

A study to assess the awareness and utilization of non – communicable disease services provided by Health and Wellness Centre among men and women of a selected area of Meghalaya.

¹Ms. Badasukshisha Nongbri, M.Sc. Nursing Student, College of Nursing, Shillong-793018, NEIGRIHMS, Meghalaya.

²Ms. C.E. Myrthong, Principal, College of Nursing, NEIGRIHMS, Shillong-793018, Meghalaya.

³Mr. Badondor Shylla, RCH Consultant, National Health Mission, Meghalaya.

Corresponding Author: Ms. Badasukshisha Nongbri, M.Sc. Nursing Student, College of Nursing, Shillong-793018, NEIGRIHMS, Meghalaya.

Citation this Article: Ms. Badasukshisha Nongbri, Ms. C.E. Myrthong, Mr. Badondor Shylla, “ A study to assess the awareness and utilization of non – communicable disease services provided by Health and Wellness Centre among men and women of a selected area of Meghalaya”, IJMSIR- March - 2023, Vol – 8, Issue - 2, P. No. 127 – 139.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

In India, nearly 5.8 million die from non - communicable diseases (NCD) every year. The Government of India felt a huge need to reach out to the rural sector for early detection and treatment of the “silent killer” diseases announcing establishment of 1.5 Lakhs Health and Wellness Centres (HWC) from April 2018. Comprehensive primary health care is one of the major step for early detection of NCDs. In Meghalaya, there were 1863 hypertensive and 1357 diabetic patients availing treatment from HWCs implying a lack of awareness in areas where HWCs had been functioning.

The main objectives of the study is to assess the awareness and utilization of non – communicable disease services provided by Health and Wellness Centre among men and women and to find the association between awareness and utilization of non – communicable disease services provided by Health and Wellness Centre with the selected demographic variables.

Descriptive cross sectional study design was used and convenient sampling technique was implemented during

1st to 27th March 2021. A total of 170 participants were enrolled for the study and a semi – structured tool via interview method was used for data collection. Data was analyzed using descriptive and inferential statistics.

Out of 170 participants, 19.7% and 46.1% of men and women had good awareness regarding non – communicable disease services provided in Health and Wellness Centre. In total, 52.3% of participants had non – communicable diseases. From participants having non – communicable diseases, 85% men and 71.1% women were currently taking treatment whereby 39.4% took treatment from Health and Wellness Centre, 51.5% - private health facility and 9.1% - other government health facility. Among participants taking treatment from Health and Wellness Centre, 84.6% were women and 15.4% were men. Overall, 6.90% men and 21.15% women were utilizing the Health and Wellness Centre. There was a significant association between age of men and a significant association between age and education of women with awareness of non – communicable disease

services provided by the Health and Wellness Centre at 0.05 level of significance.

The study revealed that overall there was less awareness and utilization of non – communicable disease services provided by Health and Wellness Centre among the participants. This implied that the rural sector required more awareness about the services related to non – communicable diseases which will eventually lead to utilization of those services.

The study recommended that health education programmes and counselling can greatly improve the awareness regarding non – communicable services that are provided by the Health and Wellness Centres which is the need of the hour in today's era.

Keywords: awareness, utilization, non – communicable disease services, Health and Wellness Centre, men and women.

Introduction

As the rise of the global pandemic of non – communicable diseases is increasing day by day, it has posed a threat towards the 2030 Agenda for Sustainable Development, which includes a target of reducing premature deaths from Non communicable diseases to one-third by 2030.

This has led to a great contradiction towards the celerity boost of public health services in the recent years. The rapid rise in NCDs is predicted to impede poverty reduction initiatives in low- income countries, particularly by increasing household costs associated with health care.⁽¹⁾

According to NFHS-5 fieldwork for Meghalaya, conducted from 8 July to 15 November 2019, information was gathered from 10,148 households, 13,089 women, and 1,824 men. From the survey, it was found that there were 23.4% adults having diabetes and taking treatment and 40.1% adults having hyper tension and

taking treatment. Screening for cervical and breast cancer among women was 0.6% and 0.5% respectively. Adults who had undergone oral cavity examination was 1.6%. The findings revealed that there may be a gap of awareness among residents of Meghalaya regarding early detection and treatment of non-communicable diseases which may be either through private facilities or government facilities.⁽⁶⁾

Comprehensive primary health care in India has an important role in the primary and secondary prevention of non – communicable diseases.

With the transition of sub centres, PHCs, CHCs, UPHCs to Health and Wellness Centres, it is one of the major step for early detection of the NCDs and can lead to a higher utilization rate of the health services.⁽⁷⁾

Thus, keeping this background in mind, the study was conducted among men and women of areas where the Health and Wellness Centre has been functioning to gain insight on their awareness and utilization of the available non-communicable disease services that are rendered to them.⁽²⁾

Objectives of the study

- To assess the awareness of non – communicable disease services provided by Health and Wellness Centre among men and women.
- To assess the utilization of non – communicable disease services provided by Health and Wellness Centre among men and women.
- To determine the association between the awareness and utilization of non – communicable disease services provided by Health and Wellness Centre with the selected demographic variables.

Research methodology

A descriptive cross sectional study design was adopted among men and women within the age group of 20 – 60

years residing in areas under Mawphlang CHC, East Khasi Hills District, Meghalaya.

A total of 170 participants took part in the study using a multi stage sampling technique. The study was conducted from 1st – 27th March 2021.

The research tools consisted of socio – demographic profile and semi structured questionnaire on awareness and utilization of non – communicable disease services provided in the Health and Wellness Centre.

The constructed tool was validated by various departments such as Community Medicine, General Medicine, Medical Surgical Nursing, Public Health and Administration and Community Health Nursing.

Prior to data collection, the purpose of the study was explained, confidentiality was assured, participant information sheet and informed consent was taken from the participants. Reliability of the tool was established using Cronbach’s alpha. Pilot study was conducted and found feasible to be carried out in the main setting as proposed.

Data was collected using a semi structured interview schedule consisting of

Section A: Socio - demographic profile

Section B: questions on awareness of non – communicable disease services and Section C: questions on utilization of non – communicable disease services.

For the awareness of participants regarding non – communicable disease services, it was categorized as good (> 80%), average (41-79%) and poor (<40%).

Analysis of the data was based on the objectives of the study using descriptive (frequency, percentage) and inferential statistics (chi-square test).

Result

Section I: Frequency and percentage distribution of Socio-demographic profile, Frequency and Percentage distribution of participants on awareness and utilization

of non - communicable disease services provided in the Health and Wellness Centre.

Section i: demographic profile

Table 1: Frequency and percentage distribution of participants according to sociodemographic variables N = 170.

Socio demographic variables				
	Men (n = 66)		Women (n = 104)	
	38.8%		61.2%	
	f	%	f	%
Age (in years)				
20 – 29	06	9.1%	05	4.9%
30 – 39	21	31.8%	38	36.5%
40 – 49	14	21.3%	22	21.1%
50 – 60	25	37.8%	39	37.5%
Educational status				
No schooling	10	15.2%	08	7.7%
Lower primary (up to Class V)	29	43.9%	33	31.7%
Class VI to Class X	12	18.1%	37	35.5%
Class XI to Class XII	07	10.6%	10	9.7%
Graduate and above	08	12.2%	16	15.4%
Religion				
Christian	52	78.7%	68	65.4%
Non – Christians	14	21.3%	36	34.6%
Occupation				
Housewife			47	45.2%
Labourer	51	77.2%	28	26.9%
Government servant	09	13.7%	20	19.2%
Self-employed/business	06	9.1%	09	8.7%
Marital status				
Married	63	95.4%	100	96.1%
Unmarried	03	4.6%	04	3.9%

Number of persons above 30 years living in the same household				
1			22	21.2%
2	46	69.6%	48	46.1%
3 – 4	15	22.8%	27	25.9%
Above 5	05	07.6%	07	06.8%
Monthly family income in Rupees				
Below 5000	26	39.4%	39	37.5%
5001 – 10000	27	40.9%	48	46.2%
10001 – 30000	10	15.2%	13	12.4%
30001 above	03	4.5%	04	3.9%

Section II: Association between awareness of non – communicable disease services provided in the Health and Wellness Centre among men and women.

Table 1: Reveals the socio – demographic characteristics of the respondents studied. The total number of respondents were 170.

As per gender distribution, 38.8% were males and 61.2% were females. With reference to age of men and women, majority of the participants, i.e. 37.8% and 37.5% were in the age group of 50 – 60 years respectively.

According to educational status, majority of the participants, i.e 43.9% men received education up to class V and 35.5% women received education up to Class X. According to religion, majority were Christians where 78.7% were men and 65.4% were women.

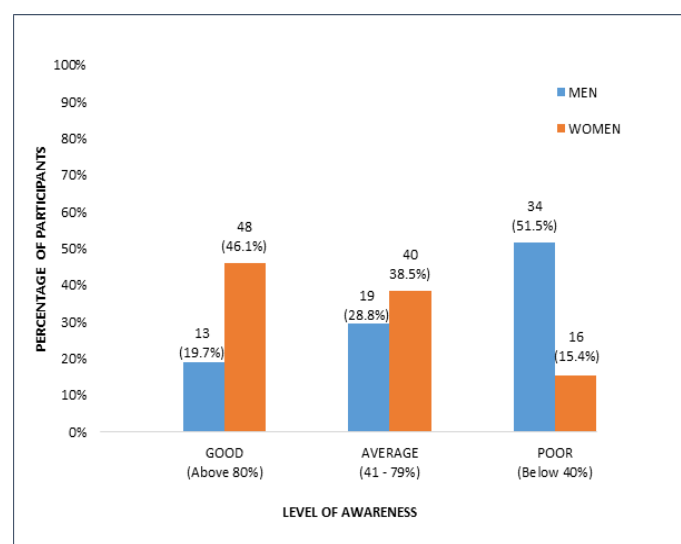
As per occupation of men, 77.2% were labourers and 45.2% women were housewives. According to marital status, majority of the participants were married i.e. 95.4% were married men and 96.1% were married women. According to the number of persons above 30 years of age living in the same house hold.

majority of the participants were: for men, below 2 persons were 69.6% and for women: below 2 persons were 46.1%. With reference to monthly family income among participants.

majority of the monthly family income among men was Rs 5001 - 10000 constituting of 40.9% and among women was Rs 5001 – 10000 constituting of 46.2%.

Figure 1: Bar diagram representing the level of awareness of participants regarding non – communicable disease services provided by Health and Wellness Centre.

N = 170



The data presented in the above figure shows that out of a total of 170 participants, among men 13 (19.7%) had good awareness, 19 (28.8%) had average awareness and 24 (51.5%) had poor awareness regarding non – communicable disease services provided in Health and Wellness Centre.

Among women, 48 (46.1%) had good awareness, 40 (38.5%) had average awareness and 16 (15.4%) had poor awareness regarding non - communicable disease services provided in Health and Wellness Centre.

Figure 2: Bar diagram representing the type of awareness programme being provided to the participants by Health and Wellness Centre regarding non - communicable disease services. N=170

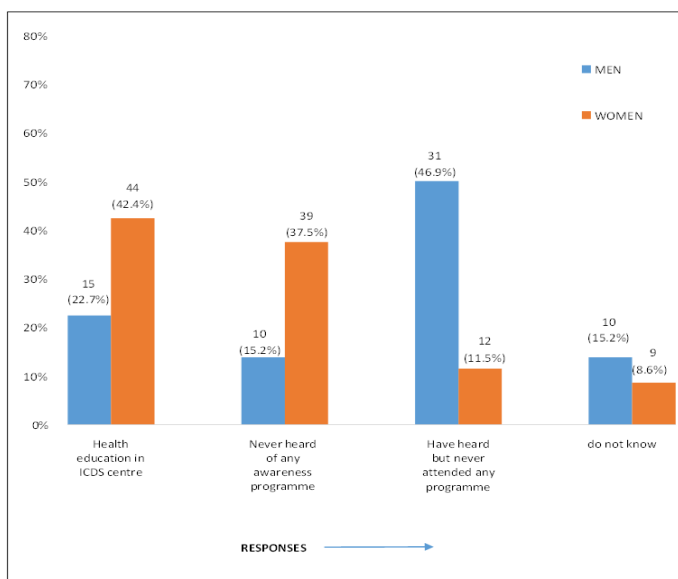
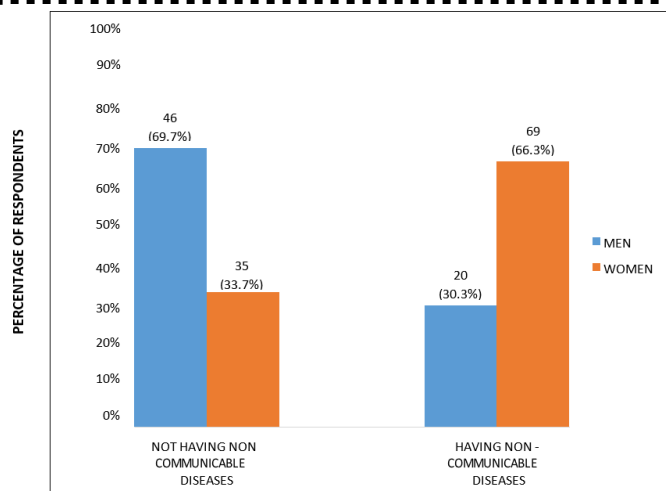


Figure 2 shows that out of a total of 170 participants, 15 (22.7%) men and 44 (42.4%) women responded that the type of awareness programme usually provided in the Health and Wellness Centre was health education given in the ICDS centre.

Also, 10 (15.2%) men and 39 (37.5%) women responded that they have never heard of any awareness programme regarding non – communi cable disease services, 31 (46.9%) of men and 12 (11.5%) women responded that they have heard but have never attended any programme regarding non – communi cable diseases and 10 (15.2%) men and 9 (8.6%)

women responded that they do not know regarding any type of awareness programme being provided by the Health and Wellness Centre regarding non – communi cable disease services.

Figure 3: Bar diagram representing the distri bution of participants according to presence or absence of non – communi cable diseases. N = 170



The above figure represents the distribution of participants according to the presence or absence of non – communicable diseases. It reveals that out of 170 participants, 46 (69.7%) men and 35 (33.7%) women were not having any form of non – communicable diseases whereas 20 (30.3%) of men and 69 (66.3%) of women had any form of non – communicable diseases.

Table 2: Frequency and percentage distribution of participants related to the type and duration of non – communicable diseases. n = 89

CRITERIA	Men (n=20)		Women (n=69)	
	f	%	f	%
Hypertension only	9	45%	44	63.7%
≤1 year	2	22.3%	15	34.1%
2 – 5 years	7	77.7%	20	45.4%
≥ 6 years	-		9	20.5%
Diabetes only	3	15%	9	13.0%
≤1 year	1	33.3%	6	66.7%
2 – 5 years	2	66.7%	1	11.1%
≥ 6 years	-		2	22.2%
Hypertension with Diabetes	7	35%	8	11.6%
2 – 5 years	6	85.7%	7	85.7%
≥ 6 years	1	14.3%	1	14.3%
Others (Thyroid/1	1	5%	4	5.7%

CVD)				
≤ 1 year			1	25%
2 – 5 years	1	100%	1	25%
≥ 6 years			2	50%
Cancer only	0	-	1	1.5%
≥ 6 years			1	100%
Chronic respiratory disease only	0	-	1	1.5%
≥ 6 years			1	100%
Hypertension with diabetes and chronic respiratory disease	0	-	1	1.5%
2 – 5 years			1	100%
Hypertension with thyroid	0	-	1	1.5%
≥ 6 years			1	100%

Table 2 represents the distribution of participants with non – communicable diseases. Out of a total of 20 men, majority i.e., 9 (45%) suffered from hyper tension where by 2 (22.3%) had hyper tension for ≤1 year and 7 (77.7%) had hypertension for 2 - 5 years. A total of 3 (15%) men had diabetes whereby 1 (33.3%) had diabetes for ≤ 1 year and 2 (66.7%) had diabetes for 2 – 5 years. Also, 7 (35%) men had hyper tension with diabetes whereby 6 (85.7%) had it for 2 - 5 years and 1 (14.3%) had it for ≥ 6 years.

Furthermore, 1 (5%) men had Thyroid disease for 2 - 5 years now. Out of a total of 69 women, majority i.e., 44 (63.7%) had hypertension out of which 15 (34.1%) had hypertension for ≤ 1 year, 20 (45.4%) for 2 – 5 years and 9 (20.5%) for ≥ 6 years now. A total of 9 (13.0%) had diabetes whereby, 6 (66.7%) had diabetes for ≤ 1 year, 1 (11.1%) had diabetes for 2 – 5 years and 2 (22.2%) had diabetes for ≥ 6 years now. Also, 8 (11.6%) had hyper tension with diabetes whereby 7 (85.7%) had it for 2 - 5

years and 1 (14.3%) had it for ≥ 6 years. Furthermore, 4 (5.7%) had been suffering from Thyroid disease/ CVD out of which 1 (25%) had been suffering for ≤ 1 year, 1 (25%) had been suffering for 2 - 5 years and 2 (50%) had been suffering for ≥ 6 years. Also, 1 (1.5%) had been suffering from Cancer for ≥ 6 years, 1 (1.5%) had been suffering from chronic respiratory disease for ≥ 6 years, 1 (1.5%) had hypertension with diabetes and with chronic respiratory disease for 2 – 5 years and 1 (1.5%) had hypertension with thyroid for ≥ 6 years now.

Table 3: Frequency and percentage distribution of participants with non – communicable diseases who are taking treatment. N=89

Currently taking treatment	Men (n=20)		Women (n=69)	
	f	%	f	%
Yes	17	85%	49	71.1%
No	3	15%	20	28.9%

The above table reveals that out of 89 participants who are having non – communicable diseases, 20 were men and 69 were women. Among 20 men, 17 (85%) were currently taking treatment and 3 (15%) were not taking any form of treatment. Out of 69 women, 49 (71.1%) were currently taking treatment and 20 (28.9%) were not taking any form of treatment. Thus, a total of 66 participants were currently taking treatment for their illness.

Table 4: Frequency and percentage distribution of participants with non – communicable diseases related to the type of treatment centre and the duration for treatment. n=66

Criteria	Men (n=17)		Women (n=49)		Total (n=66)	
	f	%	f	%	f	%
Health and Wellness Centre	-4				26	39.4%
≤1 year			6	27.2%		

2 – 5 years		100%	16	72.8%		
Private health facility					34	51.5%
2 – 5 years	10	90.9%	18	78.2%		
≥ 6 years	1	9.1%	5	21.8%		
Other Govt. health facility					6	9.1%
≤ 1 year	-		1	25%		
2 – 5 years		100%	-			
≥ 6 years			3	75%		

The above table reveals that out of 89 participants who are having non – communicable diseases, it is observed that 66 participants were currently taking treatment constituting of 17 men and 49 women whereby, 26 (39.4%) took treatment from Health and Wellness Centre, 34 (51.5%) took treatment from private health facility and 6 (9.1%) from other government health facility.

Among participants taking treatment from Health and Wellness Centre, 4 were men and 22 were women. Among men, 4 (100%) took treatment for 2 – 5 years and among women, 6 (27.2%) took treatment for ≤ 1 year and 16 (72.8%) took treatment for 2 – 5 years.

Among participants taking treatment from Private Health Facility, 11 were men and 23 were women. Out of 11 men, 10 (90.9%) took treatment for 2 – 5 years and 1 (9.1%) took treatment for ≥ 6 years. Among 23 women, 18 (78.2%) took treatment for 2 – 5 years and 5 (21.8%) took treatment for ≥ 6 years.

Among participants taking treatment from Other Government Health Facility, 2 were men and 6 were women. Among men, 2 (100%) took treatment for 2 – 5 years and among women, 1 (25%) took treatment for ≤ 1 year and 3 (75%) took treatment for ≥ 6 years.

Table 5: Frequency and percentage distribution of participants with non – communicable diseases related to the

reasons for utilizing the Health and Wellness Centre.

N=26

Criteria	Men (n=4)		Women (n=22)	
	f	%	f	%
Satisfaction of services provided in the Health and Wellness Centre	4	100%	21	95.5%
Dissatisfaction of services provided in the Health and Wellness Centre	0	-	1	4.5%
Availability of medicines free of cost from Health and Wellness Centre	4	100%	21	95.5%
Unavailability of medicines from Health and Wellness Centre	0	-	1	4.5%
Expenditure from each visit to Health and Wellness Centre				
No expenditure	2	50%	6	27.2%
≤ Rs 100	2	50%	15	68.2%
Rs 101 and above	0	-	1	4.6%

Out of 66 participants going for treatment in different treatment centres, 26 participants took treatment from Health and Wellness Centres. The above table represents the distribution of participants with non – communicable diseases related to the reasons for utilizing the Health and Wellness Centre.

According to satisfaction of services, 4 (100%) of men were satisfied and 21 (95.5%) of women were satisfied. Regarding availability of medicines, 4 (100%) of men and 21 (95.5%) of women reported that they get all medicines. The medicines were availed free of cost was reported by 4 (100%) of men and 21 (95.5%) of women. The reason if medicines were not availed was because the medicines were bought from the nearby pharmacy of the Health and Wellness Centre reported by 1 (4.5%) women.

For the expenditure from each visit to the Health and Wellness Centre, among men, 2 (50%) reported they had no expenditure and 2 (50%) spent an amount of <Rs100. Among women, 6 (27.2%) responded that they had no expenditure, 15 (68.2%) responded that they spent <Rs 100 for each visit and 1 (4.6%) responded that they spent Rs 101 and above.

Table 6: Frequency and percentage distribution of participants with non – communicable diseases related to the reasons for not taking treatment from Health and Wellness Centre. N=40

Reasons for not taking treatment from Health and Wellness Centre	Men (n=13)		Women (n=27)	
	f	%	f	%
Do not want to change treatment Centre	5	38.4%	13	48.1%
Treatment available and faster only from the current treatment Centre	2	15.4%	5	18.5%
Do not know about availability of treatment in Health and Wellness Centre	6	46.2%	0	-
Health and Wellness Centre is too far away	0	-	4	14.8%
Do not want to wait in queue	0	-	4	14.8%
Medicines are not available in Health and Wellness Centre	0	-	1	3.8%

Out of 66 participants going for treatment in different treatment centres, it is observed that 40 participants took treatment from other health centres constituting of Private Health Facility and Other Government Health facility.

The above table reveals the distribution of participants related to the reasons for not taking treatment from Health and Wellness Centre. Among men, the main reason was mainly because they did not know about availability of non – communicable disease services provided in Health and Wellness Centre which was responded by 6 (46.2%). Other reasons include: “not wanting to change treatment centre” responded by 5 (38.4%), treatment available and faster from current treatment centre responded by 2 (15.4%).

Among women, the main reason for not taking treatment was they do not want to change treatment centre responded by 13 (48.1%). Further, other reasons include, treatment available and faster from current treatment centre responded by 5 (18.5%), Health and Wellness Centre is too far away responded by 4 (14.8%), do not want to wait in queue responded by 4 (14.8%) and unavailability of Health and Wellness Centre responded by 1 (3.8%)

Table 7: Frequency and percentage distribution of participants on utilization of non – communicable disease services provided by the Health and Wellness Centre. n=162

Criteria	Men (n=58)		Women (n=104)	
	f	%	f	%
Utilization of Health and Wellness Centre	4	6.90%	22	21.15%
Non – utilization of Health and Wellness Centre	54	93.10%	82	78.85%

The above table reveals that out of a total of 162 participants constituting of 58 men and 104 women who were aware of the availability of the Health and Wellness Centre, a total of 4 (6.90%) men and 22(21.15%) women were utilizing the Health and Wellness Centre for treatment.

Furthermore, the table also reveals that in total 54 (93.

Health and Wellness Centre for treatment.

10%) men and 82 (78.85%) women were not utilizing the

Section II

Table 5: Association between awareness of non – communicable disease services provided by Health and Wellness Centre with the socio demographic variables among men. n = 66

Demographic variables	Awareness			df	χ ² table value	χ ² value	p-value
	Good awareness n=13 (19.4%)	Average awareness n=19 (28.8%)	Poor awareness n=34 (51.5%)				
Age (in years)	0	6 (9.0%)	21 (31.8%)	2	5.99	*16.12	*0.00
Below 39 years	10 (15.1%)	13 (19.6%)	13 (19.6%)				
40 – 60years							
Education							
Below Class V	10 (15.1%)	9 (13.6%)	20 (30.3%)	2	5.99	2.791	0.24
Class VI and above	3 (4.5%)	10 (15.1%)	14 (21.2%)				
Occupation							
Unemployed / Labourer	10 (15.1%)	12 (18.1%)	29 (43.9%)	2	5.99	1.19	0.55
Government servant/	3 (4.5%)	7 (10.6%)	5 (7.5%)				
Own business							
Monthly family income							
Below Rs 5000	7(10.6%)	7 (10.6%)	12 (10.6%)	2	5.99	1.42	0.49
Rs 5001 and above	6 (9.0%)	12 (18.1%)	22 (33.3%)				

***Significant at 0.05 level of significance**

Table 5 shows the findings of association between awareness of non – communicable disease services among men with the demographic variables. The obtained Chi – square value for age is 16.12 which is

more than the tabulated value i.e. 5.99 which shows that there is an association between the age of men with awareness of non – communicable disease services provided by the Health and Wellness Centre at 0.05 level of significance.

Table 6: Association between awareness of non – communicable disease services provided by Health and Wellness Centre with the socio demographic variables among women. n = 104

Demographic variables	Awareness			df	χ ² table value	χ ² value	p-value
	Good awareness n=48 (46.1%)	Average awareness n=40 (38.5%)	Poor awareness n=16 (15.4%)				
Age(in years)							
Below 39 years	22 (21.1%)	18 (17.3%)	3 (2.8%)	2	5.99	*11.31	*0.00

40 – 60 years	26 (25%)	22 (21.1%)	13 (12.5%)				
Education							
Below Class V	19 (18.2%)	14 (13.4%)	8 (7.6%)	2	5.99	*6.20	0.04
Class VI and above	29 (27.8%)	26 (25%)	8 (7.6%)				
Occupation							
Unemployed / Labourer	35 (33.6%)	29 (27.8%)	11 (10.5%)	2	5.99	1.13	0.56
Government servant/ Own business	13 (12.5%)	11 (10.5%)	5 (4.8%)				
Monthly family income							
Below Rs 5000	20 (19.2%)	14 (13.4%)	11(10.5%)	2	5.99	1.66	0.43
Rs 5001 and above	28 (26.9%)	26 (25%)	5 (4.8%)				

*Significant at 0.05 level of significance.

Table 6 shows the findings of association between awareness of non – communicable disease services among women with the demographic variables. The obtained Chi – square value for age is 11.31 and educational status is 6.20 which is more than the tabulated value i.e. 5.99 which shows that there is an association between age and educational status of women with awareness of non – communicable disease services provided by the Health and Wellness Centre at 0.05 level of significance.

Discussion

The present study aimed to assess the awareness and utilization of non – communicable disease services provided by Health and Wellness Centre among men and women of a selected area of Meghalaya.

As we move ahead, the demographic and epidemiological transition necessitates a paradigm shift – from selective to comprehensive care. The new paradigm of Ayushman Bharat-Health and Wellness Centres aims to address the rising burden of diseases including Non-Communicable Diseases (NCDs) like hypertension, diabetes and cancers along with the services which aim at providing primordial and primary prevention. The need of the hour has to be met to do away with innumerable health risks

that can slowly deteriorate and defunct the homeostatis of an individual.⁽⁸⁾

In this section, the major findings of the present study have been discussed with reference to the results of other authors and researchers of similar aspects and interests.

With regard to the presence of any of the non – communicable diseases, it was found that a total of 52.3% of the participants were having any of the non – communicable diseases which was inconsistent with the findings reported by Pati et. al (2014)⁽¹³⁾ where 28.5% were reported to be diagnosed with any NCD.⁽³⁰⁾ It was also in contrast with a study conducted by CK Bhagya Lakshmi et. al 2019⁽¹²⁾ where 61.5% of the sample population had at least one of the non – communicable diseases.

In the present study, the level of awareness regarding non – communicable disease services was found to be good among 19.7% men and 46.1% women, average among 28.8% men and 38.5% women and poor among 51.5% men and 15.4% women whereas in a study conducted by Dr. Shammy (2014)⁽⁹⁾ it was found that 67.8% were aware about NCD services and 32.2% were not aware about NCD services.

According to the present study, health education programme on non – communicable diseases was the most preferred way of providing awareness reported by 86.4% men and 89.5% women followed by home visits by the health care workers (9.0% men and 2.8% women) and also information in the form of printed media (4.9% men and 2.8% women). In a study conducted by Parker et.al (2012)⁽⁵⁾, individual lifestyle modification counselling was the preferred health education method of choice for the majority of patients and pamphlets, posters and workshops/group counselling sessions were the least preferred methods with only 9%, 13% and 11% of patients choosing these as their first choice, respectively.

In the present study, participants who have undergone oral cavity examination along with checking of BP and sugar were 19.6% men and 28.9% women. Among women, checking of BP, sugar, oral visual examination and breast examination was 8.7%. According to NFHS – 5 (2019)⁽⁵⁾ screening for breast cancer in Meghalaya was 0.5% and oral cavity examination was 1.6%.

Participants with non – communicable diseases who were currently taking treatment for the diseases were 17 (85%) among men and 49 (71.1%) among women. This was quite similar with a study conducted by CK Bhagya Lakshmi et.al, (2019)⁽¹²⁾ where participants currently taking treatment were 89.36%.

From among the participants with non – communicable diseases in the present study, 39.4% took treatment from health and wellness centre, 51.5% took treatment from private health facility and 9.1% took treatment from other government health facilities. It was in contrast with a study conducted by Deshmukh S. et al ⁽¹⁴⁾ whereby 95% sought medical care from private providers and 75% were found self-medicating with old prescriptions for the treatment. It was also inconsistent with a study conducted by CK. Bhagya Lakshmi (2019)⁽¹²⁾ where 40.69% of total

individuals with non – communicable diseases received treatment services from government health facilities and 56.28% of individuals with non – communicable diseases, received non - communicable disease services from public health facilities. On the contrary, in a study conducted by Doocy Shannon et.al,⁽¹⁵⁾ refugees utilized primary health care centers (PHCC) (57.7 %) most often while host communities sought care most in private clinics (62.4 %).

Among the participants who availed treatment from Health and Wellness Centre, 100% men and 95.5% women reported that all medicines were given free of cost from the centre whereas in the study conducted by CK Bhagya Lakshmi⁽¹²⁾ the participants reported 69.14% (yes), 12.77% (no) and 18.09% (sometimes) with regard to availability of medicines in the public health facility.

Conclusion

From the observation and findings of the present study, it is concluded that the awareness and utilization of non – communicable disease services provided by the Health and Wellness Centres was invariably low which may be due to lack of knowledge and information about such services. It can also be summarized that even with quite a good awareness of the non – communicable disease services among women, there were also associated factors such as reluctance to change treatment centre, distance, and faster medical services from other health centres which inhibited the utilization of the non – communicable disease services.

The screening of non – communicable diseases provided in the Health and Wellness Centre was not being utilized by quite a large number of participants. The functioning of Health and Wellness Centres in remote areas is comprehensive, broad and widespread. But, since it is still a very new initiative, the people in the community are still hesitant and doubtful. Most of the participants

are unaware of the availability of the non – communicable disease services provided in the Health and Wellness Centres.

References

1. Noncommunicable diseases [Internet]. [cited 2021 Sep 20]. Available from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
2. World Health Organization. National Multisectoral Action Plan for Prevention and Control of Common Non communicable Diseases [Internet]. [cited 2020 Aug 20]. 2018. p. 74. Available from: [https://mohfw.gov.in/sites/default/files/National Multisectoral Action Plan % 28N MAP % 29 for Prevention and Control of Common NCDs % 282017-22%29.pdf](https://mohfw.gov.in/sites/default/files/National%20Multisectoral%20Action%20Plan%20for%20Prevention%20and%20Control%20of%20Common%20NCDs%202017-22.pdf)
3. meta-analysis - PubMed - NCBI [Internet]. [cited 2020 Feb 22]. Available from: [https://www.ncbi.nlm.nih.gov/pubmed/?term=meta + analysis](https://www.ncbi.nlm.nih.gov/pubmed/?term=meta+analysis)
4. WHO. Chapter 2 NCDs and development. Glob Status Rep non communi cable Dis [Internet]. [cited 2020 Feb 23] 2010; 33 – 40. Available from: [https://www.who.int/nmh/publications/ncd_report_chapter 2. pdf?ua=1](https://www.who.int/nmh/publications/ncd_report_chapter2.pdf?ua=1)
5. Parker WA, Steyn NP, Levitt NS, Lombard CJ. Health promotion services for patients having non-communicable diseases: Feedback from patients and health care providers in Cape Town, South Africa. BMC Public Health [Internet]. 2012 [cited 2020 Apr 21];12(1):1. Available from: [https://bmcpublichealth. Bio med central.com/articles/10.1186/1471-2458-12-503](https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-503)
6. Sheet DF, Kannada D. National Family Health Survey - 5 District Fact Sheet Dakshina Kannada Karnataka. [internet]. 2019 [cited 2019 Sep 21]. Available from: [http://rchiips.org/nfhs/ district fact sheet _NFHS-5.shtml](http://rchiips.org/nfhs/districtfactsheet_NFHS-5.shtml)
7. Ministry of Health and Family Welfare, National Health System and Resource Centre, Government of

- India. AYUSHMAN BHARAT Comprehensive Primary Health Care through Health and Wellness Centers Operational Guidelines. [internet]. 2018 [cited 2019 Jan 20];96. Available from: [http://www.nhm.gov.in/New _ Updates_2018/NHM_Components/Health_System_Streg thening/Comprehensive_primary_health_care/letter/Oper ational_Guidelines_For_CPHC.pdf](http://www.nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Strengthening/Comprehensive_primary_health_care/letter/Operational_Guidelines_For_CPHC.pdf)
8. Non-communicable Diseases | National Health Portal Of India [Internet]. [cited 2020 Aug 14]. Available from: <https://www.nhp.gov.in/healthyliving/ncd2019>
9. Dghs. National Programme on Prevention and Control of Diabetes, Cardiovascular diseases and Stroke. [internet]. 2008 [cited 2020 May 16]; Available from: [http://nhm.gov.in/index1.php?lang=1&level=2&sublinki d=1048&lid=604#:~:text=In%20order%20to%20prevent %20and,early%20diagnosis%2C%20management%20an d%20referral.](http://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1048&lid=604#:~:text=In%20order%20to%20prevent%20and,early%20diagnosis%2C%20management%20and%20referral.)
10. Lahariya C. Health & Wellness Centers to Strengthen Primary Health Care in India: Concept, Progress and Ways Forward. Indian J Pediatr.[internet]. 2020 [cited 2020 Apr 20];87(11):916–29
11. Ministry of Health & Family Welfare. Ayushman Bharat Health and Wellness Centres: Accelerating towards health for all April 2018 - September 2019. [internet]. 2019 [cited 2020 Sep 23];(April 2018). Available from [https://abhwc.nhp.gov.in/download/ document/340b49eb2c0937e7b79ad8c1d6b975ad.pdf](https://abhwc.nhp.gov.in/download/document/340b49eb2c0937e7b79ad8c1d6b975ad.pdf)
12. Bhagya Lakshmi, Kodali PB. Utilization of noncommunicable disease services provided by public health facilities in Kasaragod, Kerala. Arch Med Heal Sci [Internet]. 2019 [cited 2021 Aug 14];7(1):18. Available from: [https://www.amhsjournal.org/ article. asp? Issn =2321-4848; year = 2019; volume =7; issue =1; spage =18;epage=24;aulast=Bhagya Lakshmi](https://www.amhsjournal.org/article.asp?Issn=2321-4848;year=2019;volume=7;issue=1;spage=18;epage=24;aulast=BhagyaLakshmi)
13. Pati S, Agrawal S, Swain S, Lee JT, Vellakkal S, Hussain MA, et al. Non communicable disease multi

morbidity and associated health care utilization and expenditures in India: Cross-sectional study. *BMC Health Serv Res.* [internet]. 2014 [cited 2020 Apr 21]; 14 (1):1–9. Available from: <https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-451>

14. Deshmukh S, Kalaskar SK, Kadam SB, Mote B, Paslawar SK, Adhav AS, et al. Utilization pattern of health services for non-communicable diseases in an urban slum: a study of Turbhe stores slum in Navi Mumbai, Maharashtra, India. *Int J Community Med Public Heal* [Internet]. 2016 Dec 21 [cited 2020 Mar 14]; 4 (1): 139–45. Available from: <https://www.ijcmph.com/index.php/ijcmph/article/view/26>

15. Doocy S, Lyles E, Hanquart B, Woodman M. Prevalence, care-seeking, and health service utilization for non-communicable diseases among Syrian refugees and host communities in Lebanon Bayard Roberts, Kiran Jobunputra, Preeti Patel and Pablo Perel. *Confl Health.* [internet] 2016 [cited 2020 Apr 21];10(1). Available from: <https://jhu.pure.elsevier.com/en/publications/prevalence-care-seeking-and-health-service-utilization-for-non-co>