



## A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE AND BELIEF REGARDING PREVENTION AND HOME MANAGEMENT OF CHICKEN POX INFECTION AMONG ADULT PEOPLE OF RURAL AREA OF JIAGANJ, MURSHIDABAD

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### ABSTRACT

**Background:** Chicken pox occurs in all parts of the world. In 2022, 191 varicella cases were reported and the rate was highest among the infant <1 year old at 1.7 cases / 1 lakh population.

**Introduction:** Chicken pox or varicella is an acute and highly infectious disease caused by varicella zoster (v-z) virus. The incubation period is about 7-14 days. It is characterized by vesicular rash that may be accompanied by fever and Malaise. It is worldwide in distribution and occur in both epidemic and endemic form.

**Objectives:** To assess the existing knowledge on prevention and home care of a person with chicken pox infection among rural adult of Jiaganj.

**Methodology:** A descriptive study with quantitative research design includes 50 adult convenient sample people in rural area of Jiaganj, Murshidabad.

**Results:** The study showed that majority of the adult people were having moderate knowledge (66%) regarding prevention and home management of chicken pox infection in pre- test. After the STP program, the majority of the adult people are able to gain adequate knowledge (60%) regarding prevention and home management of chicken pox infection.

**Conclusion:** Good knowledge of the adult people indicates that, they can gain knowledge regarding prevention and home management of chicken pox infection.

**Keywords:** Structured teaching program, knowledge and belief, Chicken pox infection.

## **INTRODUCTION:**

Chicken pox or Varicella is an acute and highly infectious disease caused by varicella zoster (v-z) virus. The incubation period is about 7-14 days. It is characterized by vesicular rash that may be accompanied by fever and Malaise. It is worldwide in distribution and occurs in both epidemic and endemic form. Chickenpox is highly contagious to people who haven't had the disease or been vaccinated against it. Today, a vaccine is available that protects children against chickenpox. Routine vaccination is recommended by the U.S. CDC.

Chicken pox occurs in all parts of the world. In 2020 – 21 the cases decreased significantly then the 2017- 2019. The annual number of reported Varicella cases increased in 2019. In 2022, 191 Varicella cases were reported and the rate was highest among the infants less than 1 year old at 1.7cases per 1lakh population. Out of 16 cases, only 5 were laboratory conformed cases of chicken pox detected in the present out-break, of the 5 laboratory conformed cases, 2 were male and 3 were female (male : female=2:3).

## **NEED OF THE STUDY:**

The purposes of the study is to recognize the belief and knowledge level of rural people on prevention and home management of chicken pox & improving it by conducting structured teaching program, which helps to:

- minimize wrong belief.
- achieve proper knowledge regarding the chicken pox.
- reduce negligence of a patient with chicken pox
- enable to take better care at home.

## **OBJECTIVES:**

- To assess the knowledge & belief on prevention on chicken pox among the people of rural area.
- To assess the existing knowledge on prevention and home care of a person with chicken pox infection among rural adult of Jiaganj.
- To find the effect issues of STP on changes and knowledge and belief on prevention & home management of chicken pox.

## **3. METHODOLOGY:**

### **• RESEARCH APPROACH :**

Quantitative approach.

### **• RESEARCH DESIGN :**

The study was comparative study in design to assess the belief and knowledge level of rural people on prevention and home management of chicken pox in Jiaganj, Murshidabad ,West Bengal.

### **• RESEARCH SETTING :**

The study was conducted at rural community area of Jiaganj, Murshidabad, West Bengal.

## **POPULATION:**

### **➤ TARGET POPULATION :**

(Population Size: 60)

Population comprised the adult people (21-60 yrs) rural area of Tantipara, Jiaganj, Murshidabad, W.B.

### **➤ ACCESIBLE POPULATION :**

Population comprised the rural area of Tantipara, Jiaganj, Murshidabad, W.B.

### **• SAMPLE:**

Adult people (21-60 yrs) of rural area of Jiaganj, Murshidabad.

➤ **SAMPLING TECHNIQUE:**

Convenience sampling technique.

➤ **SAMPLE SIZE CALCULATION: 50**

➤ **SAMPLING CRITERIA FOR SAMPLE SELECTION :**

- I. The samples are easily accessible.
- II. They have not adequate knowledge regarding prevention and home management of chicken pox infection.
- III. It is time bounding.

• **VALIDITY OF TOOL:**

*AGE:* Adult age group. (21-60 yrs)

*EDUCATIONAL STATUS:* Typically covering early childhood education.

*TYPES OF FAMILY :* Both joint and nuclear family.

*LANGUAGE:* English converted to Bengali

**STRUCTURE OF QUESTION:**

1. Question number based on knowledge: 8
2. Question number based on attitude: 8
3. Question number based on skill: 5

• **PLAN FOR DATA ANALYSIS:**

The data collected were organized, tabulated, analyze and interpreted, will be analysed by frequency, mean percentage.

Total 50 adult people were enrolled in this study by convenient sampling technique.

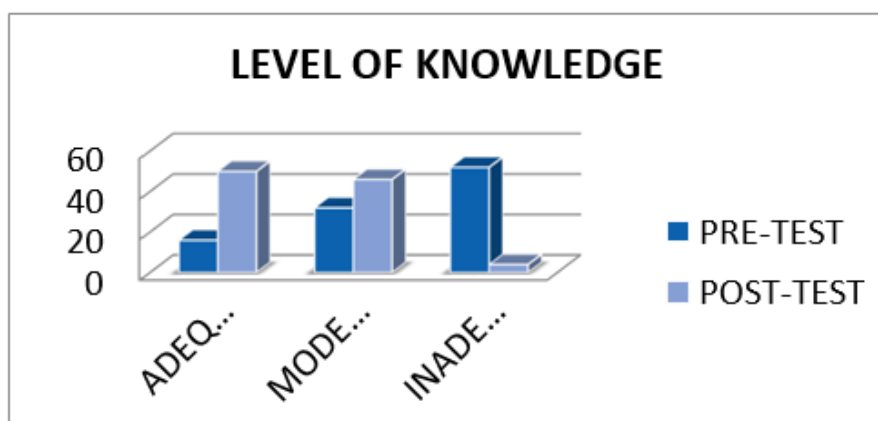
**Table 1: Distribution of demographic variable (n=50)**

	<b>Division</b>	<b>Number(frequency)</b>	<b>Percentage (%)</b>
Age (In Years)	21-30	12	24
	31-40	15	30
	41-50	13	26
	51-60	10	20
Gender	MALE	11	22
	FEMALE	39	78
Education Level	ILLITRATE	4	8
	PRIMARY	6	12
	SECONDARY	28	56
	HIGHER SECONDARY	12	24
	ILLITRATE	4	8
Religion	Hindu	20	40
	Muslim	30	60
	Christian	00	00
	Others	00	00

Occupation	Employed	11	22
	Unemployed	30	60
	Others	9	18
Income	< 5000	7	14
	5000-10000	14	28
	10000-20000	20	40
	>20000	9	18
Family	Nuclear	28	56
	Joint	22	44

**Table-2:** Percentage distribution of respondents according to their knowledge in pre-test & post-test (N=50).

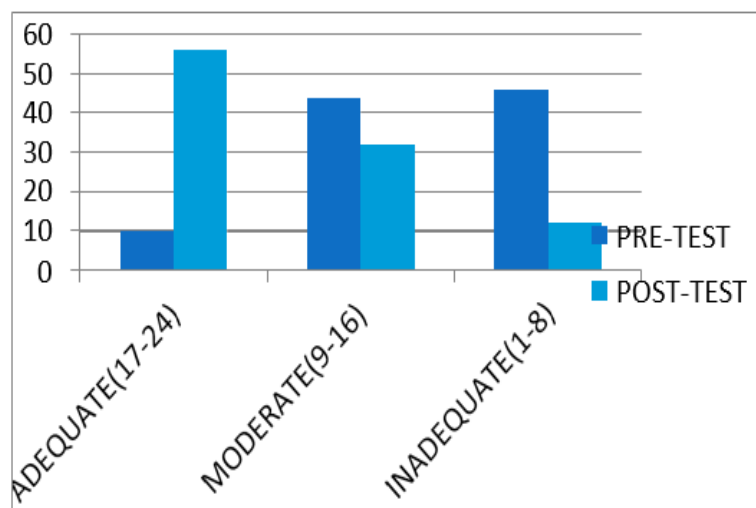
LEVEL OF KNOWLEDGE	PRE-TEST	POST-TEST
	PERCENTAGE (%)	PERCENTAGE (%)
ADEQUATE(17-24)	16	50
MODERATE(9-16)	32	46
INADEQUATE(1-8)	52	4
<b>TOTAL</b>	<b>100</b>	<b>100</b>



**Fig. 1:** Percentage distribution of respondents according to their knowledge in pre-test & post-test.

**TABLE-3:** Percentage distribution of respondents according to their attitude in pre-test & post-test (N=50).

LEVEL OF ATTITUDE	PRE-TEST	POST-TEST
	PERCENTAGE(%)	PERCENTAGE(%)
ADEQUATE	10	56
MODERATE	44	32
INADEQUATE	46	12
<b>TOTAL</b>	<b>100</b>	<b>100</b>

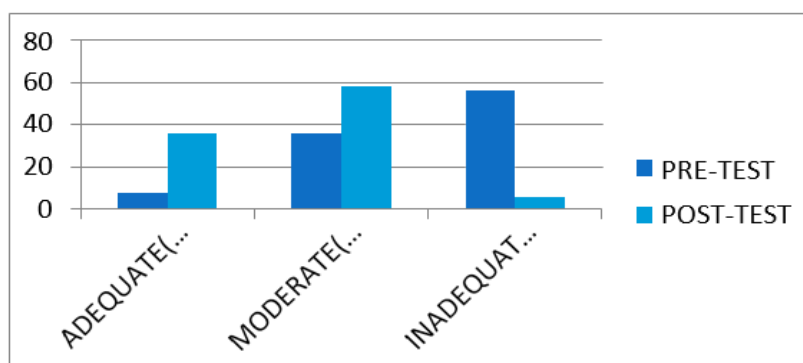


N=50

**Fig. 2:** Percentage distribution of respondents according to their attitude in pre-test & post-test.

**TABLE-4:** Percentage distribution of respondents according to their skill in pre-test & post-test(N=50).

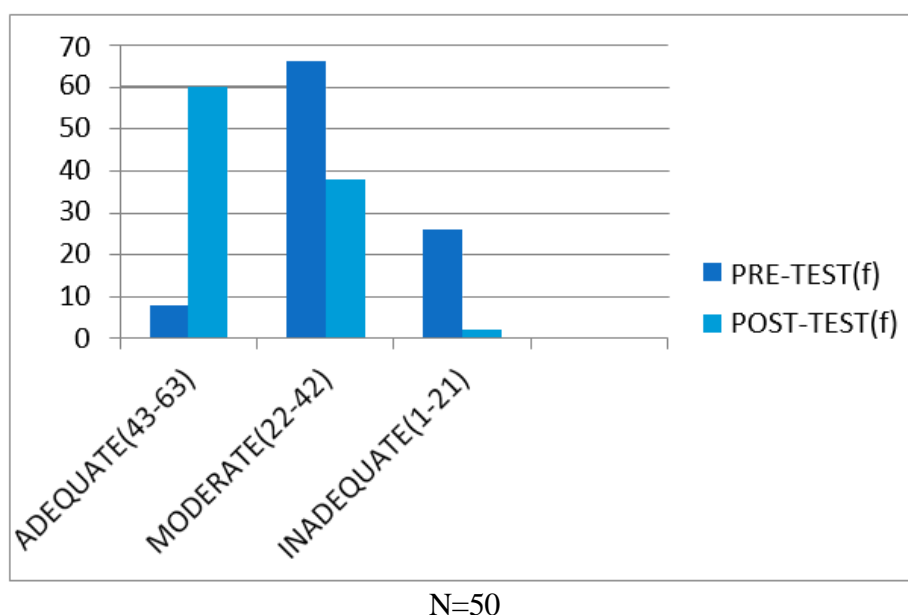
LEVEL OF SKILL	PRE-TEST	POST-TEST
	PERCENTAGE(%)	PERCENTAGE(%)
ADEQUATE	8	36
MODERATE	36	58
INADEQUATE	56	6
<b>TOTAL</b>	<b>100</b>	<b>100</b>



**Fig. 3:** Percentage distribution of respondents according to their skill in pre-test & post-test.

**TABLE-5:** Percentage distribution of respondents according to their knowledge, attitude and skill in pre-test & post-test(N=50).

LEVEL OF KNOWLEDGE, ATTITUDE, SKILL	PRE-TEST(f)	POST-TEST(f)
	PERCENTAGE(%)	PERCENTAGE(%)
ADEQUATE	8	60
MODERATE	66	38
INADEQUATE	23	2
<b>TOTAL</b>	<b>100</b>	<b>100</b>



**Fig. 4:** Percentage distribution of respondents according to their knowledge, attitude and skill in pre-test & post-test.

## 5. Discussion:

The contribution of the socio-demographic variables to the outcomes of interest indicate that only respondent's educational level remained predicting the outcome of interest. The importance of the poor knowledge regarding the belief of chicken-pox was also highlighted by the questionnaire method.

The maximum respondents, 30% were from the age group 31-40 yrs., 26% were from the age group 42-50 yrs, 24% from the age group 21-30 yrs., 20% were from the age group 51-60. The maximum respondents, 78% were from the female, 22% were from male. The maximum respondents, 56% were under secondary education, 24% were under HS education, 12% were under primary education, 8% were under illiterate.

The maximum respondents, 52% had inadequate knowledge, 32% had moderate knowledge, 16% had adequate knowledge in pre-test. And 50% had adequate knowledge, 46% had moderate knowledge, 4% had inadequate knowledge in post-test. The maximum respondents, 46% had inadequate attitude, 44% had moderate attitude, 10% had adequate attitude in pre-test. And 56% had adequate attitude, 32% had moderate attitude, 12% had inadequate attitude in post-test. The maximum respondents, 56% had inadequate skill, 36% had moderate skill, 8% had adequate skill in pre-test. And 58% had moderate skill, 36% had adequate skill, 6% had inadequate skill in post-test. The maximum respondents, 66% had moderate, 23% had inadequate, 8% had adequate knowledge, attitude, skill in pre-test. And 60% had adequate, 38% had moderate, 2% had inadequate knowledge, attitude and skill in post-test.

## Conclusion:

This study was intended to assess knowledge and belief for preventive measures and home care of a person with chicken- pox infection among the adult people of rural area of Jiaganj, Murshidabad. In this study, quantitative research design was used by taking 50 samples through convenient sample technique. The data was collected by using structured self-administer questionnaire before & after STP. Data was analyzed and interpreted by applying descriptive statistical method. It is evident that proper STP can increase the knowledge level of community participants, helps to gain positive attitude and a good skill to manage chicken pox in home setting.

### **RECOMMENDATION:**

- A comparative study may be conducted at different community or areas.
- Similar study could be replicated on large group.
- Similar study may be conducted to assess the knowledge of people regarding preventative practices of chicken-pox vaccination.

### **Delimitation:**

- Residing in rural community. (Tantipara, Jiaganj, Murshidabad)
- Willing to participate in the study.
- Present during the period of data collection.

### **Acknowledgement:**

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*Ethical approval: By Institutional Ethical Committee*

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### **Research Questionnaire**

#### **DEMOGRAPHIC DATA**

- NAME:
- AGE:
- SEX: A) MALE B) FEMALE
- **RELIGION:** A) HINDU B) MUSLIM C) OTHERS

• **OCCUPATION:**

• **INCOME:**

• **EDUCATION:**

• Have you ever suffered from chicken pox?

A) YES B) NO C) NO RESPONSE

Or,

• Did you take care of anyone who is suffering from chicken pox?

A) YES B) NO C) NO RESPONSE

**QUESTIONS BASED ON KNOWLEDGE**

1. How many days you keep the patient isolate?

a)6-9 days b)9-12 days c)12-15 days d)7-14 days

2. Do you take bath during chicken pox?

a)Yes b)No c)Don't know d)No response

3. Do you take vaccination to prevent chicken pox

a) Yes b)No c)No response

4. What are the common symptoms seen in chicken pox?

a) Rash b) Fever c)Tiredness d)All of these

5. Is chicken pox contagious?

a) Yes b)No c)Don't know d)No response

6. Who are mostly suffering from chicken pox in your locality?

a) Older aged b)Adult c)Adolescence d)Children

7. What type of measure is used to prevent the spread of chicken pox?

a) Mask using b) Not touching the patient

c) Isolate the patient d) Nothing significant

8. What food you usually give to a chicken pox patient?

a) Spicy b)Normal c)Blunt

**QUESTIONS BASED ON ATTITUDE**

1. During chicken pox what do you eat?

a) Veg b)Non-veg c)Both a and b

2. Do you believe that it is due to God's graces?

a) Yes b)No c)Don't know d)No response

3. During chicken pox do you allow the affected person to be exposed in the sunlight?

a) Yes b)No c)Don't know d)No response

4. Do you consult a doctor and take any medications during chicken pox?

a) Yes b)No c)Don't know d)No response

5. What diversional measure do you take during chicken pox?

a) Watching TV

b) Reading book and newspaper

c) Taking with family members & friends with maintaining distance

d) Mobile phone

6. Do you have any spiritual belief regarding 'jhar-phuk', during chicken pox?

a) Yes b)No c)Don't know d)No response

7. Did you break the blisters during chicken pox?

a) Yes b)No c)Don't know d)No response

8. Is your economic condition make barrier to consult with a doctor?

a) Yes b)No c)Don't know d)No response



### **QUESTIONS BASED ON SKILL**

1. Do you isolate the patient during chicken pox?  
a) Yes b)No c)Don't know d)No response
2. How you keep the patient safe during chicken pox?  
a) By using a mosquito net all the time.  
b) By regularly washing the clothes & utensils of the patient.  
c) Doing hand washing before handling the patient.  
d)All of these
3. What measures do you take to promote the healing of the rashes?  
a) Using of coconut water after birth  
b) Using of neem leaves during bath  
c) Using of chandan  
d)All of these
4. How do you use neem leaves during chicken pox?  
A) Applying in the skin  
b) Hanging in the room  
c) Boiling with water for bath  
d) All of these
5. What do you do with rashes?  
a)Break it b)Wait till it heals c)Sometimes break it

### **STRUCTURED TEACHING PROGRAM**

#### **▪ Health Education:-**

- Providing isolation of patients for at least 6 day after onset of rash, to prevent the spread of infection.
- Applying neem leaves and turmeric on the body Instead of hanging of the neem leaves into the isolated room to prevent the itching and irritation
- Nutritious and digestive food should be provided instead of boiled and spicy food to promote health.
- Regular intake of fresh fruits, including Intake of fresh lime, oranges, banana papaya etc. , so as to provide vitamin & minerals, this will reduce the duration of disease and bring the appetite back.
- Maintain sufficient physical distance from the patient, when he is talking, coughing and sneezing.
- Regularly wash the clothes instead of store. Don't share the items, clothes and rooms used by the patient.
- Do soap-water hand wash before & after handling the patient to prevent cross infection.
- Take a bath in a regular way to maintain personal hygiene.
- Avoid sun exposure to prevent burning of skin.
- It is not a God blessings, and not cured by God. It's require proper treatment.
- Avoid spiritual belief, such as 'jhar-phuk, amulet etc.
- Resin should be used in the room to kill the germs etc.
- There is no scientific reason in the use of iron objects near the Patients, to secure the patient from 'Evil's Eye'.
- Cut the nails in small size to prevent scratching the rashes.
- Apply coconut water after bath to promote healing of rashes.
- Consult the doctor to understand the condition and follow doctor's advice to take medicine to relief Symptoms.
- Provide symptomatic treatment

1. Fever:-

- Give' paracetamol 'as per doctor's advice.
- Patient should take plenty of fluid.

2. Itching :-

- To manage itching calamine lotion can be used locally.
- Vaccine:- Vaccination is the safest way to prevent chicken pox.