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KNOWLEDGE OF SCABIES AMONG THE WOMEN OF A RURAL COMMUNITY AT LAHORE

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Keywords
Scabies, Knowledge of Scabies, Women of Gajumata Community Lahore.

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Abstract

Background: *scabies is endemic in most of the mountainous areas of Pakistan, the crowded and unhygienic conditions in IDP camps immediately after the earthquake was the ideal environment for a full blown outbreak of epidemic proportions.*

Objective: *The purpose of this study was to assess Knowledge of scabies among the women of a rural community at Lahore.*

Methodology: *Descriptive cross study design was conducted to assess Knowledge of scabies among the women and a sample size of n=75 participants were selected for this study through convenient sampling. Data was collected from the women at Gajumata community Lahore.*

Result: *The main findings were as following. 93.3% of the participants knew that scratching effect causes to Scabies, 73.3% had knowledge that Skin is the main affected organ involved in scabies and 86.7% had knowledge that itching at night and feeling heat is the main sign of scabies*

Conclusion: *The purpose of this study was to assess Knowledge of scabies among women at Gajumata in Lahore. Overall result shows a good knowledge among women of Gajumata community.*

INTRODUCTION

Scabies is a parasitic skin infestation caused by the mite Sarcoptes scabiei var hominis. It occurs worldwide, and as many as 300 million people may be affected. [1] Scabies infestation occurs in people of both sexes and all ages irrespective of ethnic group or socioeconomic status, being most common in conditions of overcrowding, poverty and poor hygiene (Sule, Hassan, Gyang, & Yakuba, 2015)

One study conducted in Pakistan reported almost 7% morbidity due to skin and eye infection in children reporting to health facilities. Even though scabies is endemic in most of the mountainous areas of Pakistan, the crowded and unhygienic conditions in IDP camps immediately after the earthquake was the ideal environment for a full blown outbreak of epidemic proportions. With the dismantling of most of the camps, the population moved back to their respective villages. With living conditions similar to those in the camps, an absence of essential utilities like water and proper sanitation, and peculiar weather conditions, scabies has spread in practically every village from all three tehsils of Mansehra (Mumtaz, Zafar, & Mumtaz, 2014)

Skin related epidemics are the causes of 14%of all contagious diseases in India. Among all contagious skin diseases scabies accounts for 28%. Scabies is most prevalent in Bihar, Assam & Orissa states. In fact scabies is not a lethal illness timely prevention and management of the problem are the vital

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interventions need to be carried out to avoid further spread (Patrick, Patel, & Fenwick, 2007).

The term Scabies was derived from the Latin word "Scabere" which means "to scratch". This is colloquially called as seven year itch. It is a contagious skin infection that occurs among human and other animals. It has been classified by WHO as a water related disease because it is caused by a tiny and usually not directed visible parasite. The mite Sarcoptes Scabei, which burrows under the host's skin. This usually causes intense allergic itching. The infection in animals caused by different but related mite species is called Sarcoptes Mange.

The disease may be transmitted from objects but is most often transmitted by direct skin to skin contact. Initial infection requires 4-6 weeks to become symptomatic. Crusted Scabies previously known as Norwegian scabies is a more severe form of the infection often associated with immunosuppression

The morbidity statistics of scabies peaks among children especially among infants and school age and among those residing at slums. In our country the environmental barriers such as high population density, lack of environmental sanitation, contamination of water and soil etc... plays a major role behind the occurrence of scabies. Lack of public awareness and even poor economic and educational background also raises the amplitude of this health burden. Eradication of this health problem is not an easy task but a lot of ventures can be done by the department of health to establish a better preventive and promotive health care to protect the vulnerable population.[2]

Buehlmann M, Strub C, Bircher A et al; conducted a study in Basel; Switzrland. They investigated the outbreak of scabies in an intensive unit of university hospital to establish effective control measures against the transmission of scabies. The result showed that children with in a mean age of 3.1 years were mostly affected. A total of 1,640 exposed individuals underwent preemptive treatment. The study concluded that crusted scabies resulted in high attack rates among household contacts. Timely institution of hygienic precautions with close monitoring is essential for control of an outbreak (Buehlmann et al., 2009)

Patel J K, Vyas A P, Berman B et al; conducted a clinical study among the children up to the age of 14 in the west part of India. There were a total of 390 boys and 310 girls. They found that the majority of skin conditions are transient. The most common dermatosis found were having infectious etiology (38.43%). Incidence of Scabies was (5.32%), Impetigo (11.13%) and pyoderma (8.9%). They were the most prevalent dermatosis found in the study (Patel, Vyas, Berman, & Vierra, 2010)

Strong M and Johnstone P published an article in the Dermatology therapy journal. The article describes that the prevalence of scabies in more the areas of poor sanitation, overcrowding and social disruption and is endemic in many resource poor countries. The global prevalence of scabies is estimated at 300 million cases but the level of infection varies between countries and communities the infection can spread from person to person through skin contact including sexual contact. The problem is more prevalent in developing countries like India, Bangladesh, Sri Lanka etc... Timely preventive measures need to be carried out as emergency interventions (Strong & Johnstone, 2011).

Hay R J, Steer A C, Walton S et al; conducted a study in international child health university of Melbourne, Australia. This study reviewed the current position of scabies with regard to its complications and control in resource poor countries. The study found that scabies remains one of the commonest skin diseases seen in developing countries. This condition affects families. It has greatest impact on young children. The infection is associated with secondary bacterial infection caused by Group A Streptococci and Staphylococcus Aureus. The burden of disease is compounded by Nephritis, Rheumatic fever and Sepsis in developing countries (Hay, Steer, Engelman, & Walton, 2012).

Mohan K, Ravi C N, Singh C conducted a population based study in Indian state Tamil Nadu to assess the knowledge of public regarding Scabies and its management. They also analysed the attachment of the victims towards various scabies treatment strategies. They found that among 1260 samples only 20.6% had adequate knowledge regarding scabies and its management. Around 14.56 % individuals had previous exposure to scabies. 33.4% of the samples wrongly reported that scabies is a non curable disease. They realised that around 46.7% victims are currently following appropriate

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anti - scabies prophylaxis that includes allethrin, permethrin and ivermectin. The researchers concluded that rural communities require more information and education regarding skin related contagious diseases and their management measures (Rana et al., 2007)

Rathi SK, Rathi HS, Lakhani H et al; conducted a study to assess the Awareness about scabies among general medical practitioners of Karachi, Pakistan. A pre-tested questionnaire survey was conducted among 200 general practitioners through a cross-sectional study design and a descriptive analysis was performed. Present study showed that a substantial number of general practitioners have inadequate knowledge regarding causative organism of scabies. If responding correctly to 75% of questions asked, is taken as the criterion for satisfactory awareness, only 36% of general practitioners had a satisfactory level of awareness. There was no effect of increasing age or years of experience on the level of awareness. The study concluded that there is a general lack of knowledge regarding various aspects of scabies among general practitioners. Therefore, active intervention is required to improve their awareness (Zeba, Shaikh, Memon, & Khoharo, 2014).

Lapeere H, Brochez L, De Weert J et al; conducted a survey among general practitioners and dermatologists in the region of Ghent, Belgium, to explore their knowledge on scabies. Information on the treatment advice given and the frequency of reporting scabies to the Health Inspection was also collected. The scores on the knowledge test were of an acceptable level in both general practitioners and dermatologists (median score 59% and 79% respectively). The study found that profession (dermatologist versus general practitioners), the number of years of experience and the estimated number of scabies patients per year had a significant effect on this score. Permethrin cream, currently regarded as the standard treatment, is prescribed as the only treatment for scabies by half of the general practitioners and dermatologists. Almost 50% of the general practitioners and dermatologists indicated they rarely or never report scabies to the health Inspection (Lapeere, Naeyaert, De WEERT, De Maeseneer, & Brochez, 2008)

Dependent variable:

Knowledge level of Mothers regarding Scabies in children

Independent variables:

Age, gender, educational status, exposure to previous educational programme on scabies, family history of scabies etc...

Problem statement:

Research Problem:

Scabies occurs worldwide, and as many as 300 million people may be affected. It is also very common in Asian Countries such as India and Pakistan. Among all contagious skin diseases scabies accounts for 28% in India. Lack of Knowledge, attitude and poor practices makes the conditions worse. Therefore it needs to be solved in terms of giving awareness to the community people.

Significance of the study:

The disorders of skin usually create more psychological discomforts among the patients associated with body image disturbances. These problems affect the self-concept and esteem of a person. The impact of skin related contagious diseases are worsening in our country day by day. India holds the 7th position among the countries with highest prevalence of scabies in the world. Approximately 25 million of Indian population is affected by this health burden.

The global prevalence of scabies is estimated at 300 million cases but the level of infection varies between countries and communities. The infection can spread to person to person through direct skin contact including sexual contact. It also has greatest impact on young children the burden of disease is compounded by nephritis, rheumatic fever and sepsis in developing countries.

Purpose and objectives:

To assess the knowledge Level of Scabies among Mothers about Scabies at Gajumata community of Lahore

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Research questions:
What is the knowledge Level of Scabies among Mothers about Scabies at Gajumata community of Lahore

Keywords:
Scabies, Knowledge of Scabies, Mothers' Knowledge of Scabies, Rural community of Lahore

Methodology
Study design:
Quantitative Descriptive study design was used in this research to assess the Knowledge of Scabies among the Mothers of Children at Gajumata Community of Lahore. The descriptive study is being used because it helps to get information about what the actual proportion of Scabies Knowledge was.

Study population:
The population under study were the mothers of young children under 10 years of age at the Gajumata Community. Gajumata Community is one of the Rural Low educated, Low Socioeconomic communities of Lahore. Here in this community the chances of Communicable diseases were very high because of the low standards of living as compare to other regions of Lahore

Inclusion criteria:
Mothers between the ages of 20-40 Years
Mothers with child between 2-10 years of age
Mothers can read and write English or Urdu.

Exclusion criteria:
Mothers who were not willing to participate in the study.
Mothers who were not available at the time of study.
Mothers who had no any psychiatric problems or sensory impairment.

Sample size:
The sample will be collected through convenient sampling.

- The sample size will be calculated by Slovin's formula. $n=N / 1+N(E)^2$
- Desired sample size= n=?
- Population= N
- Margin of error= E= 0.05% (If we take confidence interval 95%)

If the Total Eligible Mothers are N= 300

Then Sample size was as Follow:

- $n=N / 1+N(E)^2$
- $n=300 / 1+300(0.05)^2$
- $n=300 / 1+300(0.0025)$
- $n=300/ 1+ 0.75$
- $n= 171$

Ethical considerations:
This study was held keeping in view all the ethical considerations. Permission was taken from ethical committee FMH. The purpose of research was informed to the participants and if they any other information regarding research they were guided. Informed consent was signed by the Participants. Participants were informed that they have a right to participate or not to participate and they can even withdraw from the research anytime if they want. Participant's right for privacy was maintained. They were explained that their information will be kept confidential, no names or numbers were published.

Data Collection Tool:
A self-administered, self-prepared questionnaire was used. The research tool used was well-organized questionnaire with close ended questions in it, as per True false to assess the Knowledge of Scabies among the Mothers. Questionnaire was taken from the prior research articles. The questionnaire consisted of the demographic data of the participants such as name, Education, Ethnic group etc. The second part consisted of the closed ended questions related to Knowledge of Scabies.

Data collection plan:
To collect the data, the questionnaire was developed. The questionnaire was then viewed by the supervisor. The permission was taken from the institutional Review Board. Then the researchers went to the research population and requested the community people for the participation in the research. A questionnaire was given to the participants with the consent form and they filled the questionnaire. Questionnaires were collected and qualify for the data analysis.

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Data analysis:

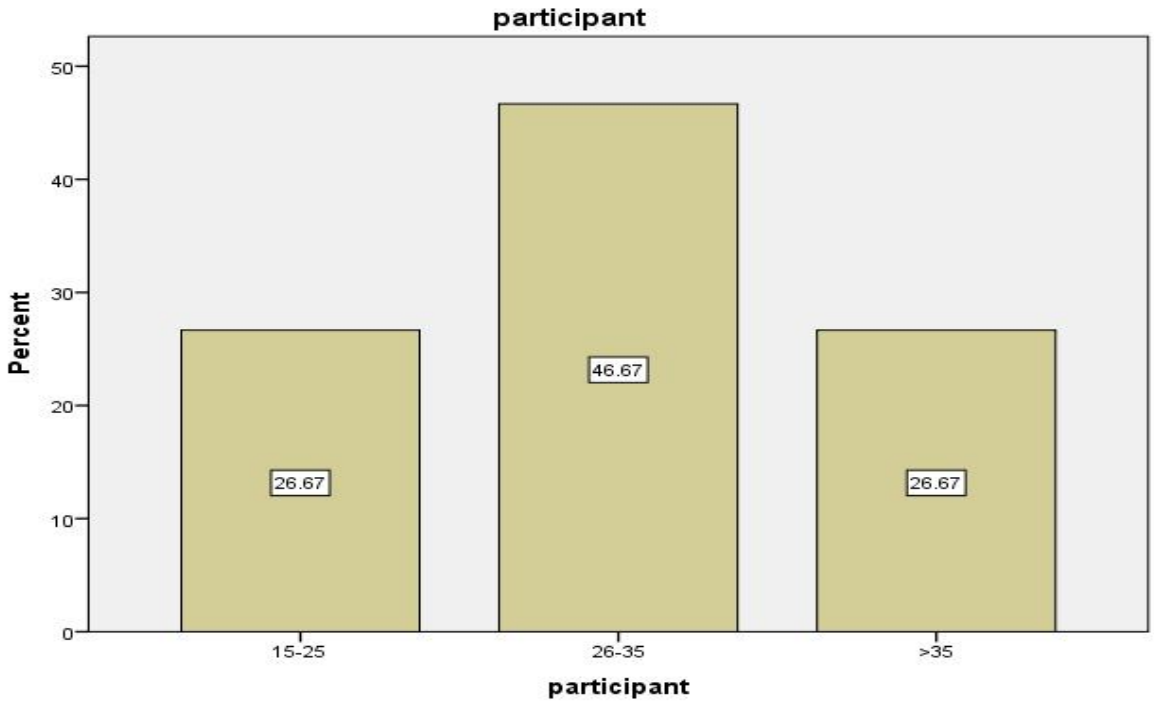
The data was gathered and analysed on statistical data analysing software, SPSS version 21. The descriptive Results were analysed through Graphs, Tables in the form of Frequencies and proportions etc.

Results

Demographic data:

participant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-25	20	26.7	26.7	26.7
	26-35	35	46.7	46.7	73.3
	>35	20	26.7	26.7	100.0
	Total	75	100.0	100.0	



The above Graph and Table reveals that 26.7% of the study participants were age group 15 to 25 years, 46.7% were age 26 to 35 Years and 26.7% were above the age of 35 years.

participant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	55	73.3	73.3	73.3
	Secondary	20	26.7	26.7	100.0
	Total	75	100.0	100.0	

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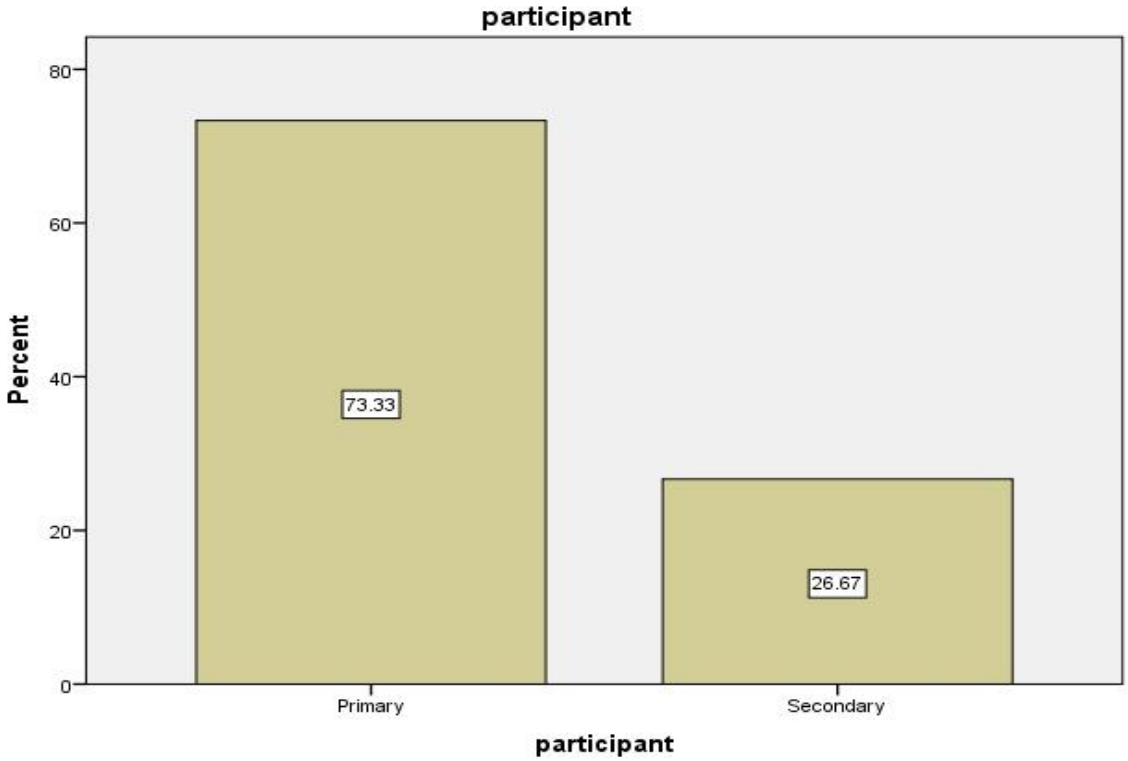

The findings of the above table and graph shows that 73.3% of the participants had education only up to primary while 26.7% were having Secondary education level

Descriptive Result Findings:

The cause (etiology) of Scabies The effect of scratching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	70	93.3	93.3	93.3
	no	5	6.7	6.7	100.0
	Total	75	100.0	100.0	

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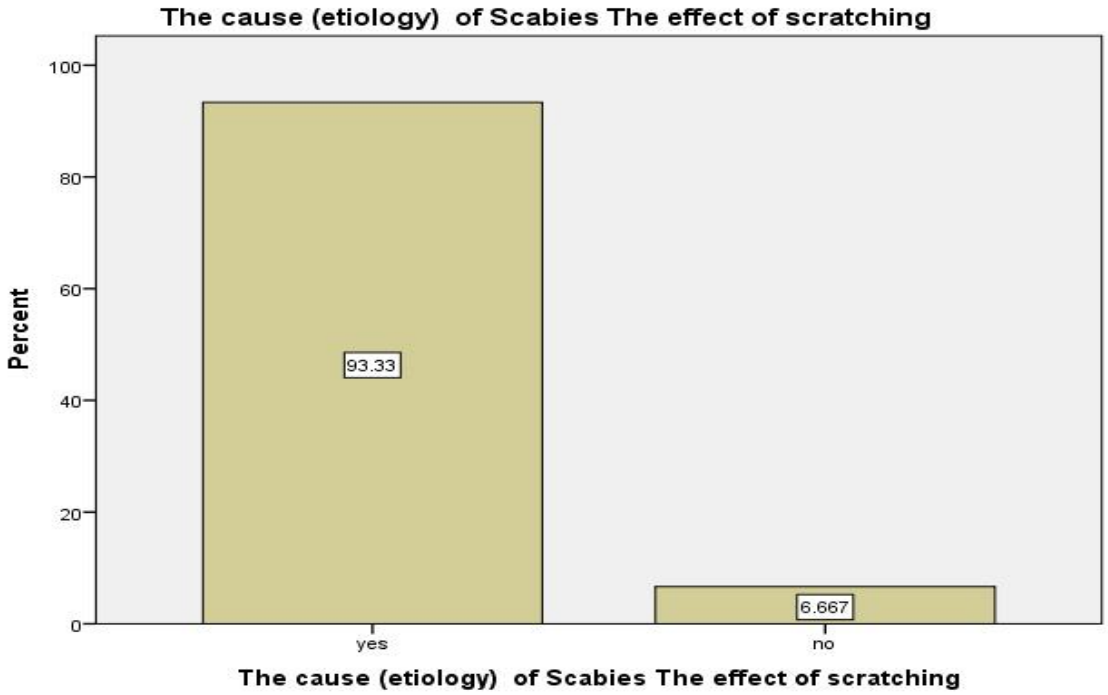

The above table and graph shows a very good knowledge level among the participants, 93.3% of the participants knew that scratching effect causes to Scabies while 6.7% did not know.

Skin is the Organ mainly affected by Scabies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	55	73.3	73.3	73.3
	no	20	26.7	26.7	100.0
	Total	75	100.0	100.0	

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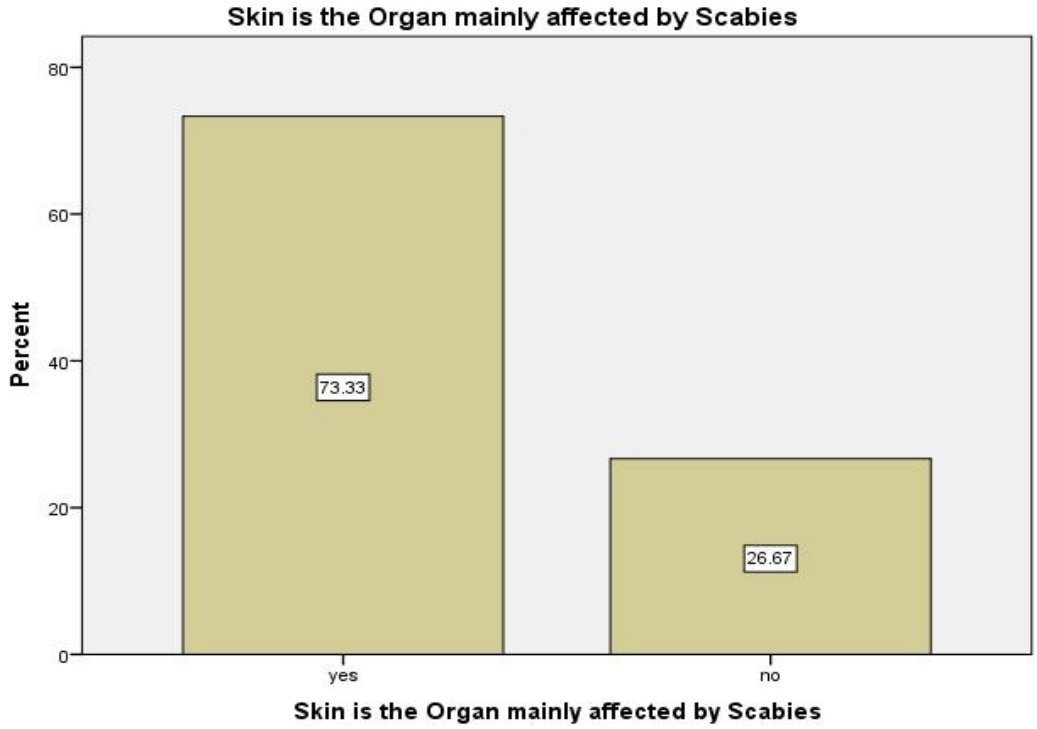

The above table and graph also shows that a very good number of participants that is 73.3% had knowledge that Skin is the main affected organ involved in scabies, while 26.7% did not know.

Itching at night and feel the heat is main signs and Symptom of Scabies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	65	86.7	86.7	86.7
	no	10	13.3	13.3	100.0
	Total	75	100.0	100.0	

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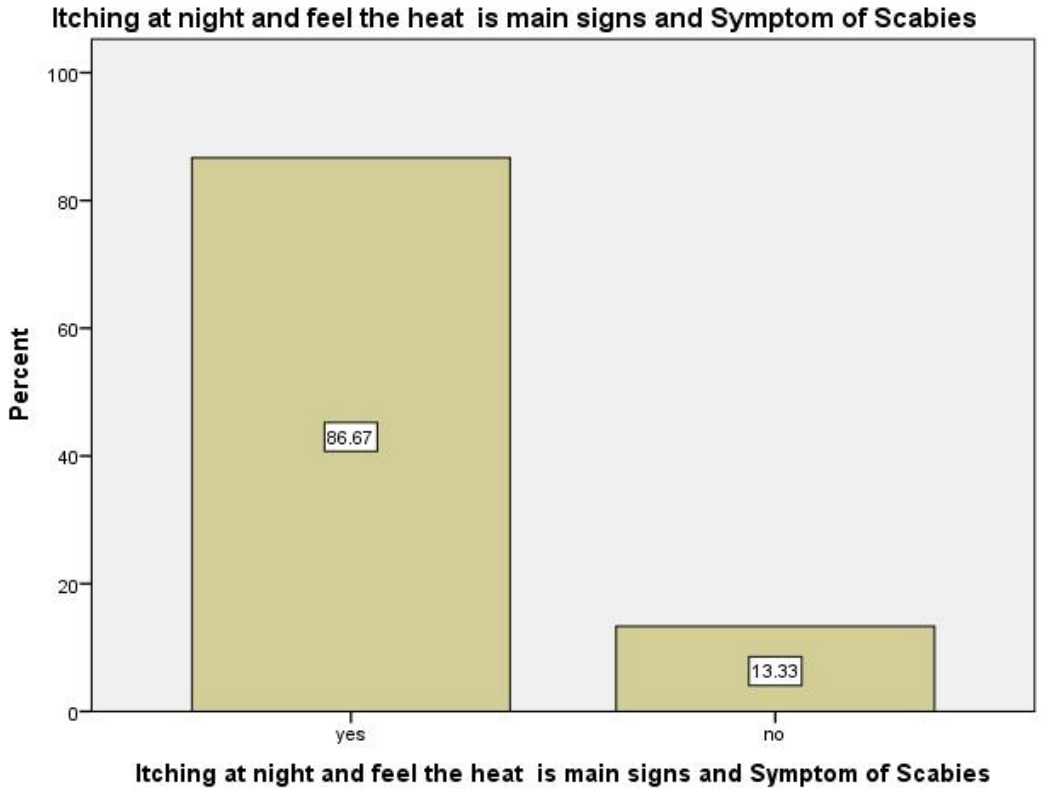

The above table and graph also shows that a very good number of participants that is 86.7% had knowledge that itching at night and feeling heat is the main sign of scabies and 13.3% did not know the main signs and symptoms of scabies.

Part that is often being covered are mainly affected by Scabies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	60	80.0	80.0	80.0
	no	15	20.0	20.0	100.0
	Total	75	100.0	100.0	

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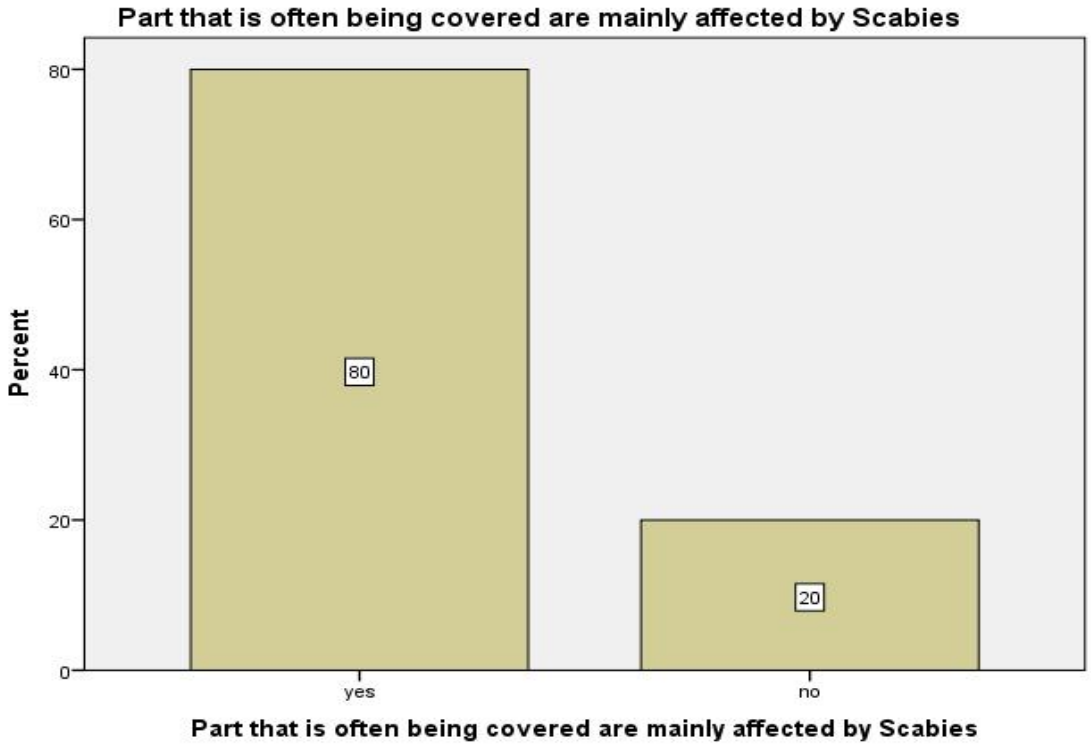

The findings of above table and graph shows that a very good number of participants that is 80% had knowledge that mainly the covered body parts are affected in scabies and 20% did not know about this.

Scabies disease is transmitted through skin to skin contact and through clothes, towels, bed linen, and other things used by the patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	50	66.7	66.7	66.7
	no	25	33.3	33.3	100.0
	Total	75	100.0	100.0	

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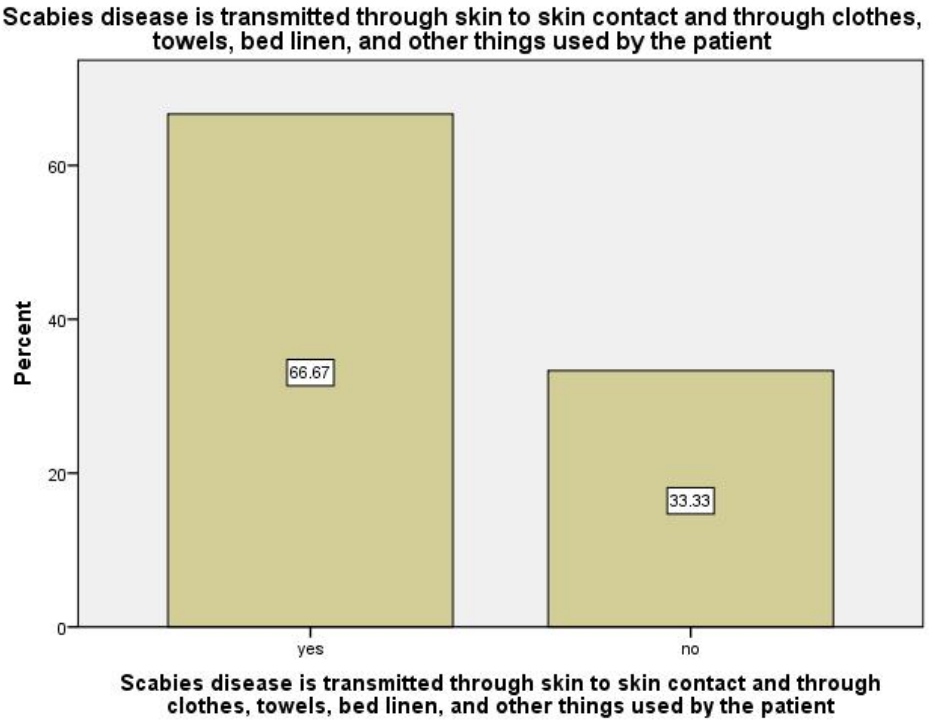

The above table and graph reveals that 66.7% of the study participants knew that scabies is transmitted through skin and 33.3% did not know about this.

Teenagers is the only group, Who can suffer from scabies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	65	86.7	86.7	86.7
	no	10	13.3	13.3	100.0
	Total	75	100.0	100.0	

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When the participants were asked if teenagers are the only group who suffer from scabies? In response 86.7% participants said yes while 13.3% participants said no to this question.

The classical sign of scabies is the burrow made by a mite within the skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	55	73.3	73.3	73.3
	no	20	26.7	26.7	100.0
	Total	75	100.0	100.0	

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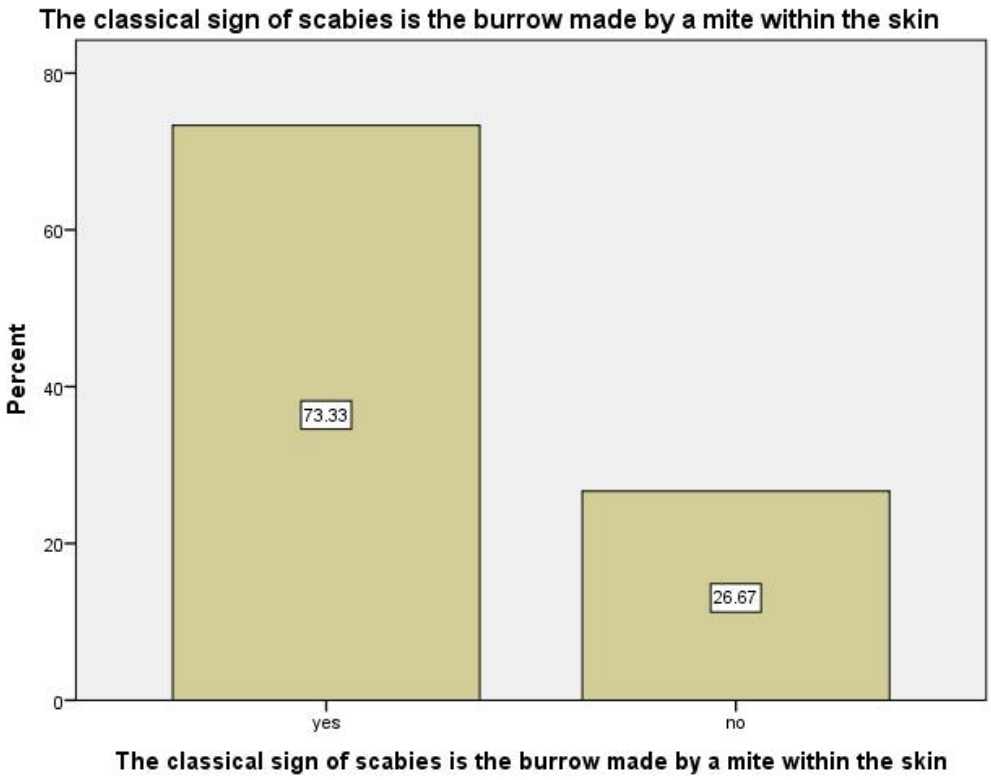

When the participants were asked about the classical signs of scabies, 73.3% of the study participants said that yes, burrow made by a mite within the skin is a classical sign of scabies while 26.7% said no to this question.

Scabies is diagnosed by Clinical signs and Symptoms

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	50	66.7	66.7	66.7
	no	25	33.3	33.3	100.0
	Total	75	100.0	100.0	

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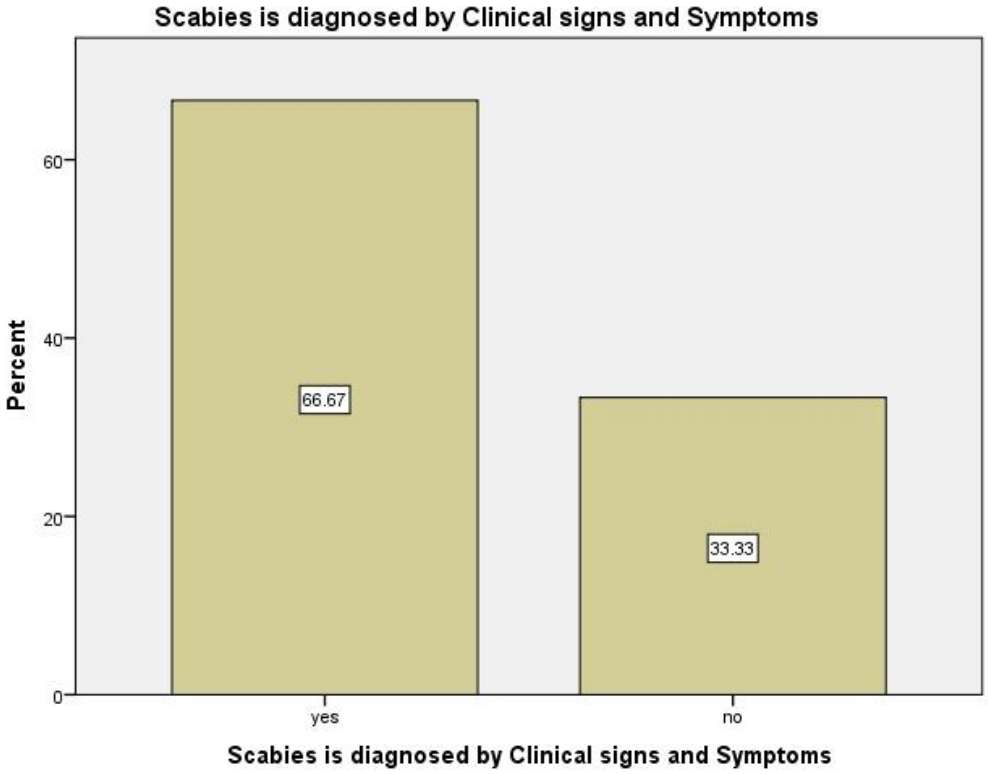

The above table and graph reveals that 66.7% of the participants said yes to the question that scabies is diagnosed by clinical signs and symptoms while 33.33% said no in response.

Scabies is Diagnosed by Blood Culture

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	20	26.7	26.7	26.7
	no	55	73.3	73.3	100.0
	Total	75	100.0	100.0	

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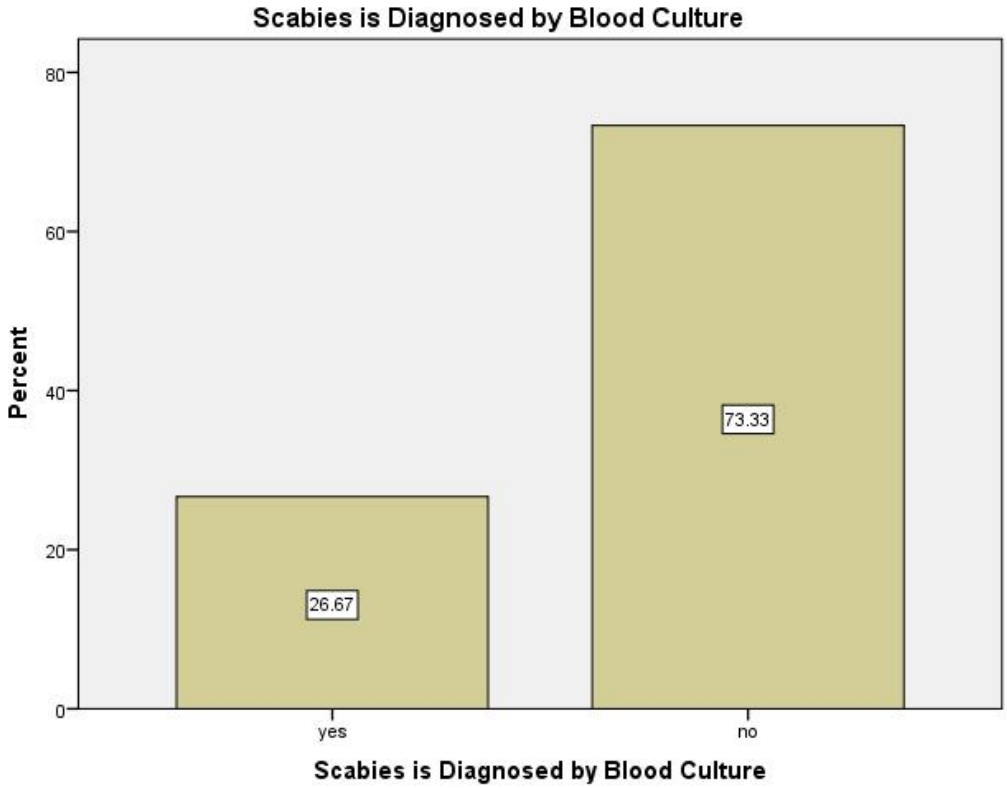

When they were asked if Scabies is diagnosed through blood culture, in response 26.7% of the participants said that yes it is diagnosed through blood culture while 73.3% said that this is not diagnosed by blood culture.

Scabies is Diagnosed by stool Analysis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	20	26.7	26.7	26.7
	no	55	73.3	73.3	100.0
	Total	75	100.0	100.0	

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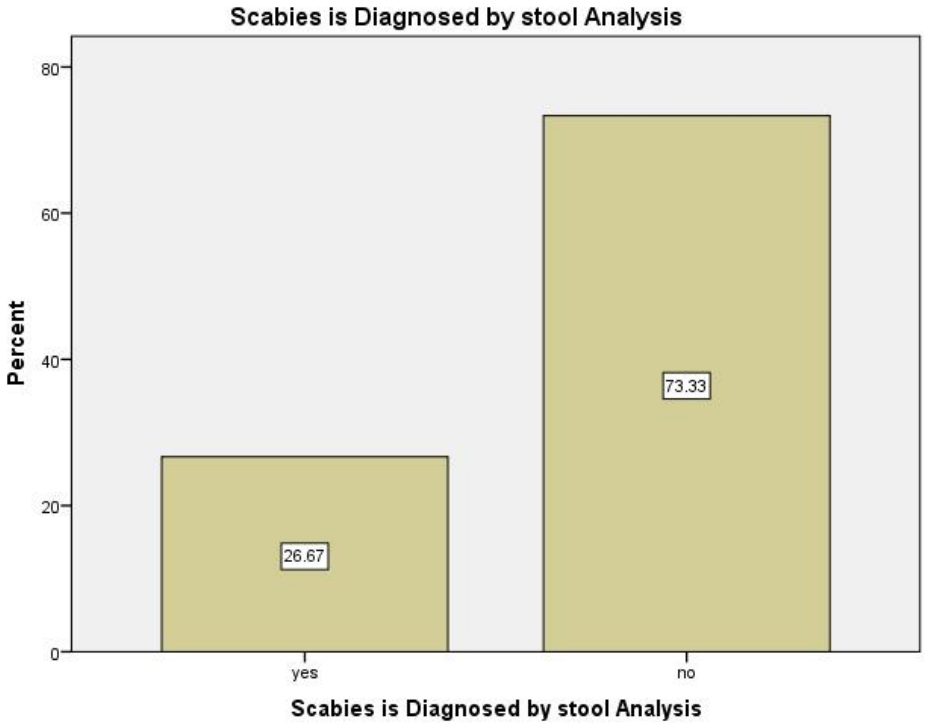

When they were asked if Scabies is diagnosed through stool analysis, in response 26.7% of the participants said that yes it is diagnosed through stool analysis while 73.3% said that this is not diagnosed by stool analysis.

Scabies is diagnosed by Microscopy of Skin Scraping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	35	46.7	46.7	46.7
	no	40	53.3	53.3	100.0
	Total	75	100.0	100.0	

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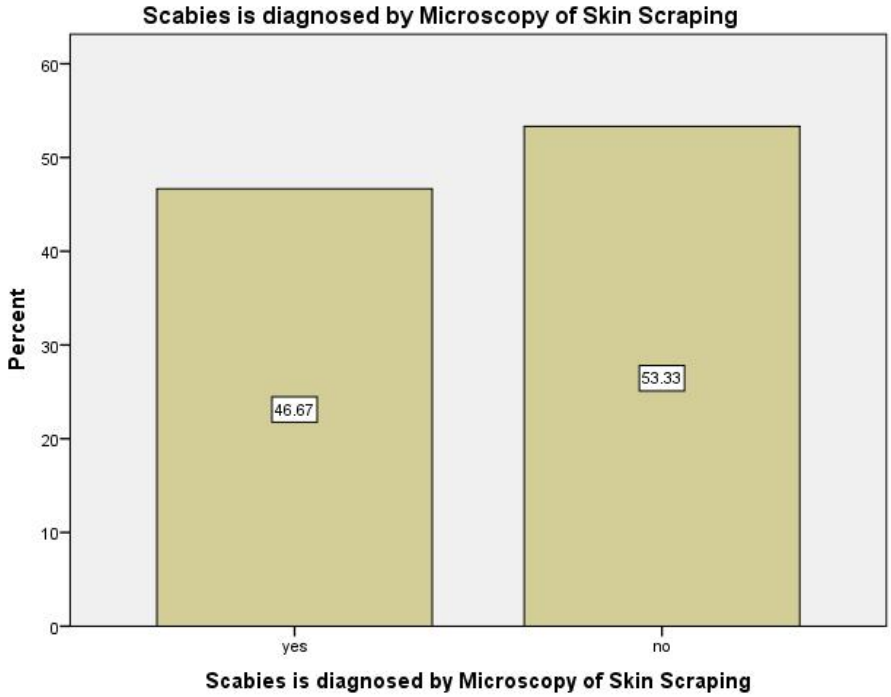

When they were asked if Scabies is diagnosed through microscopy of skin scraping, in response 46.7% of the participants said that yes it is diagnosed through microscopy of skin scraping while 53.3% said that this is not diagnosed by microscopy of skin scraping.

Close, prolonged personal contact with an infected person is not spreading Scabies therefore is common among family members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	70	93.3	93.3	93.3
	no	5	6.7	6.7	100.0
	Total	75	100.0	100.0	

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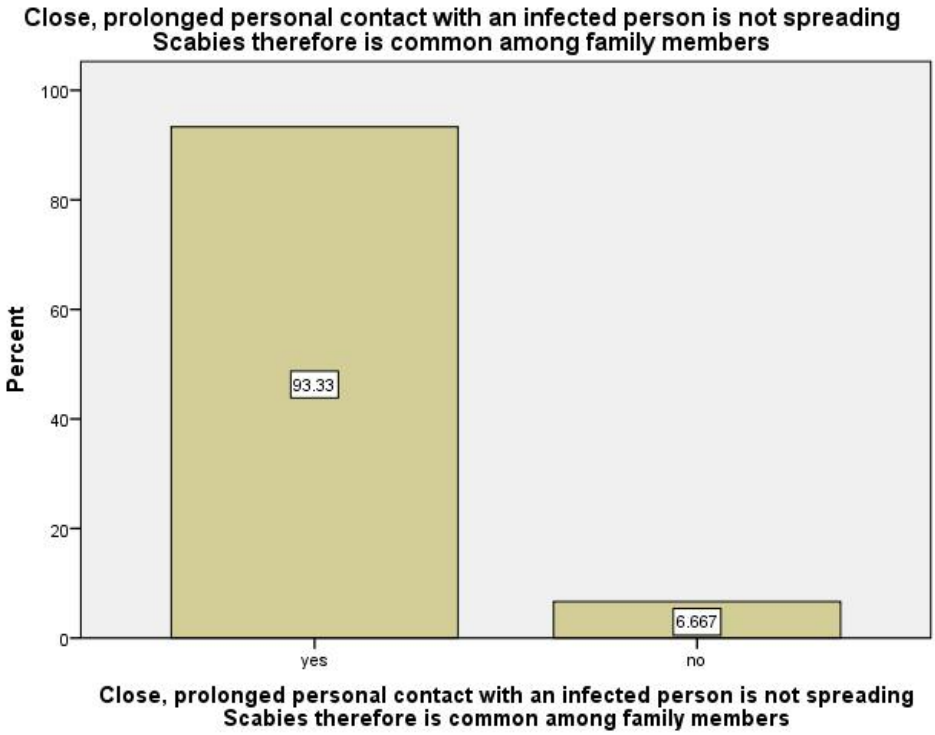

The above findings reveals that 93.3% of the patients not spreading the disease while 6.7% of the participants said yes that close contact with scabies participants said no to the question.

High Suspicion Index is required for Clinical diagnosis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	65	86.7	86.7	86.7
	no	10	13.3	13.3	100.0
	Total	75	100.0	100.0	

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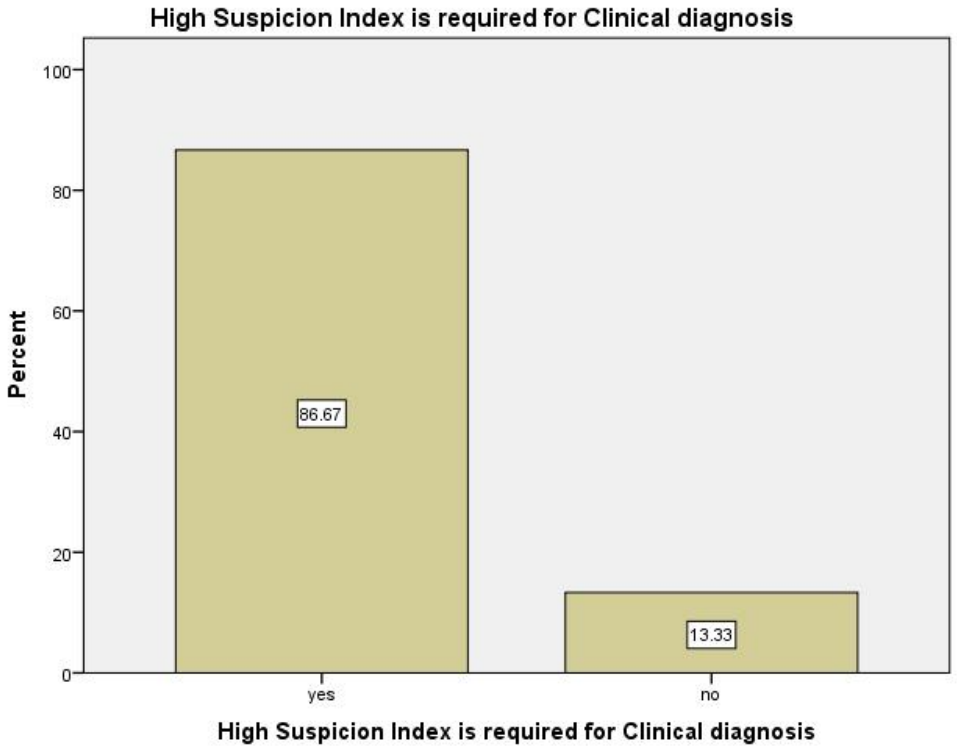

The above table reveals that 86.7% of the participants answered yes that high suspicion is required for scabies clinical diagnosis while 13.3% said no in response to this question.

Scabies can be Prevented by having Bath 2 times per day with soap and prevent direct contact with the patients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	60	80.0	80.0	80.0
	no	15	20.0	20.0	100.0
	Total	75	100.0	100.0	

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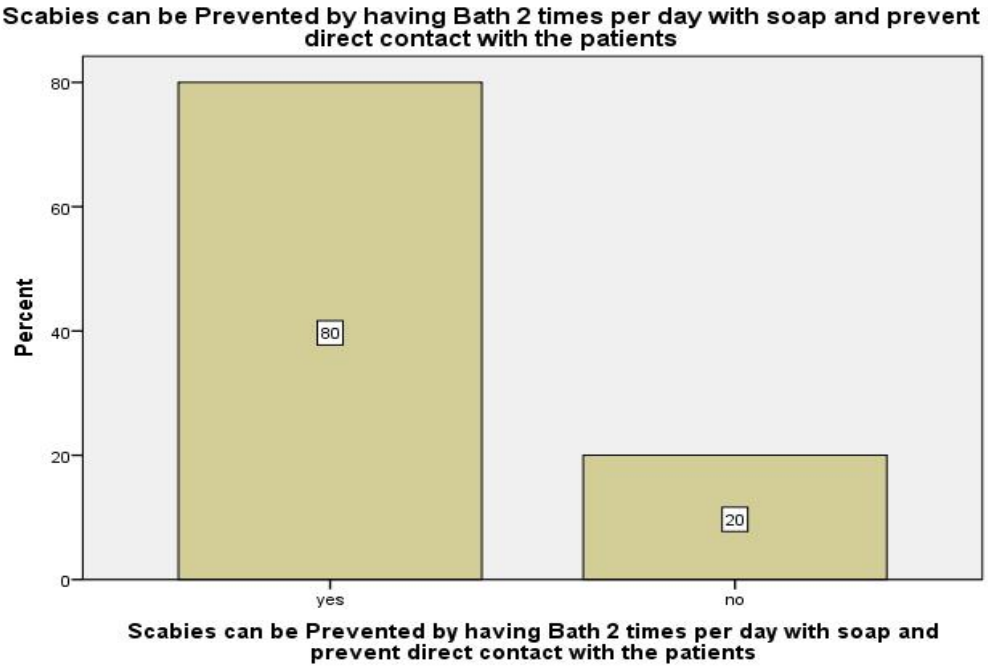

The findings of above table and graph shows that a very good number of participants that is 80% had knowledge that scabies can be prevented by taking bath 2 times a day with sope and proper contact precaution and 20% did not know about this.

Drying mattress and pillow prevent scabies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	70	93.3	93.3	93.3
	no	5	6.7	6.7	100.0
	Total	75	100.0	100.0	

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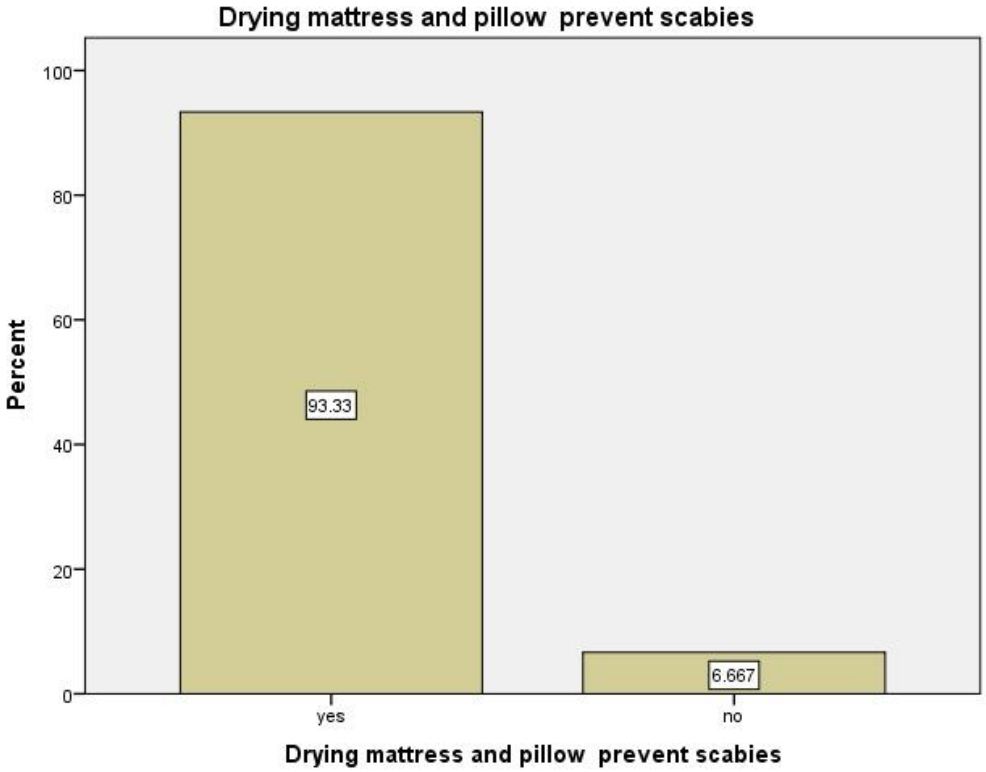

The findings of above table and graph shows that a very good number of participants that is 93.3% had knowledge that drying of mattress and pillow can prevent scabies and 6.7% did not know about this.

Discussion:

During this study the knowledge of scabies was good among the participants in contract to another study given below where they found that among 1260 samples only 20.6% had adequate knowledge regarding scabies and its management. Around 14.56 % individuals had previous exposure to scabies. 33.4% of the samples wrongly reported that scabies is a non curable disease. They realised that around 46.7% victims are currently following appropriate anti - scabies prophylaxis that includes allethrin, permethrin and ivermectin. The researchers concluded that rural communities require more information and education regarding skin related contagious diseases and their management measures (Rana et al., 2007)

Conclusion:

Overall the participants had god knowledge regarding some questions such as the cause of disease and the main organ involved in it. The knowledge was poor about the diagnostic procedure for the Scabies. More detailed studied are required.

Limitations:

Small sample size, the study findings cannot be generalized

Descriptive study which is weak study

Time limitations, as students we do not have long time to have depth explorations.

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