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HEAT WAVE RELATED KNOWLEDGE, ATTITUDE AND PRACTICES AMONG COMMUNITY

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Abstract

Introduction: Heat stoke is a most serious form of heat injury. It requires medical attention. It is caused by dry skin, a body temperature above 103 to 104 degrees Fahrenheit, sometime person may present unconsciousness. The humidity is a big reason. If you have extremely high temperatures and high humidity, a person will be sweating but the sweat won't be drying on the skin. That's why it's not just heat but the combination of heat and humidity that matters. both temperature and humidity above which we see an increase in death. Heat stoke is described by high temperature E.g: 40C (104F) and neurological dysfunction.

Aim of study: The aim of this study to is to evaluate the knowledge, attitude and practices related to heat wave.

Methodology: Cross sectional study, survey type research model and quantitative data which is obtained through a reliable and valid scales are used in the study. The study will be conducted in Ali Raza abad Community in Lahore, Pakistan. This study will be take approximately 3-4 months, from September 2019 to December 2019. In this study, the questionnaire is adopted from Jing Li (2016). Demographic data consist of 7 questions and other section which is likert scale questionnaire is consist of 13 questions.

Result: the mean score of people knowledge related to heat wave is 1.255. the mean score of people attitude toward heat wave is 2.38. the mean score of people practices toward heat wave is 1.2225.

Conclusion: Studies have found that the impact of heat waves or extremely high temperature on human health are negative. Rural population typically have low level of education and inadequate awareness and are therefore unaware of ways to protect themselves at high temperature.

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1. INTRODUCTION

Tiredness due to severe heat that can cause dizziness, headache and fainting. It can usually be treated with rest, a cool environment and hydrate the person. Heat stoke is a most serious form of heat injury. It requires medical attention. It is caused by dry skin, a body temperature above 103 to 104 degrees Fahrenheit, sometime person may present unconsciousness. The two ways we deal with heat are by perspiring and breathing. The humidity is a big reason. If you have extremely high temperatures and high humidity, a person will be sweating but the sweat won't be drying on the skin. That's why it's not just heat but the combination of heat and humidity that matters. both temperature and humidity above which we see an increase in death. Heat stoke is described by high temperature E.g: 40C (104F) and neurological dysfunction (seizure and impairment of consciousness. Atmospheric heat waves over land are changing under global warming, increasing the risk of severe, and in some cases irreversible impacts on natural and socio-economic system. Similarly, extreme events in the ocean, especially those associated with warming will change under global warming, and they will effect on organisms who lived in ocean. Recently observed marine heat waves (MHWs) demonstrated the high vulnerability of marine organisms and ecosystems services to such extreme climate events. (Frölicher & Laufkötter, 2018)

Black clothing did absorb more heat. Black color is thought to absorb more heat, making you a lot hotter than you need to be. In summer avoid to open the windows and doors at noon it should keep your room cool and also you should be protection from heat waves. The sign and symptoms of heat stoke are headache, dizziness and light headedness, nausea vomiting, hot, red, and dry skin, palpitation, muscle weakness, seizure and unconsciousness. Heat stoke is a serious from the heat injury, and it is a medical emergency. Some medicines can increase the risk of heat stoke because they make harder of your body to stay hydrate and it respond to heat. Some medicines blocks the adrenaline (beta-blockers). Hyperthermia can increase the risk of mortality rate. (Mora et al., 2017).

The evolution of ozone layer (O3) was affected by both increasing ozone depleting substances and greenhouse gases. The chlorine and bromine radicals can then initiate catalytic reaction

cycles which destroy ozone. (Meul, Oberländer-Hayn, Abalichin, Langematz, & Physics, 2015). Green plants gives natural cooling. Green leaves blocks the heating effect of the sun and provide cooling effect. When you go to outside should be used a preventive measure to avoid heatstoke by taking all these steps: drink plenty of water, use sun protection cream or (sun block), wear lightweight cloths, choose light color to wear, and loose fitting cloths, and use a big hat. Don't drink water when you are thirsty, per day use a 1- 1/1.2 liter water it is necessary for your body. Children, older and weaker family member needs more attention then any other.

1.2. Problem Statement

In tropical Africa, Climate change is causing warming. This increase in temperature is expected to continue in the future with a projected global temperature change of around 1.4 °C to 4.8 °C and a regional response of around 2 °C to 6 °C over the Sahel (Sylla et al., 2016). In many regions of the world, hot extremes will become more common and deadly (Gasparrini et al., 2015). These warm events can have widespread impacts on human and natural enviornments, testing local community's adaptive ability and resilience and activities (Ceccherini et al., 2018)

In the summer, most of Pakistan's cities, especially Karachi, Lahore and Multan have begun baking. The deadliest heat wave in Karachi had seen in past few years. Over 1,200 people dead and 40,000 suffering from heat stroke. (Ali, 2019)

1.3. Research question

Identify the heat wave related knowledge, attitude and practice among the Ali Raza Abad community people?

1.4. Significance of study

Significance of this study is to enhance patient knowledge about the heat wave vulnerable impact. Encourage patients to take plenty of fluids in summer to protect against dehydration. Despite the effects of green leaves, trees and green house effects, it helps to prevent from sunrays and make cooling effect in summer. Preventive measures sort from heat prevention and satisfactory lifestyles among at risk of patients to climate adjusted medication treatment to protect against worsen effect. These include architectural agencies to improve the internal temperature (e.g: cover green building

from the rooftops, these measures protect and reduce the effects from sunrays, filters and seals) as well as urban planning measures (e.g: parks and green spaces). (Witt, 2015)

This study is also significant in nursing profession, as nurses help and encourage patients in preventing their disease and preventing sensitive sunrays effects. Nurse's help to educate people about sunlight protective measures such as using hats, sun filters, do not use black suit in summer etc. In addressing climate change, climate justice, and environmental health, the role of nurse is crucial.. Nursing researches must focus on investigating and documenting the relationship between climatic conditions and negative health outcomes as well as nursing efforts to mitigate and adapt to climate changes health effects. Nursing management should engage in local, national, and worldwide efforts to support globally friendly practices in healthcare organizations and proactively consider the role of nursing in the complex health issues and prevention, education, and care of patients dealing with climate related health challenges. (Nicholas, 2017)

1.5. Research purpose

The main purpose of this study is to evaluate the knowledge and attitude of community and enhance their practices about heat wave.

1.6. Research objective

The objective of the study is to check the heat stroke knowledge, attitude and practices and give awareness about heat stroke to the ali raza abad community. Give heat stroke knowledge and enhance ali raza abad community practices. Heat stoke is a serious from the heat injury, and it is a medical emergency. Some medicines can increase the risk of heat stoke because they make harder of your body to stay hydrate and it respond to heat. Some medicines blocks the adrenaline (beta-blockers). Hyperthermia can increase the risk of mortality rate. (Mora et al., 2017).

1.7. Research variables

Independent variables: The independent variables for this study was heat wave.

Dependant variable: The dependant variables for this study was knowledge, attitude and practice.

1.8. Conceptual Definition

Heat wave:

Heat wave is abnormally hot weather lasting in 2-3 days.

1.9. Operational definition

Heat wave:-

Heat wave is a hot weather in prolonged time period.

Chapter 2

LITERATURE REVIEW

The worldwide distribution of research into heat waves and their impact on human health is not constant, and tends to gathering in regions with high levels of resources and income. Furthermore, as a risk associated with heat wave mortality and morbidity, worldwide population density does not match the location of current heat wave and human health studies. Studies in Asia (primarily in China) became prominent after 2010, and by 2016 represented almost 40% of the worldwide studies for that year. (Campbell, Remenyi, White, Johnston, & place, 2018)

A heat wave on sea side is usually defined as a rational area of extreme warm sea surface temperature (SST) that continues for days to months. in 2003 in the northwestern Mediterranean Sea with sea surface temperature (SST) reaching 3–5 °C (Frölicher & Laufkötter, 2018)

The World Health Organization (WHO) recognize the overall health effects of a changing climate as tremendously negative, with areas demonstrating the poorest health arrangement being the slightly able to adapt, prepare and respond to the variety of increased health risks likely in a changing climate. The exposure to heat waves and the related illnesses is a important issue of public health and is considered as a major cause of death in United States. Heat wave is a major issue of public health concern that is characterized by intense hot temperature that last for 3 or more consecutive days. (Khaliq, Sarfaraz, Aamir, Aamir, & Sciences, 2018). Hypohidrosis is a risk factor for developing heat-related illnesses miliaria profunda, a well-recognized cause of hypohidrosis Out of 65 males, 30 consented to participation. One was excluded because an exogenous cause resulted in heat injury. Nine (31%) demonstrated hypohidrosis. Of these, 1 (11%) had miliaria profunda, 2 (22%) had acquired idiopathic generalized anhidrosis and 6 (67%) manifested a new phenotype which we termed acquired symmetrical hypohidrosis (ASH). (Lim, Kok, Ali, Chong, & Tey, 2016)

The major effects of Heat related illness are environmental factor, personal risk factors, and metabolic heat. All work places that are directly exposed to heat that is dangerous for workers. This is the responsibilities of managers they should check the status of workers, such as drinking of alcohol before work, sleeplessness, and dehydration. (Park, Kim, Oh, & medicine, 2017)

An acknowledgement of ozone changes between 1960 and 2000 to increasing greenhouse gases GHGs and ozone depleting substance ODSs, clearly accounting for irregularity. (Meul et al., 2015)

We suggested a new thermoregulation model by considering the role of dehydration in the development of body core temperature during heat stress, which can be used to predict heatstroke at home. Easy-to-use indoor stress index and survival time table were obtained to early recognize and alert the risk of heatstroke. (Deng, Zhao, Liu, Li, & Environment, 2018)

Chapter 3

Methodology

3.1. Study Design: Cross sectional study, survey type research model and quantitative data which is obtained through a reliable and valid scales are used in the study.

3.2. Settings: The study will be conducted in Ali Raza Abad Community in Lahore, Pakistan.

3.3. Duration of Study: This study will be take approximately 3-4 months, from September 2019 to December 2019.

3.4. Target population: The population for this study is the parents of primary school children in community of Ali Raza Abad.

3.5. Sample Size:

n= sample size, N= total population (420), E= margin of error (0.05%)

$n= N/ 1 +N (E)^2$

$n= 420/ 1+ (420) (0.05)^2$

n= 420/ 1+ (420) (0.0025)

n= 420/ 1+1.05

n= 420/ 2.05

n= 204

So, the sample size for this study is 204 according to formula. (Jing Li, 2016)

3.6. Sampling Technique: Random Sampling Technique used for this study.

3.7. Sample Selection:

Inclusion Criteria: both male and female 15 to above 65 year age group.

Exclusion Criteria: mentally retard patients, those who are not willingly participate.

3.8. Equipment: In this study, the questionnaire is adopted from Jing Li (2016). Demographic data consist of 7 questions and other section which is likert scale questionnaire is consist of 13 questions.

3.9. Ethical Consideration

- All Written informed consent attached will be taken from all the participants.
- All information and data collection will be kept confidential.
- Participants will remain anonymous throughout the study.
- The subjects will be informed that there are no disadvantages or risk on the procedure of the study.
- They will also be informed that they will be free to withdraw at any time during the process of the study.
- Data will be kept in under key and lock while keeping keys in hand. In laptop it will be kept under password.

Chapter 4

4.1. Data Analysis

Data analyzed on SPSS version 21.0 frequencies, percentage, mean applied on individual item. Data is collected through questionnaire. Distributed in 195 participants.

Results:-

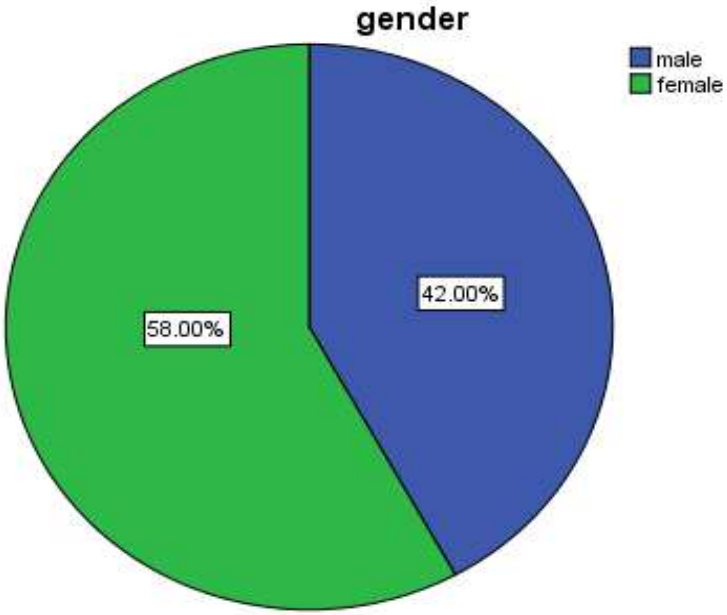
Part-I Demographic Data

1. Gender:-

Table and figure no.1 shows that 42.0% (n=84) are male and 58.0% (n=116) are female.

Gender	F	%
Male	84	42.0
female	116	58.0
Total	200	100.0

Table no.1

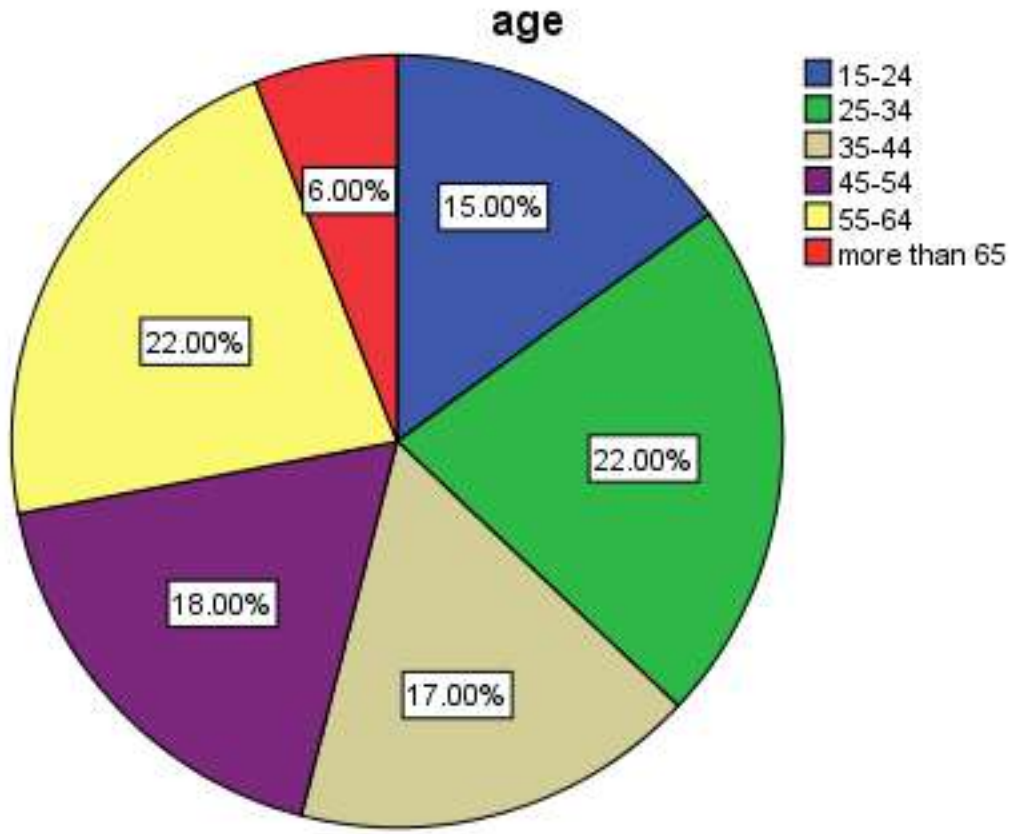


2. Age:-

Table and figure no.2 shows that 15.0% (n=30) age is 15-24 years, 22.0% (n=44) age is 25-34 years, 17.0% (n=34) age is 35-44 years, 18.0% (n=36) age is 45-54 years, 22.0% (n=44) age is 55-64 years, 6.0% (n=12) age is more than 65 years.

Age	**F**	**%**
15-24 years	30	15.0
25-34 years	44	22.0
35-44 years	34	17.0
45-54 years	36	18.0
55-64 years	44	22.0
More than 65 years	12	6.0
Total	200	100.0

Table No.2

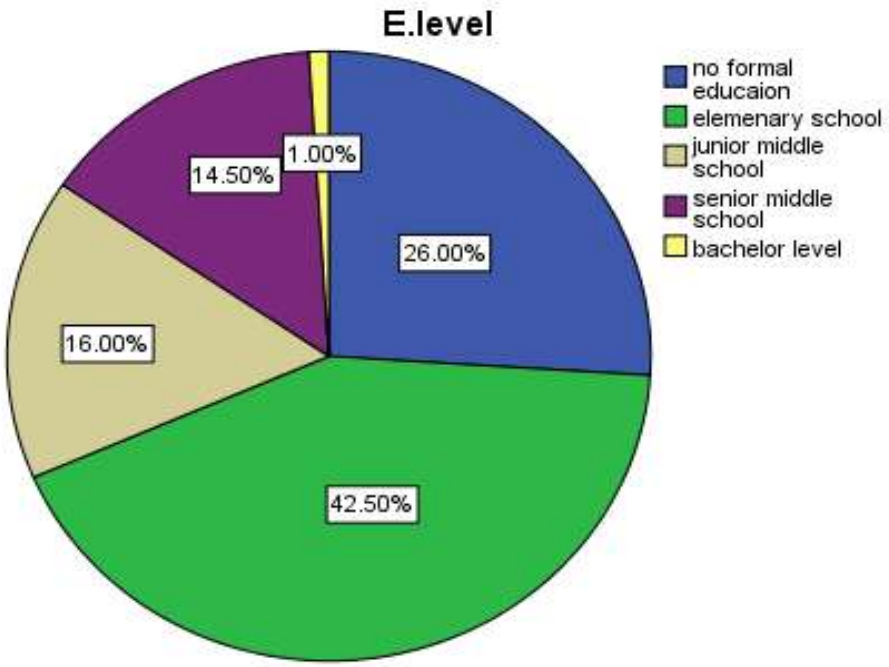


3. Education Level:-

Table and figure no.3 shows that 26.0% (n=52) were no give formal education, 42.5% (n=85) were studied in elementary school, 16.0% (n=32) were studied junior middle school, 14.5% (n=29) were studied in senior middle school, 1.0% (n=2) were studied in bachelor level.

Education	**F**	**%**
No formal education	52	26.0
Elementary school	85	42.5
Junior middle school	32	16.0
Senior middle school	29	14.5
Bachelor level	2	1.0
Total	200	100.0

Table No. 3

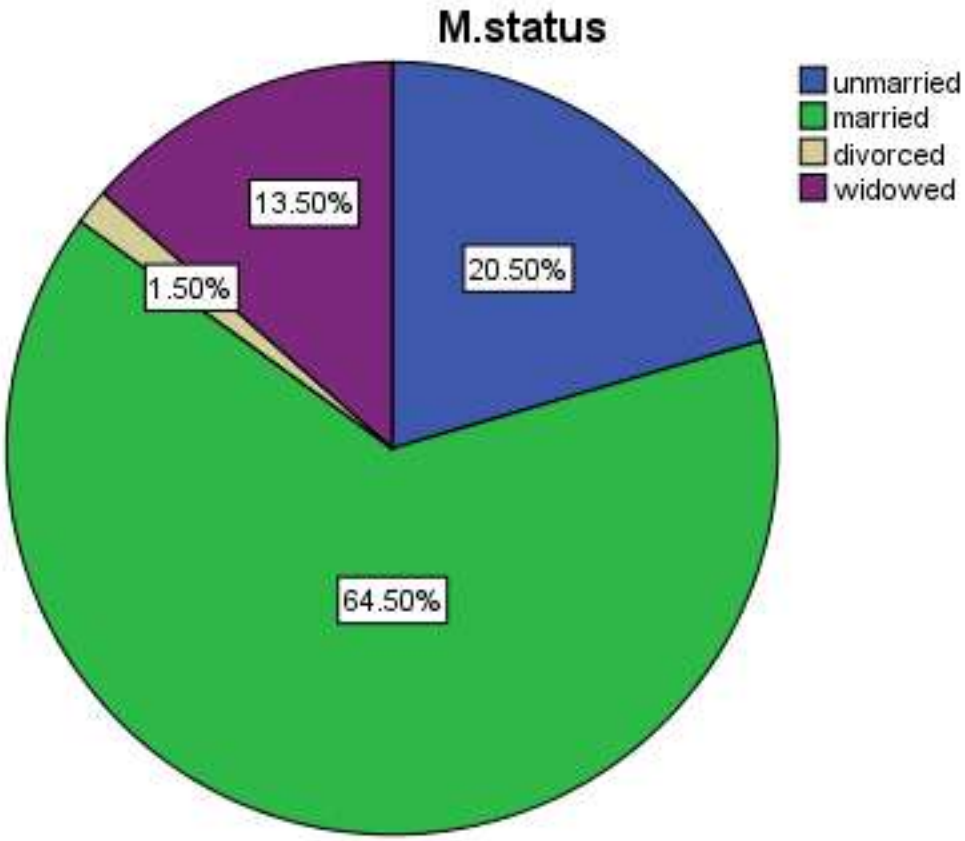


4. Marital status:-

Table and figure no.4 shows that 20.5% (n=41) were unmarried, 64.5% (n=129) were married, 1.5% (n=3) were divorced, 13.5% (n=27) were widowed.

Marital status	**F**	**%**
Unmarried	41	20.5
Married	129	64.5
Divorced	3	1.5
Widowed	27	13.5
Total	200	100.0

Table No. 4

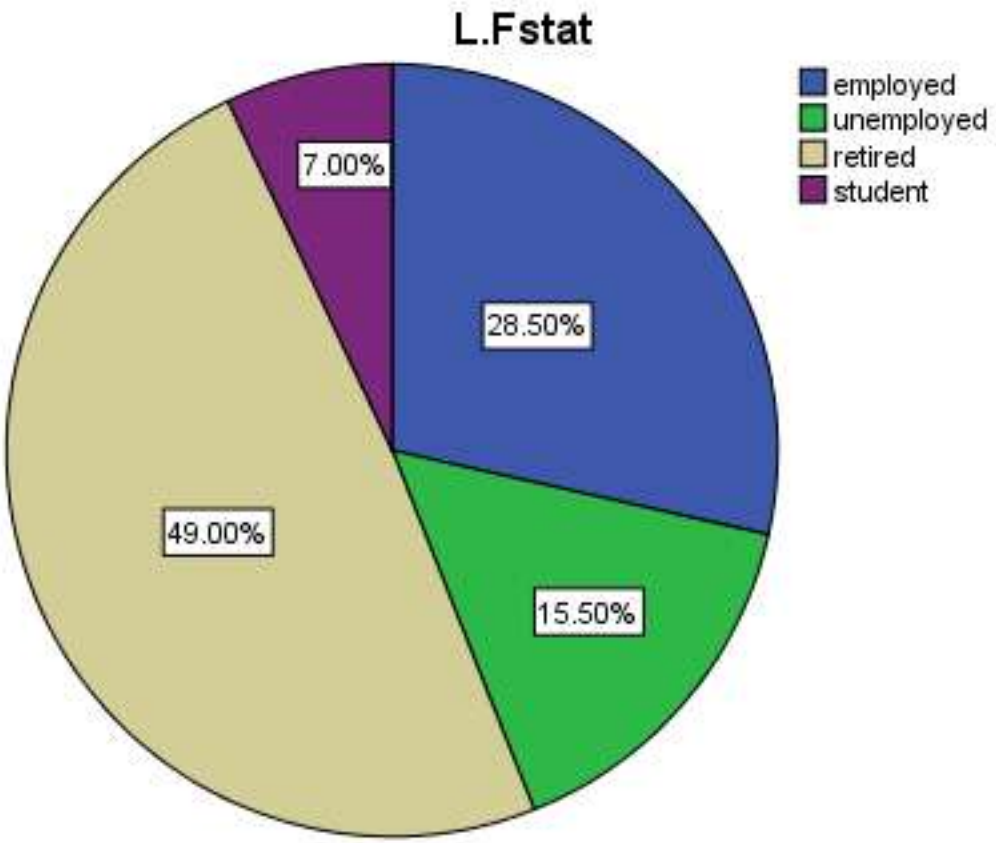


5. Labor force status:-

Table and figure no.5 shows that 28.5% (n=57) were employed, 15.5% (n=31) were unemployed, 49.0% (n=98) were retired, 7.0% (n=14) were students.

Labor force status	**F**	**%**
Employed	57	28.5
Unemployed	31	15.5
Retired	98	49.0
Student	14	7.0
Total	200	100.0

Table No. 5

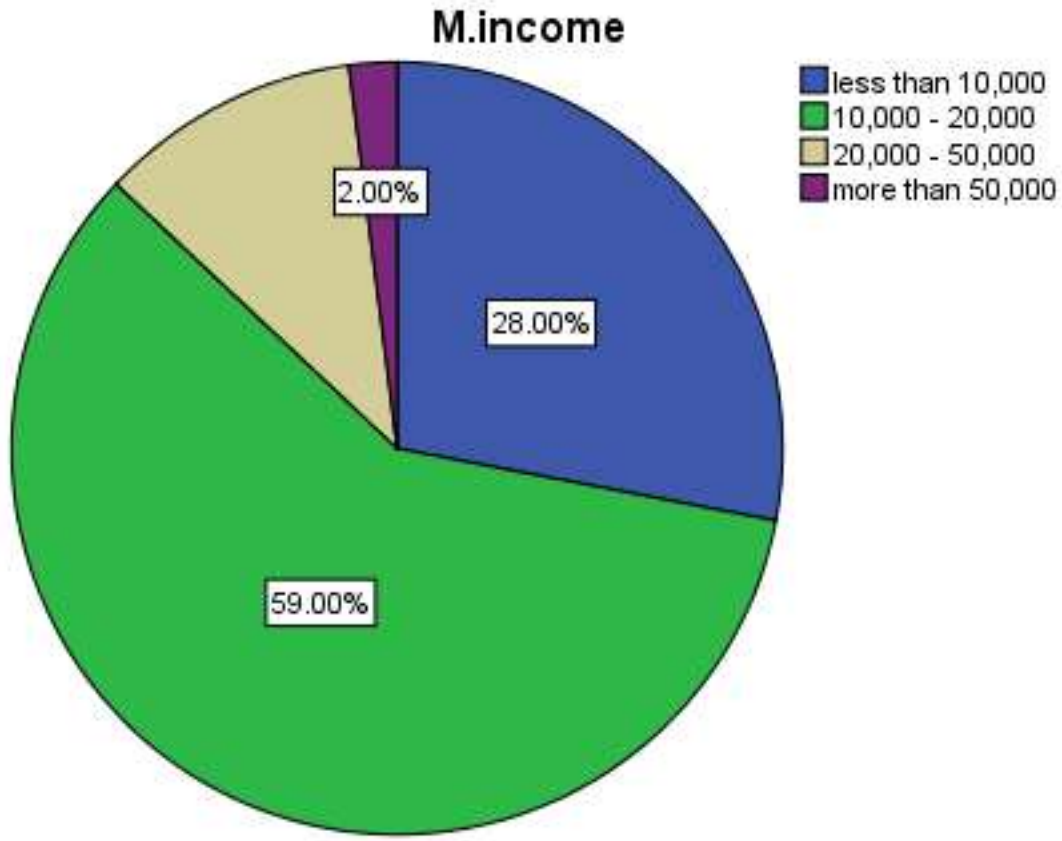


6. Monthly Income :-

Table and figure no.6 shows that 28.0% (n=56) income is less than 10.000, 59.0% (n=118) income is 10,000-20,000, 11.0% (n=22) income is 20,000-50,000, 2.0% (n=4) income is more than 50,000.

Monthly Income	**F**	**%**
Less than 10,000	56	28.0
10,000- 20,000	118	59.0
20,000- 50,000	22	11.0
More than 50,000	4	2.0
Total	200	100.0

Table No.6

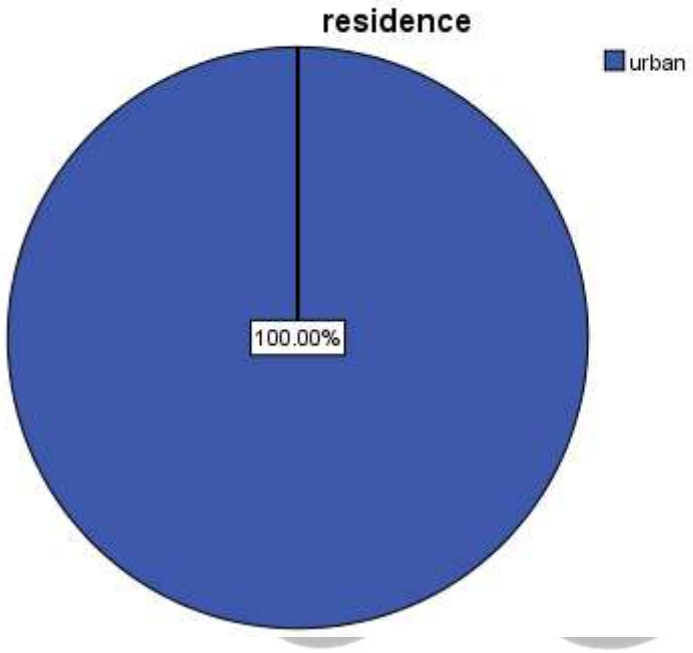


7. Residence:-

Table and figure no.7 shows that 100% (n=200) were rural.

Residence	**F**	**%**
Rural	200	100.0

Table No.7



Part II

8. Section No. 1:

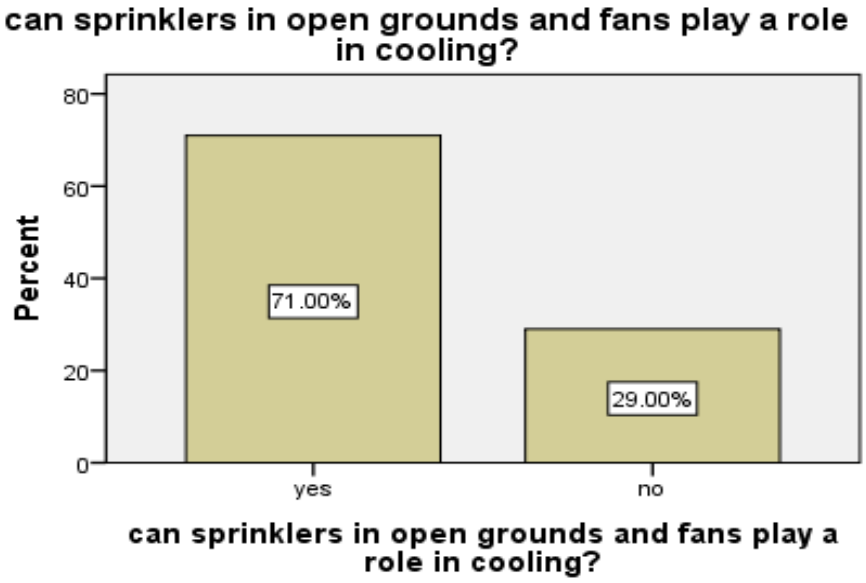
This section checked people knowledge related to heat wave.

Table No.8 shows that people answered their questions related to heat wave. Can sprinklers in open grounds and fans play a role in cooling? 71.0% (n=142) answered yes, 29.0% (n=58) answered no. If you wear dark clothes, will you feel cool in summer? 23.5% (n=47) answered yes, 76.5% (n=153) answered no. should windows and doors be opened at noon on hot days? 87.5% (n=175) answered yes, 12.5% (n=25) answered no. Are fever, fatigue, and chest tightness common symptoms of heat stoke? 92.0% (n=184) answered yes, 8.0% (n=16)

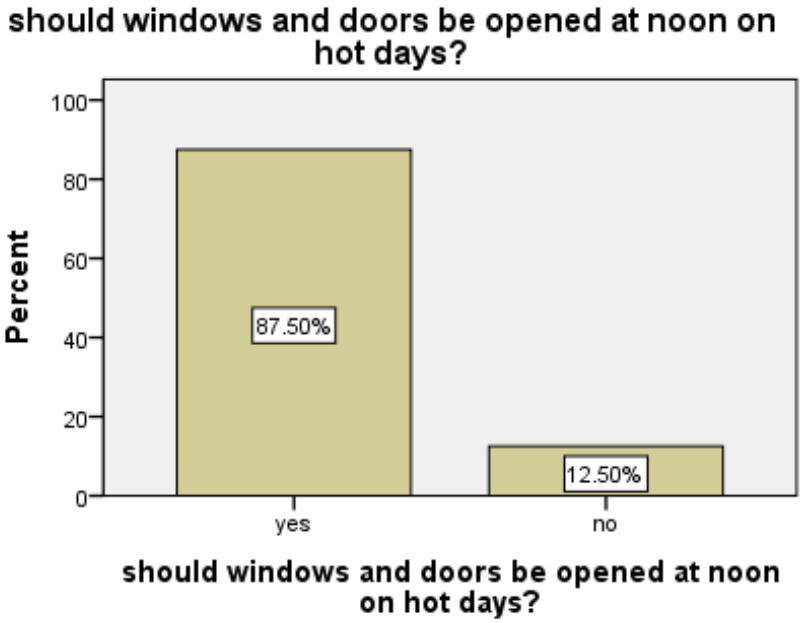
answered no. Can some medicines increase the risk of heat stroke? 92.5% (n=185) answered yes, 7.5% (n=15) answered no. Can death be caused by high temperature? 84.5% (n=169) answered yes, 15.5% (n=31) answered no. Is the greenhouse effect mainly caused by the depletion of ozone layer? 53.0% (n=106) answered yes, 47.0% (n=94) answered no. Can green plants play a role in cooling? 94.0% (n= 188) answered yes, 6.0% (n=12) answered no. the overall mean score is 1.255

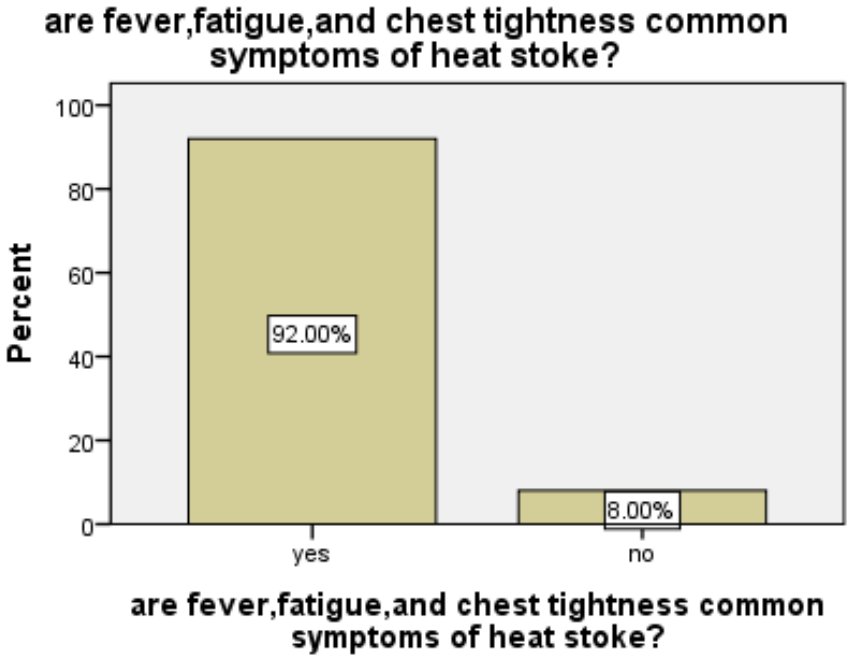
Sr.no	**Statements**	**Yes**		**No**		**Mean**
		F	**%**	**F**	**%**	
1.	Can sprinklers in open grounds and fans play a role in coolin?	142	71.0	58	29.0	1.29
2.	If you wear dark clothes, will you feel cool in summer?	47	23.5	153	76.5	1.77
3.	Should windows and doors be opened at noon on hot days?	175	87.5	25	12.5	1.13
4.	Are fever, fatigue, and chest tightness common symptoms of heat stoke?	184	92.0	16	8.0	1.08
5.	Can some medicine increase the risk of heat stroke?	185	92.5	15	7.5	1.08
6.	Can death be caused by high temperature?	169	84.5	31	15.5	1.16
7.	Is the greenhouse effect mainly caused by the depletion of ozone layer?	106	53.0	94	47.0	1.47
8.	Can green plants play a role in cooling?	188	94.0	12	6.0	1.06

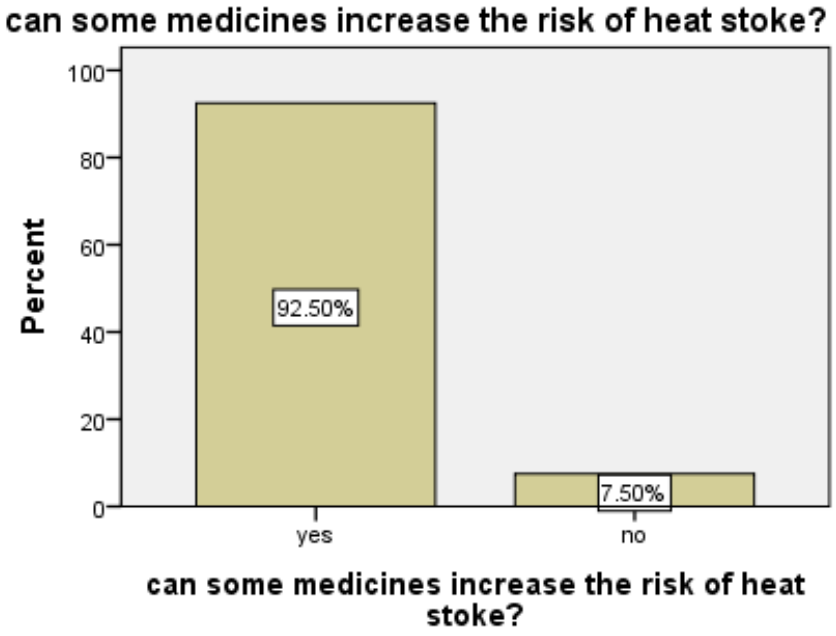
Table No.8

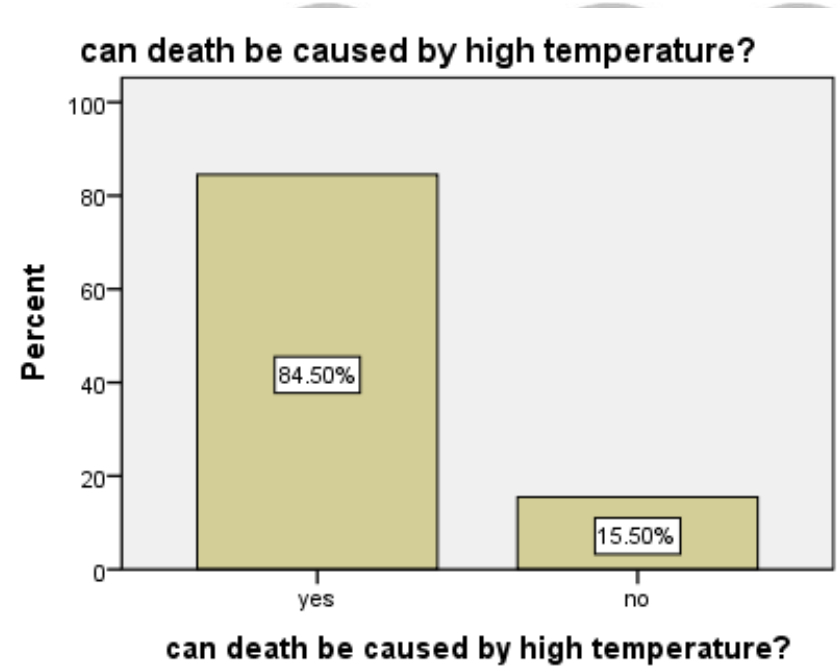

can sprinklers in open grounds and fans play a role in cooling?
Percent
80
60
40
20
0
71.00%
29.00%
yes
no
can sprinklers in open grounds and fans play a role in cooling?

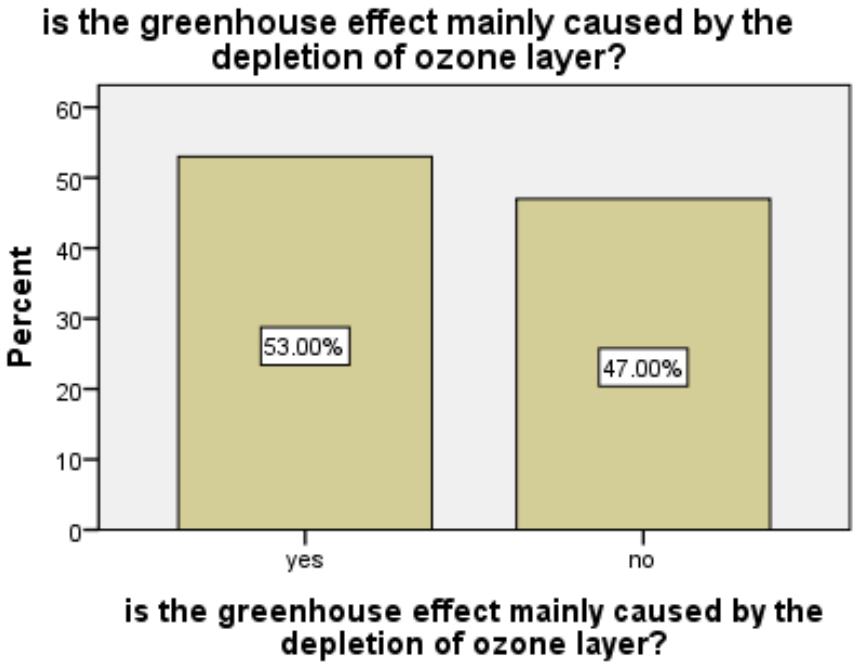

if you wear dark clothes,will you feel cool in summer
Percent
80
60
40
20
0
23.50%
76.50%
yes
no
if you wear dark clothes,will you feel cool in summer

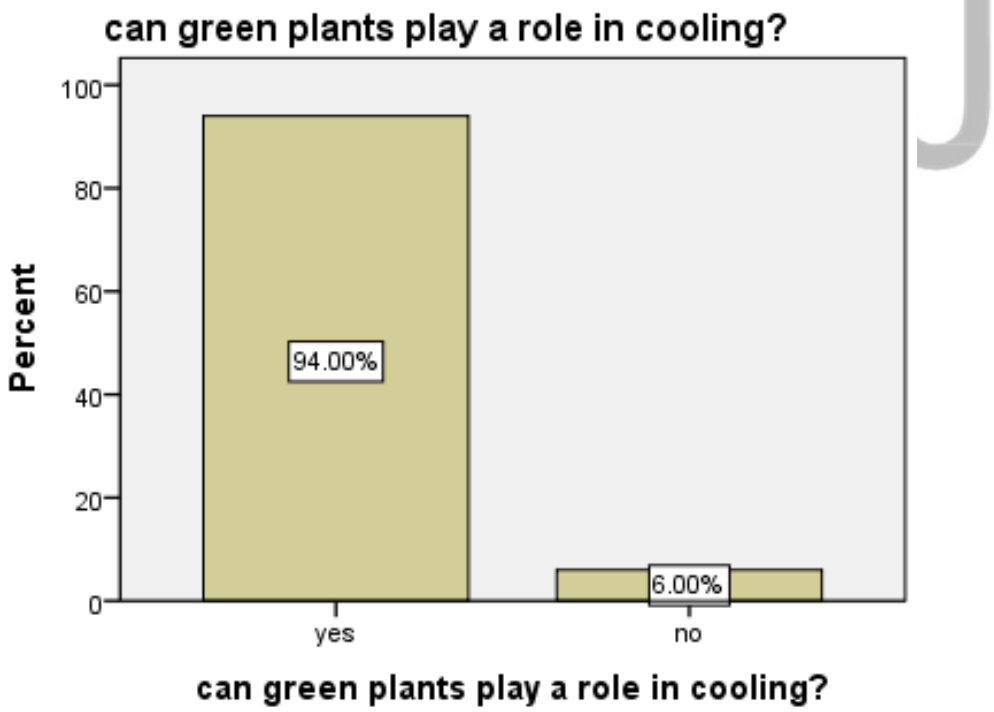

should windows and doors be opened at noon on hot days?
Percent
100
80
60
40
20
0
87.50%
12.50%
yes
no
should windows and doors be opened at noon on hot days?


are fever,fatigue,and chest tightness common symptoms of heat stoke?
Percent
100
80
60
40
20
0
92.00%
8.00%
yes
no
are fever,fatigue,and chest tightness common symptoms of heat stoke?


can some medicines increase the risk of heat stoke?
Percent
100
80
60
40
20
0
92.50%
7.50%
yes
no
can some medicines increase the risk of heat stoke?


can death be caused by high temperature?
Percent
100
80
60
40
20
0
84.50%
15.50%
yes
no
can death be caused by high temperature?


is the greenhouse effect mainly caused by the depletion of ozone layer?
Percent
60
50
40
30
20
10
0
53.00%
47.00%
yes
no
is the greenhouse effect mainly caused by the depletion of ozone layer?


can green plants play a role in cooling?
Percent
100
80
60
40
20
0
94.00%
6.00%
yes
no
can green plants play a role in cooling?

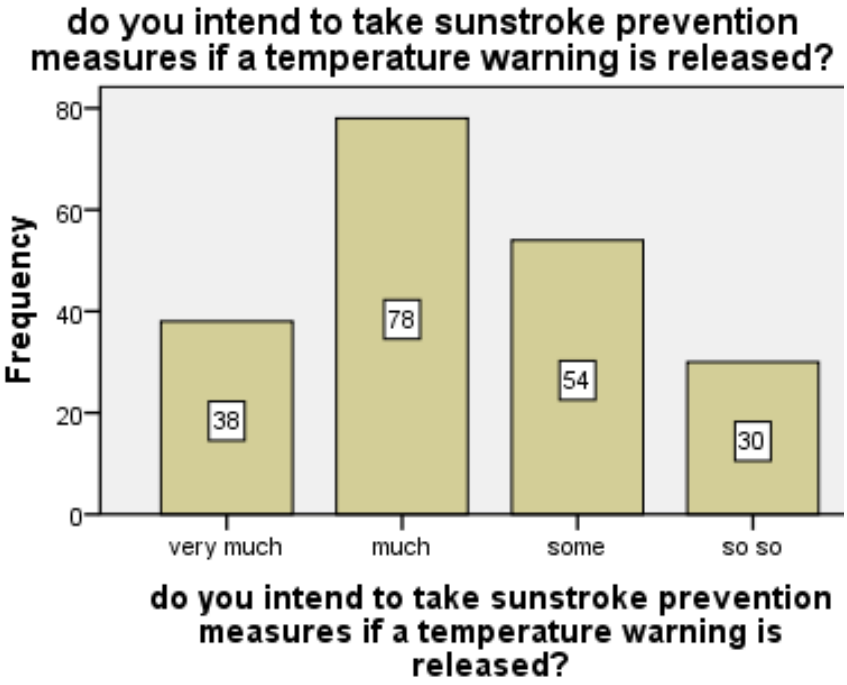
9. Section No.2

In this section checked people attitude toward heat wave

Table no.9 shows that people answered their questions related to their attitude toward heat wave. Do you intend to take sunstroke prevention measures if a temperature warning is released? 19.0% (n=38) answered very much, 39.0% (n=78) answered much, 27.0% (n=54) answered some, 15.0% (n=30) answered so so. So the overall mean is 2.38.

Sr.no	Statement	Very much		Much		Some		So so		Mean
		F	%	F	%	F	%	F	%	
1.	Do you intend to take sunstroke prevention measures if a temperature warning is released?	38	19.0	78	39.0	54	27.0	30	15.0	2.38

Table No.9



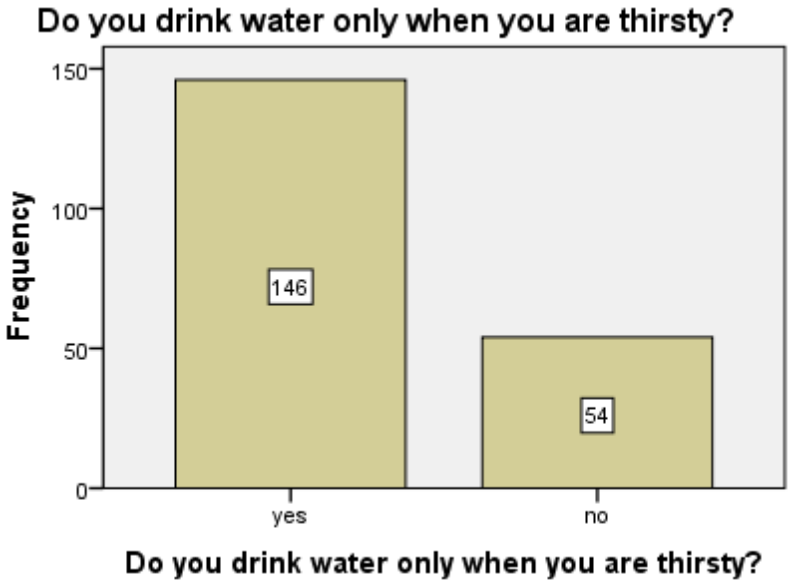
10. Section No.3

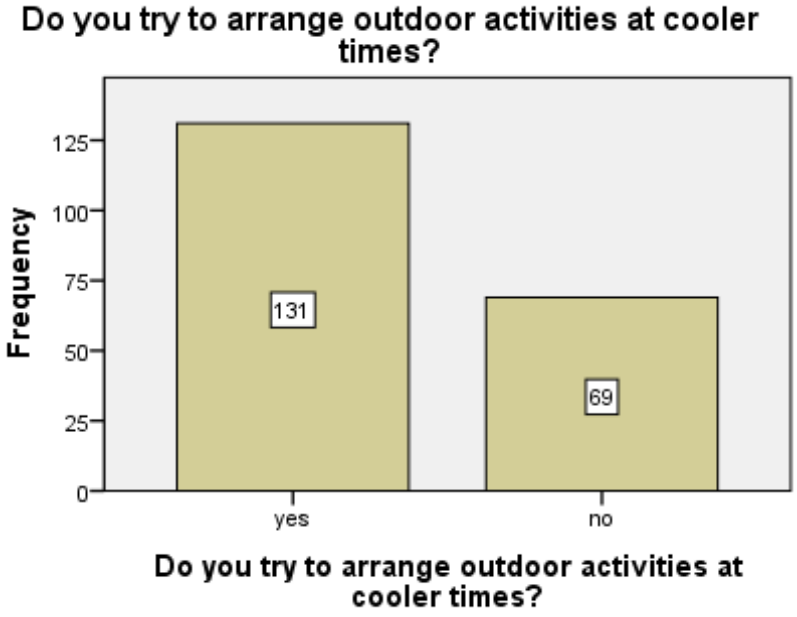
In this section checked people practices toward heat wave

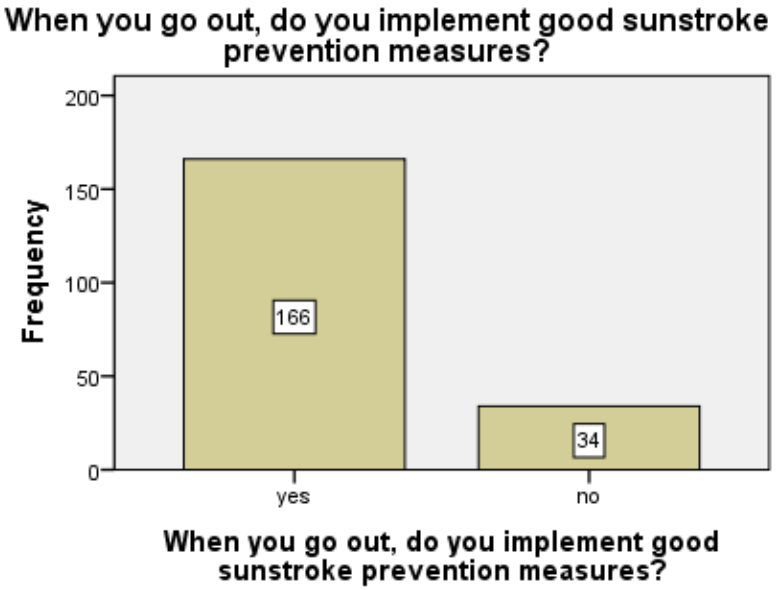
Table no.10 shows that people answered the questions related to their practices toward heat wave. Do you drink water only when you are thirsty? 73.0% (n=146) answered yes, 27.0% (n=54) answered no. do you try to arrange outdoor activities at cooler times? 65.5% (n=131) answered yes, 34.5% (n=69) answered no. when you go out, do you implement good sunstroke prevention measures? 83.0% (n=166) answered yes, 17.0% (n=34) answered no. Do you pay more attention to the elderly, children, or weaker family members? 90.0% (n=180) answered yes, 10.0% (n=20) answered no. so the overall mean is 1.2225

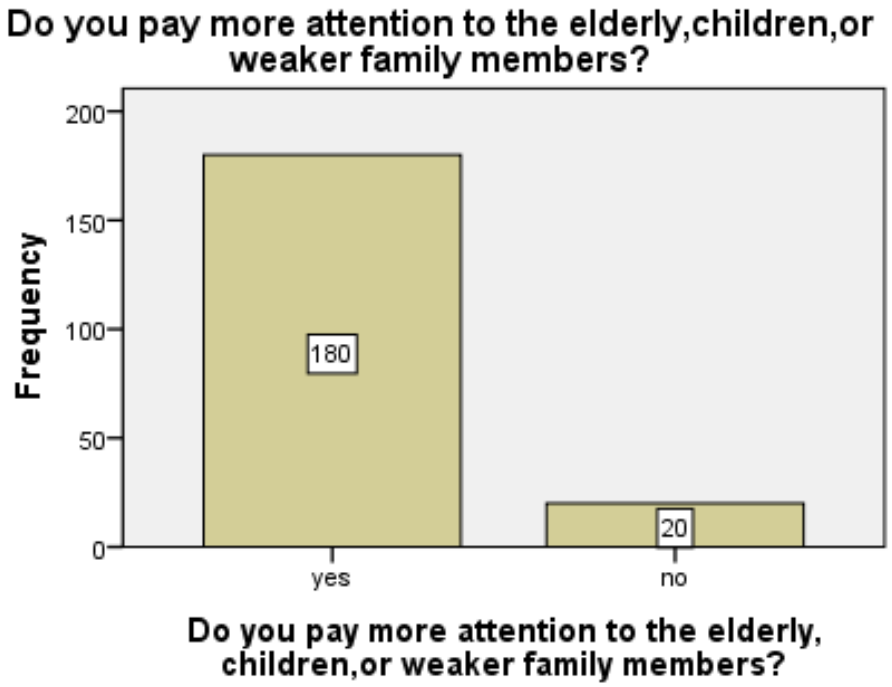
Sr.no	Statements	Yes		No		Mean
		F	%	F	%	
1.	Do you drink water only when you are thirsty?	146	73.0	54	27.0	1.27
2.	Do you try to arrange outdoor activities at cooler times?	131	65.5	69	34.5	1.35
3.	When you go out, do you implement good sunstroke prevention measures?	166	83.0	34	17.0	1.17
4.	Do you pay more attention to the elderly, children, or weaker family members?	180	90.0	20	10.0	1.10

Table No. 10




Do you try to arrange outdoor activities at cooler times?
Frequency
125
100
75
50
25
0
131
69
yes
no
Do you try to arrange outdoor activities at cooler times?


When you go out, do you implement good sunstroke prevention measures?
Frequency
200
150
100
50
0
166
34
yes
no
When you go out, do you implement good sunstroke prevention measures?



Chapter 5

5.1. Discussion

This study is conducted through rural area of Pakistan to check the people knowledge, attitude and practices about heat wave. (Likert scale) questionnaire is used to conducted data. According to formula sample size is 200. Total 42.0% male and 58.0% female were participate. The age of participants were 15.0% was 15-24 years, 22.0% was 25-34 years, 17.0% was 35-44 years, 18.0% was 45-54 years, 22.0% was 55-64 years, 6.0% was more than 65 years old. 26.0% were uneducated, 42.5% were studied elementary school, 16.0% were studied junior middle school, 14.5% were studied senior middle school, and 1.0% studied bachelor level. The main focus of this study is analysis of community perception about heat wave and enhances their practices to prevent from heat stroke. Knowledge about heat wave it is consist of 8 questions. 71.0% people said yes about the sprinklers in open grounds and fans play a role in cooling, and 29.0% said no. 23.5% said wearing dark cloths in summer feel cool in summer rather than 76.5% said no. 87.5% said windows and doors should be opened at noon in summer it gives to cooling effect in summer rather than 12.5 said no. 92.0% said fever, fatigue and chest tightness are the common symptoms of heat

stroke, but 8.0% said no this is not a symptoms of heat stroke. 92.5% said some medicine increase the risk of sun stroke, but 7.5 said no. 84.5% said increased temperature can caused death, but 15.5 said no. 53.0% said greenhouse effect are the mainly caused of depletion of ozone layer, but 47.0% said no. 94.0% said green plants play a important role in cooling, but 6.0% said no. attitude toward heat wave it consist of one question. 19.0% said they take sunstroke prevention measures very much, if temperature warning is released, 39.0% said much, 27.0% said some, 15.0% said so so. Practices toward heat wave it is consist of 4 questions. 73.0% said they drink water only when they are thirsty, 27.0% said they drink water every 1 and ½ hours in their daily practices. 65.5% said they arrange outdoor activities at cooler times in summer, 34.5% said no. 83.0% said when they go out, they implement good sunstroke preventive measures, 17.0% said no they no implemented preventive measures. 90.0% said they pay more attention to elderly, children, or weaker family members. 10.0% said no.

5.2. Limitation

The limitation of this study is to focus on to prevent from sunstroke, use preventive measures. Time duration for this study is 3 months. The study design use is cross sectional. Closed ended questions related to topic are used.

5.3. Conclusion

This research is conducted across Pakistan's rural area to track people's knowledge, behavior, and heat wave practices. Studies have found that the impact of heat waves or extremely high temperature on human health are negative. Rural population typically have low level of education and inadequate awareness and are therefore unaware of ways to protect themselves at high temperature.

CONSENT FORM

Description of the Research and Your Participation

You are invited to participate in a research study conducted by iram Jalal. The purpose of this research is to evaluate the "Knowledge, Attitude and practices of heat wave".

Risks and Discomforts
Mention if there will be any known risks associated with this research.

Potential Benefits
Mention if there will be benefits to the participant that would result from their participation in this research.

Protection of Confidentiality
We will do everything we can to protect your privacy. Your identity will not be revealed in any publication resulting from this study.

Voluntary Participation
Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate any time. You will not be penalized in any way should you decide not you participate or to withdraw from this study.

CONSENT

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Participant's Signature _____ Date: _____

A copy of this consent form should be given to the participant.

تحقیق میں شرکت کا دعوت نامہ

عنوان:

نقصانات اور تکلیف: اس تحقیق سے کسی قسم کے نقصان یا تکلیف کا اندیشہ نہیں ہے ۔

ممکنہ فوائد: آپکو ایک اہم تحقیق میں حصہ لینے کا موقعہ دیا جائے گا۔

رازداری کا تحفظ: ہم آپ کی معلومات کے تحفظ کے لیے وہ سب کچھ کریں گے جو ہم کر سکتے ہیں۔ تحقیق کے متعلق اکٹھی کیی گیی تمام معلومات کو انتہا ئی خفیہ رکھا جاے گا۔ ڈیٹا انٹری اور تجزیے کے دوران آپ کے متعلق وہ تمام معلومات جن سے آپ کی شناخت ہو سکتی ہو کو ختم کر دیا جاے گا۔ اس تحقیق کے نتیجے میں شائع ہونے والی کسی بھی اشاعت میں آپ کی شناخت کو ظاہر نہیں کیا جاے گا۔

رضاکارانہ شمولیت: اس تحقیقی مطالعہ میں آپ کی شرکت رضاکارانہ ہے۔ آپ کو شرکت نہ کرنے اور کسی بھی وقت پغیر وجہ بتانے اس تحقیق میں شمولیت کو چھوڑنے کا اختیار ہے۔ شرکت نہ کرنے یا اس میں شمولیت کو چھوڑنے کی صورت میں آپ کے خلاف کوئی کاروایی نہیں کی جاے گی

درجذیل معلومات تحقیق میں شامل ہونے والوں کے لیے پڑھیں اور ان کا جواب دیے گیے خانوں میں درج کریں

- ☐ میں نے معلوماتی شیٹ جو کہ تحقیق کی وضاحت کر رہی ہے کو سمجھ لیا ہےاورمجھے تحقیق کے سوالات کرنے کا موقع دیا گیا تھا۔
- ☐ میں سمجھ گیا/گیی ہوں کہ میری شرکت رضاکارانہ ہے اور یہ کہ میں کسی بھی وقت اپنا ارادہ بدل سکتا/سکتی ہوں اور تحقیق سے دستبردار ہو سکتا/سکتی
- ☐ میں سمجھ گیا/گیی ہوں کہ میرے جوابات خفیہ رکھے جاءیں گے۔ میں محقیقین کو اس بات کی اجازت دیتا/دیتی ہوں کے وہ جوابات کو جانچ سکیں۔
- ☐ میں سممجھ گیا/گی ہوں کے معلومات میرے نام کے بجاے نمبر کی صورت میں محفوظ کی جائیں گی۔ تا کہ میں نتائج کی اشاعت کے دوران کسی بھی طرح سے شناخت نہ کیا جا سکوں۔ میں اس بات سے رضامند ہوں کے جو معلومات مجھ سے لی جائہیں گی وہ تحقیق میں استعمال ہوں گی۔
- ☐ میں اوپر بتایی گی تحقیق میں شامل ہونے کے لیے رضامند ہوں اور محقیقین کو اپنا پتہ تبدیل ہونے کی صورت میں مطلع کروں گا/گی۔

رضا مندی:میں نے یہ اجازت نامہ پڑھا ہے اور مجھے سوال پوچھنے کا موقع دیا گیا ہے۔ میں اس سٹڈی میں شرکت کے راضی ہوں۔

شرکت کنندہ کا نام _____ دستخط _____ تاریخ _____

اجازت لینے والے کا نام _____ دستخط _____تاریخ _____

اس اجازت نامہ کی ایک نقل آپکو دی جانی چاہے۔

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