin among victims in every section of the world represents an important seasonal difference. There is a specific function of climate, environment, education, urbanization and socioeconomic status on the frequency of skin seasonal diseases, which effect skins in the winter season.

5) SOURCES OF INFORMATION FOR SEASONAL DISEASES

All over the world, people have experienced important lives due to epidemic diseases from ling time, both in case of mortality and morbidity also economic cost and social customs. In consequence, a tool for large scale which has mass media, have a great role to control and diminish infectious diseases (Public Health Agency of Canada. 2006). The media such as radio, television, community gathering, social media and newspapers have been considered a useful tool for communicating a health-related message to prevent the outbreak of seasonal diseases and to influence the behaviour of people to aware of other people in the community about infectious diseases. There is a strong connection between health education campaigns and mass media, which provide proper time for health education and services in times of seasonal disease outbreaks.

The mass media have great responsibilities to distribute the information regarding health care and diseases and regularly report about health issues, the mass media are considered one of the most important tools of the source of knowledge and information related health problem for people. The coverage of media regarding health issues has become significant through which many monitoring methods just depend upon internet trolling and media news to inform people about the emerging threat of diseases (Public Health Agency of Canada. 2006).

6) DISTRICT BUNER: A BRIEF HISTORY

Khan and Khan (2005) explored the history of the district that Buner is a district in the northern part of Khyber Pakhtunkhwa. It is situated on a distance of 250 km from Islamabad and 131 km from provincial capital Peshawar. The pre dominant

Language is Pashto. Majority of the area is hilly with small plane areas in the middle.

Buner was given the status of separate district in 1991. It has a population of 0.897 million (2017). The population density is 480/sq.kmand an area of 1865 sq.km.

7) WHY SELECTED DISTRICT BUNER?

The researcher selected the area of district Buner for this study, because it has been observed that majority of population is illiterate because of remote area and their awareness level about seasonal diseases is very low, which effecting them very much. In this regard, this study has been considered to present recommendation for the government about effective source of information that to overcome and control the seasonal diseases in the area.

8) SIGNIFICANCE OF THE STUDY

This study will not only identify the effective sources of information in seasonal diseases but it will also help the policy makers and health department to focus on awareness of the public and use the effective sources for public awareness in District Buner Particularly and for the remote areas of the country generally.

9) PROBLEM STATEMENT

Media is playing an important role in information dissemination about daily life such as education, economic, social, politics, diseases, pandemic etc. People in remote areas are mostly lacking of exposure to mainstream media. In such situation seasonal disease have great impact on their lives due to less information about it. This study has been conducted that what are the effective sources and places of information for the residents of Buner? Why these people are giving importance to such kind of media in remote area of Buner?

10) OBJECTIVES OF THE STUDY

To evaluate the aware of public about seasonal diseases.
To find out the problems in awareness of public about seasonal diseases.
To provide a platform to the masses to share their understanding about seasonal diseases.
To discover the most effective tool of information for public in seasonal diseases
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11)LITERATURE REVIEW

Lee, K., Agrawal, A., &Choudhary, A. (2013) explored that social media is producing large amounts of data on a massive scale because people share their opinions and experiences with various diseases; we can use it as a valuable resource for predicting seasonal disease outbreaks. A surveillance system can be built, which can monitor social media and gather real time data to facilitate in faster response to epidemics and assist both patients and doctors in making informed and correct

decisions.

Haas, J., Braun, S., & Wutzler, P. (2016) found that seasonal influenza can result in severe outcomes for patients in terms of finances, as a study carried out in Germany revealed that hospitalization cost for influenza affected people was €87,202,485. The study found that vaccination rates were less than 4% for children and 37% for patients aged more than 60. As seasonal influenza is an annual epidemic, it affects children, elderly people, and those with disposition to it, with children having to carry larger burden of concomitant diseases.

Cui, X., Yang, N., Wang, Z., Hu, C., Zhu, W., Li, H., … Liu, C. (2015) concluded that proper and expert techniques are required as hundreds of thousands of deaths caused by influenza, chickenpox, and malaria are reported each year. An estimate puts this number at 250,000 to 500,000 deaths each year. Social media analysis can be an efficient way for surveillance because users are posting various types of data regarding the diseases. In the past, some analysis focused only on one part of the world. However, with 87.495% precision in classification, flu outbreak can be predicted five days earlier.

12) HYPOTHESES

H1. Public is mostly unaware about precautionary measures in seasonal diseases because of lack of effective information tools.

H2. The mainstream media is not an effective source of information for the residents of Buner as compare to interpersonal communication.

13) RESEARCH METHODOLOGY

The researchers adopted quantitative method for this study as other researchers also used the same method for this type of phenomenon. While, the research technique for this study applied was survey to find out the opinion, belief and viewpoint about the phenomenon in the selected area. Survey research method was described by (Fowler, 2008) as it provide description of attitudes, opinions, or trends of population in quantitative or numeric form.

The universe of this study was district Buner, Khyber Pakhtunkhwa of Pakistan. The area was selected because it is a far flung area of KP, where lack of effective sources of information mostly. Babbie,(2013)demarcated the term population as "it is a group of individuals which have similar qualities that is of researcher's interest". Simple random sampling method of probability sampling was used for the data collection. Data was collected from 500 residents of the areas through a questionnaire. Pandey, & Pandey, (2015) described that for collection of data tools or techniques may be required. Tests are the tools for measurement and these tests vary like it can be questionnaires, interviews, schedules, rating scales etc. Researcher is guided by the tool in data collection as well as evaluation of data. Self-developed questionnaire was distributed among the respondents whereas the reliability of the tool was 74% on the bases of Cronbach's Alpha. Correlation tests

were applied to find out the results of the proposed hypotheses.

The units of analysis in this study will be awareness level, their understanding about seasonal diseases, Behavioral change and sources of information of the masses in the area. Goddard & Melville, (2004) defined independent variable as that one which is manipulated. While Pandey, P., & Pandey, M. M. (2015) stated that variable which don not depend on any other variable as well as its effect is going to be known. In this study sources of information were independent variable. Kaur, (2013), described that dependent variable is subsequent and it is that variable which is affected by the independent variable. Dependent variable depends on the independent one. The dependent variable of this study were, Awareness, Understating and behavioral change of the residents of District Buner, KP.

14) FINDINGS

Table.1. Association between Awareness about precautionary measures in seasonal disease and effective source of information
H1: Public is mostly unaware about precautionary measures in seasonal diseases because of lack of effective information tools

Correlations

			effective information tools	precautionary measures
Spearman's rho	effective information tools	Correlation Coefficient	1.000	.098*
		Sig. (2-tailed)	.	.028
		N	499	499
	precautionary measures	Correlation Coefficient	.098*	1.000
		Sig. (2-tailed)	.028	.
		N	499	500

*. Correlation is significant at the 0.05 level (2-tailed).

Correlation test was applied for the between effective information tools and lack of effective information tools, illustrated that there is association as (n=500), p=.028 which is less than .05. It means that the proportion of the awareness of precautionary measures is significantly correlated with effective information tools. The statistical analysis supported the hypothesis with significant relation.

Table.2. Association between mainstream media and interpersonal communication

H2: The mainstream media is not an effective source of information for the residents of Buner as compare to interpersonal communication

How and from where do you got information about causes, prevention and treatments of cold/flu

Count

		From where you get appropriate awareness regarding winter seasonal diseases?					
		at home	from hospital	at masjid	at hujra	on the occasions of marriages/funerals	Total
How do you got information about causes, prevention and treatments of cold/flu	Newspapers	17	9	6	15	8	55
	radio	15	16	7	14	11	63
	TV	31	17	8	17	19	92
	posters/banners	40	21	19	28	22	130
	social media	20	13	17	11	16	77
	friends/relatives	19	15	9	16	24	83
Total		142	91	66	101	100	500

How and from where do you got information about causes, prevention and treatments of cough?

Count

		From where you get appropriate awareness regarding winter seasonal diseases?					
		at home	from hospital	at masjid	at hujra	on the occasions of marriages/ funerals	Total
How do you got information about causes, prevention and treatments of cough?	from newspapers	18	12	11	7	10	58
	from radio	17	6	9	13	10	55
	from TV	30	26	12	25	16	109
	posters banner	43	23	22	31	29	148
	social media	20	13	4	12	18	67
	from friends relatives	14	11	8	13	17	63

Total		142	91	66	101	100	500

How and from where do you got information about causes, prevention and treatments of Asthma

Count

		From where you get appropriate awareness regarding winter seasonal diseases?					
t		at home	from hospital	at masjid	at hujra	on the occasions of marriages/funerals	Total
How do you got information about causes, prevention and treatments of Asthma	From newspaper	18	13	6	10	11	58
	from radio	21	8	14	10	11	64
	from TV	30	20	12	25	24	111
	from posters/ bnners	23	28	10	16	17	94
	from social media	25	12	16	21	17	91
	from friends/ relatives	25	10	8	19	20	82
Total		142	91	66	101	100	500

How and from where do you got information about causes, prevention and treatments of Itchy skin

Count

		From where you get appropriate awareness regarding winter seasonal diseases?					
		at home	from hospital	at masjid	at hujra	on the occasions of marriages/ funerals	Total
How do you got information about causes, prevention and treatments of Itchy skin	From newspaper	11	11	4	11	12	49
	from radio	25	11	3	12	10	61
	from TV	20	20	11	18	11	80
	from banners/ posters	24	11	8	16	19	78
	from soial media	27	22	17	21	23	110
	from friends/ relatives	35	16	23	23	25	122
Total		142	91	66	101	100	500

How and from do you got information about causes, prevention and treatments of Chest infection

Count

		From where you get appropriate awareness regarding winter seasonal diseases?					
		at home	from hospital	at masjid	at hujra	on the occasions of marriages/ funerals	Total
How do you got information about causes, prevention and treatments of Chest infection	From newspaper	22	10	4	9	13	58
	from radio	20	12	10	14	16	72
	from TV	24	20	13	21	14	92
	from postersbanners	40	26	21	30	23	140
	from social media	21	17	9	17	20	84
	from friends/relatives	15	6	9	10	14	54
Total		142	91	66	101	100	500

The above tables demonstrate the influential sources of information for winter disease in district Bunir of Khyber Pakhtunkhwa. For cold/flue and cough the effective sources of information are TV , posters & banners and social media, while for Asthma seasonal disease is posters & banners, radio, TV and social media. For Itch skin the influential sources of awareness are social media, friends & relatives and radio, whereas, for chest infection , TV, posters and social media and suitable places for information are homes, hujras, masjis and hospitals. The results disclosed that the effective sources of information for winter disease are posters, TV and social media, whereas, effective places are hujras, hospitals, masjids and homes.
The overall results about effective sources of information at the district Bunir are friends & relatives and social media and suitable places of information are majids, hujras and hospitals. The findings supported the hypothesis 2 that interpersonal communication is more effective than other media. The findings also supported the assumption of the two-step flow of communication.

15) DISCUSSION

It was also found that public is mostly unaware about precautionary measures in seasonal diseases because of lack of effective information tools. According to18.8% of the respondents, there were obstacles to get information about seasonal diseases while 17.2% pointed out that the media used for awareness of general masses was not available to them in summer diseases. On the other hand, 31.2% of respondents in the winter diseases answered that the media used for awareness of public was not accessible for them while according to 22.2%, they faced problems to get the information.

The study proved that mainstream media is not an effective source of information for the residents of Buner as compare to interpersonal communication. Majority of

the respondents answered in favor of social media, static media, Hujra and Masjid as compared to Newspaper Radio and TV.

The survey also explored that Opinion leaders are the prime source of information in seasonal diseases than local media. The friends, relatives and for some people teachers were effective source of Information in Seasonal diseases. In pashtoon community Masjid and Hujra are to important places where people frequently get together and discuss their day to day issues.

16) CONCLUSIONS

The weather of Buner remains extremely cold in the months of December, January and up to mid-February. Snow fall on the mountains and fog in the plain areas in the morning is common. The respondents were asked about five winter diseases Cold/flu, Asthma, Itchy skin, Throat infection and Chest infection. According to 25% of the respondents, they suffered from chest infection in winter, 20% of them suffered from cold, cough and throat infection respectively, 09% of them suffered from asthma while 06% of them suffered from itchy skin in the winter.

17) COUGH/COLD

Cough and cold were the most common among the winter diseases in district Buner according to the respondents. 57% of the respondents responded that cough is a bacterial disease while 43% of them responded that cough is a viral disease. 30% of the respondents got information about causes, prevention and treatments of cough from posters/banners, 22% of them got from TV, 13% of them got from social media and friends/relatives, 12% of them got from newspaper, 11% of the got information from radio.

Chest infection is the most common among winter diseases in district Buner according to the respondents. 25.4% respondents suffered from Chest infection. 54% of the respondents responded that cold is bacterial disease while 46% of them responded that cold is a viral disease.41% of the respondents known after x-ray when they suffered from chest infection, 28% of them known after clinical examination, 24% known after feeling pain in chest.

When asked about information regarding causes, prevention and treatment of chest infection, 28% of the respondents responded that they got information about causes, prevention and treatment of chest infection from posters/banners, 18% of them got from TV, 17% of them got from social media, 14% of them from radio, 12% of them got from newspaper while 11% of them got information friends/relatives.

18) ASTHMA

Asthma was also among the most common winter diseases in Buner according to the respondents. 59% of the respondents responded that asthma is a viral disease while 41% of them responded that it is a bacterial disease. Answering to the question that from which source you got informationabout causes, prevention and

treatments of asthma, 22% respondents answered that they have got information about causes, prevention and treatments of asthma from TV, 19% of them got from posters/banners, 18% of them got from social media, 16% of them got from friends/ relatives, 13% of them got from radio while 12% of them got information from newspaper.

19) ITCHY SKIN

Almost 6% respondents suffered from itchy skin.32% of the respondents responded that itchy skin is a disease which spreads due to changing weather, 27% of them responded that it spreads due to dirty water, in the view of 24% of them itchy skin is a viral disease, 16% of them responded that it is a bacterial disease while 0.02% of them responded that itchy skin is an epidemic disease. 24% of the respondents got information about causes, prevention and treatments of itchy skin from friends/ relatives, 22% of them got from social media, 16% of them got from TV and posters/ banners respectively, 12% got from Radio while 10% of them got information from newspaper.

From the above study it is concluded that for 23% respondent's posters and banners were the most effective information source in winter seasonal diseases in district Buner. Social media is also an effective source for 18% respondents. The study also find out that 28.4% of the respondents got appropriate awareness regarding winter seasonal diseases at home, 20% of them got on the occasion of marriage/funerals 20.2% from hujra/community gatherings, 18.2% of them from hospitals and clinics while 13.2% of them got information from Masjid.

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