



A STUDY TO ASSESS THE AWARENESS OF BRONCHIAL ASTHMA AMONG THE PATIENTS ADMITTED IN MEDICINE WARD OF THE SELECTED HOSPITALS OF GUWAHATI, ASSAM.

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This condition is due to inflammation of the airway passages in the lungs and affects the sensitivity of the nerve endings in the airways so that they become easily irritated.

ABSTRACT

Asthma is a chronic inflammatory disorder of the airways. It is a disease characterized by recurrent attack of breathlessness and wheezing which vary in severity and frequency from person to person. This condition is due to inflammation of the airway passages in the lungs and affects the sensitivity of the nerve endings in the airways so that they become easily irritated.

Aim: The aim of the study was to assess the awareness of Bronchial Asthma among the patients admitted in medicine ward of the selected hospitals of Guwahati, Assam

Method And Material: Non experimental descriptive design was used in this study to accomplish the objectives. Nonprobability convenience sampling technique was used for obtaining the adequate sample for the study. Study was undertaken on 150 patients of selected hospital of Guwahati, Assam. Respondents were selected on the basis of the inclusion criteria. A semi structured questionnaire was used to assess the level of awareness on Bronchial Asthma. The technique used was self report.

Results: Out of 150 respondents, majority 53(35.3%) were in the age group of 31-40 years, 107(71.3%) were male, 38(25.3%) were educated till primary school, 106 (70.6%) were living in nuclear type of family, 81(54%) were having monthly income \leq Rs.10,000, 80(53.3%) were living in semi pucca house, 51(34%) were doing business, 110(73.3%) were living in rural area, 126(84%) were not having family history of Bronchial Asthma. Majority of the respondents 93 (62%) had moderately adequate awareness, 31(20.6%) had inadequate awareness, and 26 (17.3%) had adequate awareness regarding Bronchial Asthma. The mean and standard deviation of awareness level was 10.74 and 3.71 respectively. The association was statistically tested by using Chi square at $p=0.05$ level of significance and the result showed that there were significant association of awareness with educational qualification, income per month, type of house and residence.

Conclusion: Twenty six (17.3%) of the respondents had adequate awareness regarding Bronchial Asthma. The study concluded that there is a lack of awareness among the patients admitted in medicine ward. Nurses need to conduct health camp, educational programme in the community setting as well as in the ward or hospitals to provide education on prevention and lifestyle modification of the people to prevent Asthma.

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INTRODUCTION

Asthma is a chronic inflammatory disorder of the airways.¹ It is a disease characterized by recurrent attack of breathlessness and wheezing which vary in severity and frequency from person to person. This condition is due to inflammation of the airway passages in the lungs and affects the sensitivity of the nerve endings in the airways so that they become easily irritated. According to WHO (2015) there were 235 million people currently suffered from Asthma, and there were 383,000 deaths due to Asthma. Asthma occurs at all age groups but often start in childhood. The chronic inflammation causes an increase in airway hyper responsiveness that lead to recurrent episodes of wheezing, breathlessness, chest tightness and cough particularly at night or in early morning. The risk factor for developing asthma are exposure especially in infancy to indoor allergens such as domestic mites, a family

history of Bronchial Asthma or allergy, exposure to tobacco smoke, exposure to chemical irritants in the workplace, exertion or exercise, emotional or mental stress, sensitivity to specific drug such as to aspirin and nonsteroidal anti inflammatory drugs (NSAIDS), allergy to some food items and extreme weather condition.

Identifying triggers for Asthma like air pollution, allergies, cold air, flu virus, and smoke can help the individual to take steps to avoid them. Allergen exposure can temporarily increase the inflammation of airways in a person with Asthma. Avoiding or minimizing contact with allergens can help to prevent Asthma attack.

Smoke and Asthma are bad mix. Minimize exposure to all sources of smoke like tobacco smoke, candles, fire, fireworks, avoid public place that permits smoking and quitting cigarette smoking can help to prevent Asthma. And getting a flu vaccine every year can protect against the flu virus which always make Asthma much worse.

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Objectives

- To assess the awareness on Bronchial Asthma among the patients admitted in medicine ward of selected hospitals, Guwahati.
- To find out the association between awareness and selected demographic variables.

Conceptual Framework

The nursing theory that was used in this study is based on modified Health belief model 1950 .

RESEARCH METHODOLOGY

Research approach: quantitative research approach.

Research design: descriptive research

Research variables: awareness

Demographic variables: The demographic variables were age, gender, educational qualification, type of family, income per month, type of house, occupation, residence, and family history of Bronchial Asthma.

Setting of the study: Guwahati Medical College And Hospital, Assam (GMCH) and North Health City Hospital, Khanapara, Guwahati.

Population of the study: patients admitted in the hospital.

Target populations: patients admitted in selected hospitals of Guwahati, Assam

Accessible populations: patients admitted in medicine ward of selected hospitals of Guwahati, Assam.

Sample: patient admitted in medicine ward of selected hospitals of Guwahati, Assam, who fulfilled the inclusion criteria.

Sample size : 150 patients.

Sampling technique: Non-probability Convenience sampling technique.

Tools and techniques: A semi structured questionnaire was used to assess the level of awareness about Bronchial Asthma. The technique used in this study was self-report.

Validity of the tool: Validity of the tool was established from 5 experts of Medical Surgical Nursing, 2 expert of Community Health Nursing and 2 Medical experts in the field of Pulmonary Medicine and Internal Medicine.

Reliability of the tool: The reliability of the tool was done by using Split half method, and was found to be $r=1$ were found to be reliable to proceed to main study.

Pilot study: The pilot study was conducted from 18th to 23rd June, 2018.

Main study: 2nd- 28th July 2018

Ethical Consideration

Ethical permission to proceed with the study was taken from Ethics committee, INS Trust GNRC Dispur, Guwahati, Assam.

Data Collection Process

The period for data collection was done from 2nd July to 28th July 2018. Prior to data collection the researcher obtained permission from the Medical Superintendent and Medical Director of the hospitals of Guwahati, Assam. A brief self-introduction and the purpose of the study were explained to the samples prior to data collection and keeping in mind the ethical aspects of research, the data was collected after obtaining the informed consent from each sample for their willingness to participate in the study. The samples were assured anonymity and confidentiality of information provided by them. A semi structured questionnaire was provided to assess the awareness of Bronchial Asthma among patients. The respondents took approximately 30 minutes to complete the questionnaires.

RESULTS

Section-I Frequency and percentage distribution of the demographic characteristics

Table I Frequency and Percentage distribution of the respondents according to their Age

Age in years	Frequency	Percentage
21-30	57	38%
31- 40	53	35.3%
41-50	29	19.3%
Above 50	11	7.3%
Total	150	100%

n =150

Table I shows that out of 150 respondents, majority 57(38%) of the respondents belongs to 21-30 years , 53 (35.3%) of the respondents belongs to 31- 40 years, 29 (19.3%) of the respondents belongs to 41-50 years of age and 11 (7.3%) of the respondent belongs to above 50 years of age .

Table II Frequency and percentage distribution of the respondents according to their Gender

Gender	Frequency	Percentage
Male	107	71.3%
Female	43	28.6%
Transgender	0	0%
Total	150	100%

n=150

Table II shows that out of 150 respondents, majority 107 (71.3%) of the respondents were male and 43 (28.6%) of the respondent were female.

Table III Frequency and percentage distribution of the respondents according to their Educational Qualification

Educational qualification	Frequency	Percentage
Primary	38	25.3%
High school	34	22.6%
Middle school	34	22.6%
Higher secondary	26	17.3%
Graduate	12	8%
Post graduate	6	4%
Total	150	100%

n =150

Table III shows that out of 150 respondents, majority 38 (25.3%) respondents were educated till primary school , 34(22.6%) respondents were educated till

high school and middle school, 26(17.3%) respondents were educated till higher secondary, 12(8%) respondent were educated till graduate and 6(4%) respondent were educated till post graduate.

Table IV Frequency and percentage distribution of the respondents according to their Type of family
n=150

Type of family	Frequency	Percentage
Nuclear	106	70.6%
Joint	44	29.3%
Total	150	100%

Table IV shows that out of 150 respondents, majority 106 (70.6%) of the respondents were living in nuclear family and 44(29.3%) of the respondents were living in joint family.

Table V Frequency and percentage distribution of the respondents according to their income
n=150

Income	Frequency	Percentage
≤Rs.10,000	81	54%
Rs.10,001-20,000	50	33.3%
Rs.20,001-30,000	14	9.3%
>Rs.30,000	5	3.3%
TOTAL	150	100%

Table V shows that out of 150 respondents, majority 81 (54%) of the respondents had monthly income ≤Rs.10,000 , 50 (33.3%) of the respondents had Rs.10,001-20000, 14 (9.3%) of the respondent had Rs.20,001-30,000 and 5(3.3%) respondent had monthly income >Rs.30,000.

Table- VI Frequency and percentage distribution of the respondents according to their Type of house
n=150

Type of house	Frequency	Percentage
Thatched	16	10.6%
Semi pucca	80	53.3%
Pucca or Cement	54	36%
Total	150	100%

Table VI shows that out of 150 respondents, majority 80 (53.3%) of the respondent were living in semi pucca house, 16 (10.6%) of the respondents were living in thatched house and 54 (36%) of the respondents were living in pucca or cement type of house.

Table VII Frequency and percentage distribution of the respondents according to their Occupation
n=150

Occupation	Frequency	Percentage
Business	51	34%
Daily wage laborer	45	30%
Government service	11	7.3%
Private service	43	28.6%
Retired	0	0%
Others	0	0%
TOTAL	150	100%

Table VII shows that out of 150 respondents, majority of the respondents 51 (34%) of the were in business, 45(30%) were

daily wage laborer, 43 (28.6%) respondent were having private service and 11(7.3%) were government service.

Table VIII Frequency and percentage distribution of the respondents according to their residence
n=150

Residence	Frequency	Percentage
Rural	110	73.3%
Urban	40	26.6%
TOTAL	150	100%

Table VIII shows that out of 150 respondents, majority 110 (73.3%) of the respondents were living in rural and 40 (26.6%) of the respondents were living in urban.

Table- IX Frequency and percentage distribution of the respondents according to their family history of Bronchial Asthma
n=150

Family history	Frequency	Percentage
Yes	24	16%
No	126	84%
TOTAL	150	100%

Table IX shows that out of 150 respondents, majority 126(84%) of the respondents were not having family history of Bronchial Asthma and 24 (16%) respondent were having family history of Bronchial Asthma.

Section-II- Distribution of respondents according to their level of awareness
n=150

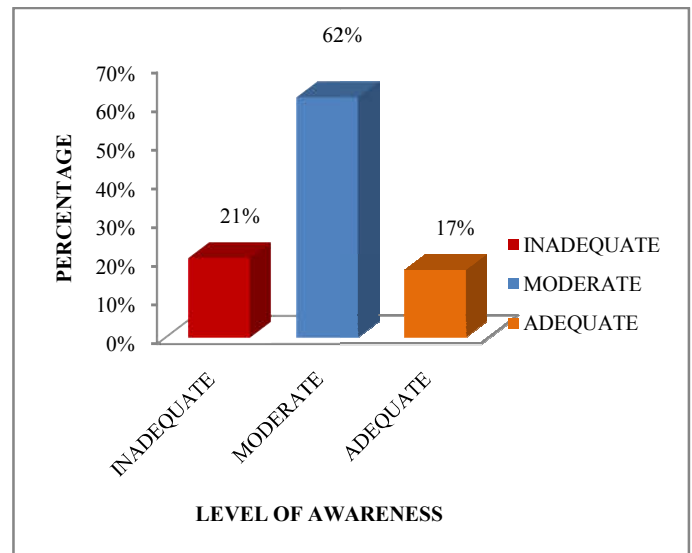


Figure 1 Percentage distribution of the respondents according to their level of awareness

Figure 1 shows that out of 150 respondents, majority i.e. 93(62%) respondents had moderately adequate awareness, 31(21%) respondents had inadequate awareness and 26(17%) respondents had adequate awareness.

Section-III

Table X Association of awareness with selected demographic variables

n=150

Demographic variables	Calculated chi square value	df	Remarks
1. Age	5.66	4	NS
2. Gender	5.75	2	NS
3. Educational qualification	9.466	2	S
4. Type of family	1.53	2	NS
5. Income	7.34	2	S
6. Type of house	9.640	4	S
7. Occupation	0.04	2	NS
8. Residence	9.89	2	S

Table X represent the association of awareness with selected demographic variables. The association was statistically tested by using Chi square at $\alpha=0.05$ level of significance and the result showed that there were significant association of awareness with educational qualification, income, type of house and residence. And there were no significant association of awareness with age, gender, type of family and occupation.

DISCUSSION

The first objective was to assess the awareness of patient regarding Bronchial Asthma. The study revealed that out of 150 respondents, majority i.e. 93 (62%) had moderately adequate awareness, 31 (20.6%) had inadequate awareness, and 26 (17.3%) had adequate awareness.

The study was supported by the findings of Nguyen NV, Chavannes NS, Huynh HT (2018) who conducted a cross sectional study on knowledge on self-management and level of Asthma control among 322 adult patients in Ho Chi Minh City, Vietnam. They found that 0.3% had good knowledge, 16.2% adequate knowledge and 83.5% had poor knowledge.

The second objective was to find out the association between the awareness regarding bronchial Asthma with selected demographic variables.

Chi square test was used to find out the association between the awareness regarding bronchial Asthma with selected demographic variables and found that there were significant association between awareness with education, income per month, type of house and residence.

CONCLUSION

In the conclusion it was found that out of 150 respondents, 31 (20.6%) had inadequate awareness, 93 (62%) had moderately adequate awareness and 26 (17.3%) had adequate awareness regarding Bronchial Asthma and it was found that there were significant association between awareness with education, income per month, type of house and residence of patients. The investigator has provided leaflets as reinforcement to all the participants of the selected hospital irrespective of their level of awareness after the data collection to enhance their awareness regarding Bronchial Asthma.

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