



The Evaluation of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular disease and Stroke (NPCDCS) in Kashmir

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ABSTRACT:

Aim: To monitor and evaluate the NPCDCS programme and examining the infrastructure and human resource management of this programme

Methodology: Secondary data was collected from NPCDCS Kashmir and analysis was done on the generated secondary data for FY April 2018 - March 2019, FY April 2019 - March 2020 and FY April 2020 - March 2021. Study population was the patients enrolled in the NPCDCS Programme during FY April 2018 - March 2019, FY April 2019 - March 2020 and FY April 2020 - March 2021 in Kashmir. Permission was taken from the NPCDCS administration along with ethical approval from the ethics committee. Evaluation of NPCDCS Organizational structure, Infrastructure including human resources was done by visiting the NCD cells of some the districts of Kashmir.

Results: The study was done on 3 financial years i.e., 2018-19, 2019-20 and 2020-21. The data presents the prevalence of Diabetes, Hypertension, CVD's, Stroke and Cancers. The prevalence of diabetes and hypertension were increasing alarmingly in these 3 years. Counseling was going in higher rates till 2019-20 but there was a sudden drop in the rate of counseling sessions due to Covid 19 pandemic situation in the year 2020-21.

Conclusion: The NPCDCS programme focused on awareness for behavioral and life style modifications. The infrastructure and human resource system is well developed. Many cases which couldn't be reached out and were hidden were diagnosed by the help of camps and regular OPD's at NCD cells. In a long run it will be very beneficial as the burden of diseases will be reduced to some extent. As seen in the data, the cancer detection is not as it is desired to be. The early screening for oral cancers in males and breast and cervical cancer in females should be achieved through awareness campaigns to make NPCDCS programme more successful.

KEY WORDS: Evaluation, NCD, NPCDCS.

INTRODUCTION

Non-communicable diseases (NCDs) are also named as chronic diseases that are not communicable and in general be of long duration with slow progression. Non-communicable diseases (NCDs) are the outcome of different factors such as genetic, behavioral, environment and physiological¹. Non-communicable diseases (NCDs) include cardiovascular diseases such as heart attacks and stroke, Cancers (commonly oral, breast and cervical), Chronic respiratory diseases such as chronic obstructive pulmonary disease, asthma and Diabetes.²

Nowadays NCD's have become common due to sedentary lifestyle.³ There is increase in non-communicable diseases (NCDs) and the cause is some significant predisposing factors such as physical inactivity, overweight or obesity, unhealthy diet, raised blood glucose, tobacco use, raised blood pressure, alcohol consumption and raised cholesterol.⁴ As per the World Health Organization (WHO) reports there is an alarming shift in the global burden of diseases from infectious diseases to Non-Communicable Diseases (NCDs).⁵ Leading cause of morbidity and mortality are Non-communicable diseases (NCDs) which are responsible for sixty three



percent death rates globally.⁶ So, for the prevention and control of NCD's, the programme was launched in 2010 in India, named as National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). NPCDCS goals are to strengthen the infrastructure, early diagnosis, management referral, health promotion and human resource development.⁷ Monitoring and Evaluation of the programme are the significant parts of any programme and are useful for strategic planning of the programme. This research is based on the monitoring and evaluation of the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)⁸. However, little data is accessible about the working of NPCDCS program at various levels. Evaluation of NPCDCS programme will be helpful in analyzing the programme to become more acquainted with the amount of its benefits. More significant overall program data can be acquired by assessing the execution of each program - what exercises happen, under which conditions, by whom, and with what level of exertion. This data can help with future endeavors, having better expressed the condition that should be made to accomplish effective results from the program execution.⁹ Accomplishment of any program relies on the monitoring and evaluation of the programme and by this we can make new strategies and get an approximate idea about the amount it helped as entirety.¹⁰ Programme was implemented in 36 states / UT, sum of 298 NCD cells with 294 NCD clinics along with 103 Cardiac Care Units for emergency cardiac care and 64 Day-Care Centers for Cancer care at the district level.¹¹

The research study is about the NPCDCS programme in Kashmir Division covering its all Districts. More significant overall program data can be acquired by assessing the execution of each program - what exercises happen, under which conditions, by whom, and with what level of exertion. This data can help with future endeavors, having better expressed the condition that should be made to accomplish effective results from the program execution.⁹ Accomplishment of any program relies on the monitoring and evaluation of the programme and by this we can make new strategies and get an approximate idea about the amount it helped as entirety.¹⁰

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REVIEW OF LITERATURE

The Literatures found are presented below:

A review titled burden of NCD's and implementation challenges of National Programmes in India. It was conducted by J S Thakur, Ronika Paika, Sukriti Singh. The aim of this study was to estimate the burden of NCD's and to evaluate the working of national programmes for NCD. The study revealed that government has taken many major initiatives to tackle with NCD's in India. 13 different programmes were established for the prevention of NCD's and among them NPCDCS played the major role.¹³

A research study titled How to effectively monitor and evaluate NCD programmes in India. The study was conducted by Anand Krishnan, Vivek Gupta, Ritvik, Baridalyn Nongkynrih, Js Thakur. The aim of this study is to initiate new actions which could be proven as an asset to the NPCDCS programme. The study revealed early diagnosis and the management of NCD plays a major role in prevention of NCD's. As per the study, population-based surveys should be done and policy makers should take new initiatives for effective monitoring of the programme.⁸

A research study titled Effect of Ayurveda intervention, lifestyle modifications and Yoga in pre-diabetic and type-2 diabetes under NPCDCS - AYUSH integration project (pilot project). The study was conducted by Ramavtar Sharma, Vinod Kumar Shahi, Shruti Khanduri, Arun Goyal, Suhas Chaudhary, Rakesh Kumar Rana, Richa Singhal, Narayanam Srikanth, Kartar Singh Dhiman. The aim of this study was to observe the effectiveness of Ayurveda, lifestyle modifications and yoga in NPCDCS programme. The study revealed that these interventions were very effective as there was a significant decline in sugar levels of pre-diabetic and type-2 diabetic patients of NPCDCS programme.¹⁴

METHODOLOGY

Study Objective: The objectives of this research are to monitor and evaluate the NPCDCS programme and examining the infrastructure and human resource management of this programme.



Study Design: Secondary data was collected from NPCDCS Kashmir and analysis was done on the generated secondary data.

Study Period: FY April 2018 - March 2019, FY April 2019 - March 2020 and FY April 2020 - March 2021.

Study Population: All of the people which are enrolled in the NPCDCS Programme during FY April 2018 - March 2019, FY April 2019 - March 2020 and FY April 2020 - March 2021 in Kashmir.

Sources of data: All the records, registers and reports collected from all the NCD cells of Kashmir by the permission of Nodal officer of NPCDCS Programme.

Data Collection: Permission was taken from the NPCDCS administration along with ethical approval from the ethics committee. Data collection was undertaken. Evaluation of NPCDCS Organizational structure, Infrastructure including human resources was done by visiting the NCD cells of some the districts of Kashmir. The data which was collected was put in Microsoft Excel for double data entry. Before doing the analysis, data cleaning was done for quality control.

Statistical Methodology: After analyzing the data with help of Microsoft excel and SPSS.

RESULT

Table No. 1: Human Resource under NPCDCS programme in Kashmir

	Post	Sectioned
District NCD Cell	Program Officer	1
	Programme Coordinator	1
	Finance Cum Logistic Consultant	1
	Data Entry Operator	1
	Total	4
District NCD Cell Clinic	Medical Officer	1
	Nurse	2
	Laboratory Technician	1
	Physiotherapist	1
	Counsellor	1
	Data Entry Operator	1
	Total	7
Cancer Care Unit (CCU)	Medical Officer	1
	Nurse	4
CHC NCD Clinic	Medical Officer	8
	Nurse	8
	Laboratory Technician	8
	Counsellor	8
	Data Entry Operator	8
	Total	45
	Total	56

Table No. 1 shows sanctioned post for NPCDCS programme which comprises of total no. of 56 posts in this programme.

Infrastructure of NPCDCS programme in Kashmir region:

There is one NCD cell for the administration of NCD centre at district level. There is Out Patient Department for NCD working along with civil hospital's own OPD wing. There is Cardiac care unit (CCU) equipped with ventilator and other necessary CCU equipment along with Laboratory testing which includes lipid profile, complete blood count (CBC), random blood sugar (RBS) etc. are accessible for this programme and important tests like CT-scan, ECHO and ECG are also accessible under this programme.¹²



Free Medication, equipments and diagnostic kits are available under NPCDCS programme according to Indian Public Health Standards (2012).

Table no. 2: The Table shows the prevalence of NCD's and the percentage was calculated for the financial year 2018-19

Common NCDs under NPCDCS		During the Reporting Month			Cummulative since April (Financial Year)			
Indicator		Male	Female	Total	Male	Female	Total	
i.	Total no. of persons attended NCD Clinics (new and Follow up)	7379 (43.88%)	9434 (56.11%)	16813	78256 (64.32%)	103405 (56.92%)	181661	
ii.	No. newly diagnosed	Diabetes Only	245 (42.98%)	325 (57.01%)	570	3236 (43.36%)	4227 (56.63%)	7463
		Hypertension	435 (47.85%)	474 (52.14%)	909	6792 (44.59%)	8439 (55.40%)	15231
		HTN & DM (BOTH)	123 (41.87%)	170 (58.02%)	293	1767 (41.94%)	2528 (58.85%)	4295
		CVDs	32(47.76%)	35 (52.3%)	67	346 (50.95%)	333 (49.04%)	679
		Stroke	15 (55.55%)	12 (44.44%)	27	203 (54.86%)	167 (45.13%)	370
		Oral Cancer	0 (0.00%)	0 (0%)	0	1 (100.00%)	0 (0%)	1
		Breast Cancer	0 (0.00%)	1 (100.00%)	1	0 (0.00%)	4 (100.00%)	4
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	10 (100.00%)	10
		Other Cancers	8 (66.66%)	4 (33.33%)	12	84 (68.29%)	39 (31.70%)	123
iii.	No. of new patients initiated on treatment	Diabetes Only	232 (45.56%)	313 (57.43%)	545	2959 (42.79%)	3956 (57.20%)	6915
		Hypertension	399 (42.40%)	542 (57.59%)	941	6182 (44.06%)	7848 (55.93%)	14030
		HTN & DM (BOTH)	112 (41.17%)	160 (58.82%)	272	1645 (40.79%)	2387 (59.20%)	4032
		CVDs	26 (45.61%)	31 (54.38%)	57	306 (49.51%)	312 (50.48%)	618
		Stroke	7 (50.00%)	7 (50.00%)	14	133 (50.18%)	132 (49.81%)	265
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	1 (100.00%)	1	0 (0.00%)	1 (100.00%)	1
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	5 (71.42%)	2 (28.57%)	7	19 (70.37%)	8 (29.62%)	27
iv.	No. of patients on Follow up	Diabetes Only	1341 (40.50%)	1970 (59.49%)	3311	11220 (39.57%)	17131 (60.42%)	28351
		Hypertension	1142 (44.52%)	1423 (55.47%)	2565	12810 (42.14%)	17588 (57.85%)	30398
		HTN & DM (BOTH)	770 (40.48%)	1132 (59.51%)	1902	7479 (41.09%)	10746 (58.91%)	18225
		CVDs	77 (39.48%)	118 (60.52%)	195	608 (50.67%)	594 (50.33%)	1202



				(60.51%)		(42.39)%	(57.60%)	
		Stroke	5 (41.66%)	7 (58.33%)	12	115 (48.11%)	124 (53.55%)	239
		Oral Cancer	0 (0%)	0 (0%)	0	0 (0%)	0 (0%)	0
		Breast Cancer	0 (0%)	0 (0%)	0	0 (0%)	0 (0%)	0
		Cervical Cancer	0 (0%)	0 (0%)	0	0 (0%)	0 (0%)	0
		Other Cancers	10 (71.42)	4 (28.57%)	14	54 (65.16%)	35 (39.32%)	89
v.	No. of patients referred to Tertiary Care/TCCC	Diabetes	0 (0%)	2 (100%)	2	12 (27.90%)	31 (72.09%)	43
		Hypertension	1 (10%)	9 (90%)	10	29 (38.15%)	47 (61.41%)	76
		CVDs	7 (58.33%)	5 (41.66%)	12	50 (69.44%)	22 (30.55%)	72
		Stroke	9 (64.28%)	5 (35.71%)	14	81 (35.71%)	38 (31.93%)	119
		Cancer	3 (50.00%)	3 (50.00%)	6	64 (64.00%)	36 (36.00%)	100
vi.	No. of patients treated at CCU	CVDs	20 (58.82%)	14 (41.17%)	34	182 (60.26%)	120 (39.73%)	302
		Stroke	4 (80.00%)	1 (20.00%)	5	36 (61.01%)	23 (38.98%)	59
vii.	No. of persons attended day care centre		3 (75.00%)	1 (25.00%)	4	66 (70.21%)	28 (29.78%)	94
viii.	No. of persons counseled for health promotion and prevention of NCDs		1814 (42.48%)	2456 (57.51%)	4270	19607 (41.00%)	27087 (58.00%)	46694
ix.	No. of patients attended physiotherapy		1471 (38.87%)	2313 (61.12%)	3784	14122 (44.18%)	17842 (55.81%)	31964
x.	Total no. of NCD checkups done		20585 (47.39%)	22848 (52.60%)	43433	197018 (46.82%)	223708 (53.17%)	420726

Table no. 3: The Table shows the prevalence of NCD's and the percentage was calculated for the financial year 2019-20

Common NCDs under NPCDCS		During the Reporting Month			Cumulative since April (Financial Year)			
Indicator		Male	Female	Total	Male	Female	Total	
i.	Total no. of persons attended NCD Clinics (new and Follow up)	6999 (45.30 %)	8451 (54.69 %)	15450	96273 (41.23 %)	137207 (58.76 %)	233480	
ii.	No. newly diagnosed	Diabetes Only	211 (46.57 %)	242 (53.42 %)	453	3647 (42.92 %)	4850 (57.07 %)	8497
		Hypertension	418 (44.99 %)	511 (55.00 %)	929	7753 (44.68 %)	9598 (55.31 %)	17351
		HTN & DM (BOTH)	114 (43.18 %)	150 (56.81 %)	264	1781 (43.53 %)	2310 (56.46 %)	4091
		CVDs	20 (68.96 %)	9 (31.03 %)	29	351 (50.35 %)	346 (49.64 %)	697
		Stroke	17 (62.96 %)	10 (37.03 %)	27	209 (54.71 %)	173 (45.28 %)	382
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	10 (100.00 %)	10



		Cervical Cancer	0 (0.00%)	24 (100.00%)	24	0 (0.00%)	49 (100.00%)	49
		Other Cancers	2 (66.66%)	1 (33.33 %)	3	83 (62.87%)	49 (37.12 %)	132
iii.	No. of new patients initiated on treatment	Diabetes Only	168 (44.21 %)	212 (55.78 %)	380	3342 (42.57 %)	4508 (57.42 %)	7850
		Hypertension	352 (45.47 %)	422 (54.52 %)	774	6962 (45.05%)	8490 (54.94 %)	15452
		HTN & DM (BOTH)	128 (42.95%)	170 (57.04 %)	298	1719 (60.16 %)	2138 (55.43%)	3857
		CVDs	5 (45.45 %)	6 (54.54%)	11	267 (46.27 %)	310 (53.72 %)	577
		Stroke	4 (40.00%)	6 (60.00%)	10	126 (50.40%)	124 (49.60%)	250
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	1 (50.00%)	1 (50.00%)	2
		Breast Cancer	0 (0.00%)	1 (100.00%)	1	0 (0.00%)	4 (100.00%)	4
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	0 (0.00%)	0 (0.00%)	0	17 (45.94 %)	20 (54.04 %)	37
iv.	No. of patients on Follow up	Diabetes Only	1288 (41.33 %)	1828 (58.66 %)	3116	16663 (39.02 %)	26037 (60.97 %)	42700
		Hypertension	1496 (45.19 %)	1814 (54.80 %)	3310	17917 (42.20 %)	24535 (57.79 %)	42452
		HTN & DM (BOTH)	905 (40.02 %)	1356 (59.97 %)	2261	15500 (51.39 %)	14660 (48.60 %)	30160
		CVDs	78 (45.08 %)	95 (54.91 %)	173	1124 (44.14 %)	1422 (55.85 %)	2546
		Stroke	13 (65.00 %)	7 (35.00%)	20	122 (56.22 %)	95 (43.77%)	217
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	4 (21.05 %)	15 (78.94 %)	19	59 (35.97 %)	105 (64.02%)	164
v.	No. of patients referred to Tertiary Care/TCCC	Diabetes	2 (40.00%)	3 (60.00%)	5	29 (50.87 %)	28 (49.12 %)	57
		Hypertension	6 (75.00 %)	2 (25.00%)	8	45 (56.96 %)	34 (43.02 %)	79
		CVDs	16 (80.00 %)	4 (20.00%)	20	102 (65.80 %)	53 (34.19 %)	155
		Stroke	11 (91.66%)	1 (8.33 %)	12	89 (71.20 %)	36 (28.80 %)	125
		Cancer	3 (75.00%)	1 (25.00%)	4	79 (73.14 %)	29 (26.85%)	108
vi.	No. of patients treated at CCU	CVDs	11 (57.89 %)	8 (42.10 %)	19	251 (58.10 %)	184 (42.29 %)	435



	Stroke	4 (80.00 %)	1 (20.00%)	5	85 (66.40 %)	43 (33.59 %)	128
vii.	No. of persons attended day care centre	0 (0.00%)	1 (100.00 %)	1	40 (49.38 %)	41 (50.61 %)	81
viii.	No. of persons counseled for health promotion and prevention of NCDs	1913 (47.58 %)	2107 (52.41 %)	4020	24524 (43.73 %)	31544 (56.26 %)	56068
ix.	No. of patients attended physiotherapy	902 (42.11 %)	1240 (57.88 %)	2142	15633 (42.66%)	21005 (57.33 %)	36638
x.	Total no. of NCD checkups done	16983 (47.08 %)	19085 (52.91 %)	36068	224422 (46.55 %)	257625 (53.44 %)	482047

Table no. 4: The Table shows the prevalence of NCD's and the percentage was calculated for the financial year 2020-21

Indicator	Common NCDs under NPCDCS	During the Reporting Month			Cumulative since April (Financial Year)			
		Male	Female	Total	Male	Female	Total	
i.	Total no. of persons attended NCD Clinics (new and Follow up)	8815 (44.15 %)	11148 (55.84 %)	19963	68668 (45.93 %)	80816 (54.06 %)	149484	
ii.	No. newly diagnosed	Diabetes Only	567 (48.29 %)	607 (51.70 %)	1174	4208 (48.31 %)	4502 (51.68 %)	8710
		Hypertension	618 (47.64 %)	679 (52.35 %)	1297	4790 (48.70 %)	5044 (51.29 %)	9834
		HTN & DM (BOTH)	374 (47.94 %)	406 (52.05 %)	780	2873 (47.77 %)	3269 (53.22 %)	6142
		CVDs	43 (45.74 %)	51 (54.25 %)	94	283 (52.21 %)	259 (47.78 %)	542
		Stroke	28 (57.14 %)	21 (42.85 %)	49	154 (54.22 %)	130 (45.77 %)	284
		COPD	71 (50.35 %)	70 (49.64 %)	141	1163 (54.67 %)	964 (45.32 %)	2127
		CKD	14 (43.75 %)	18 (56.25 %)	32	193 (53.91 %)	165 (46.08 %)	358
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	1 (100.00 %)	1
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
	Other Cancers	1 (50.00 %)	1 (50.00 %)	2	23 (71.87 %)	9 (28.12 %)	32	
iii.	No. of new patients initiated on treatment	Diabetes Only	426 (46.65 %)	487 (53.34 %)	913	2750 (46.51 %)	3162 (53.48 %)	5912
		Hypertension	412 (44.83 %)	507 (55.16 %)	919	3271 (46.32 %)	3790 (53.67 %)	7061
		HTN & DM (BOTH)	238 (45.59 %)	284 (54.40 %)	522	1993 (47.49 %)	2203 (52.50 %)	4196
		CVDs	24 (45.28 %)	29 (54.71 %)	53	214 (50.47 %)	210 (49.52 %)	424
		Stroke	14 (48.27 %)	15 (51.72 %)	29	93 (49.20 %)	96 (50.79 %)	189



			%)	%)			%)	
		COPD	71 (50.35 %)	70 (49.64 %)	141	1049 (56.45 %)	809 (43.54 %)	1858
		CKD	14 (43.75 %)	18 (56.25 %)	32	180 (55.72 %)	143 (44.27 %)	323
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	2 (100.00%)	0 (0.00%)	2
		Breast Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	0 (0.00%)	0 (0.00%)	0	2 (50.00%)	2 (50.00%)	4
iv.	No. of patients on Follow up	Diabetes Only	1377 (39.78 %)	2084 (60.21%)	3461	11598 (43.43 %)	15101 (56.56 %)	26699
		Hypertension	1141 (44.51 %)	1422 (55.48 %)	2563	10710 (46.56 %)	12290 (53.43 %)	23000
		HTN & DM (BOTH)	1084 (42.66 %)	1457 (57.33 %)	2541	7200 (45.56 %)	8602 (54.43 %)	15802
		CVDs	129 (50.19 %)	128 (49.80 %)	257	817 (47.14 %)	916 (52.85 %)	1733
		Stroke	48 (28.74 %)	119 (71.25 %)	167	264 (43.06 %)	349 (56.93%)	613
		COPD	103 (51.50 %)	97 (48.50 %)	200	617 (54.40 %)	517 (45.59 %)	1134
		CKD	35 (56.45 %)	27 (43.54 %)	62	252 (55.50 %)	202 (44.49 %)	454
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	1 (100.00%)	1	0 (0.00%)	6 (100.00%)	6
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	1 (100.00%)	0 (0.00%)	1	8 (34.78 %)	15 (65.21 %)	23
v.	No. of patients referred to Tertiary Care/TCCC	Diabetes	9 (42.85 %)	12 (57.14 %)	21	415 (47.37 %)	461 (52.62 %)	876
		Hypertension	9 (60.00 %)	6 (40.00 %)	15	63 (56.75 %)	48 (43.24 %)	111
		HTN & DM (BOTH)	0 (0.00%)	0 (0.00%)	0	18 (50.00 %)	18 (50.00%)	36
		CVDs	8 (53.33%)	7 (46.66 %)	15	74 (58.26 %)	53 (41.73 %)	127
		Stroke	11 (55.00 %)	9 (45.00 %)	20	79 (58.08 %)	57 (41.91 %)	136
		COPD	4 (44.44 %)	5 (55.55 %)	9	45 (43.26 %)	59 (56.73 %)	104
		CKD	4 (57.14 %)	3 (42.85 %)	7	60 (54.05 %)	51 (45.94 %)	111
		Oral Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Breast Cancer	0 (0.00%)	0 (0.00%)	0	2 (33.33 %)	4 (66.66 %)	6



							(%)	
		Cervical Cancer	0 (0.00%)	0 (0.00%)	0	0 (0.00%)	0 (0.00%)	0
		Other Cancers	0 (0.00%)	3 (100.00%)	3	13 (36.11 %)	23 (63.88 %)	36
vi.	No. of patients treated at CCU	CVDs	16 (41.02 %)	23 (58.97 %)	39	121 (55.76%)	96 (44.23 %)	217
		Stroke	6 (75.00%)	2 (25.00%)	8	15 (50.00%)	15 (50.00%)	30
vii.	No. of persons attended day care centre		0 (0.00%)	0 (0.00%)	0	2 (40.00 %)	3 (60.00 %)	5
viii.	No. of persons counseled for health promotion and prevention of NCDs		1970 (43.20 %)	2590 (56.79 %)	4560	13905 (43.98 %)	17708 (56.01 %)	31613
ix.	No. of patients attended physiotherapy		845 (44.85 %)	1039 (55.14 %)	1884	6366 (43.88 %)	7211 (53.11 %)	13577
x.	Total no. of NCD checkups done		21162 (46.08 %)	24753 (53.91 %)	45915	139523 (46.48 %)	160641 (53.51 %)	300164

The present study is done on 3 financial years i.e. 2018-19, 2019-20 and 2020-21. The data presented is for all the three financial years. The data presents the prevalence of Diabetes, Hypertension, CVD's, Stroke and Cancers.

Newly Diagnosed patients, old follow ups, patients on treatment in NCD clinic, patients treated in tertiary care, CCU, day care centers, all of this data is presented in the table to get a good overview of this national programme and how it works.

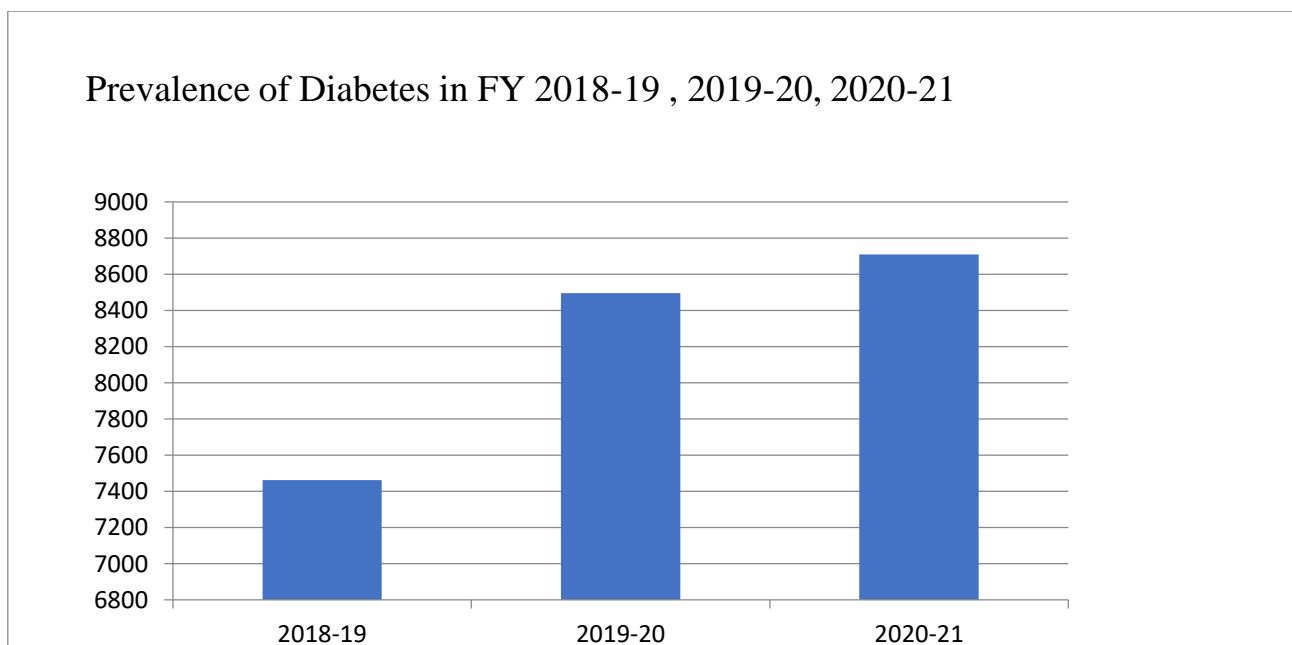


Figure 1: This Bar chart shows that in these 3 years the numbers are increasing for the prevalence of diabetes. The graph is going alarmingly up.

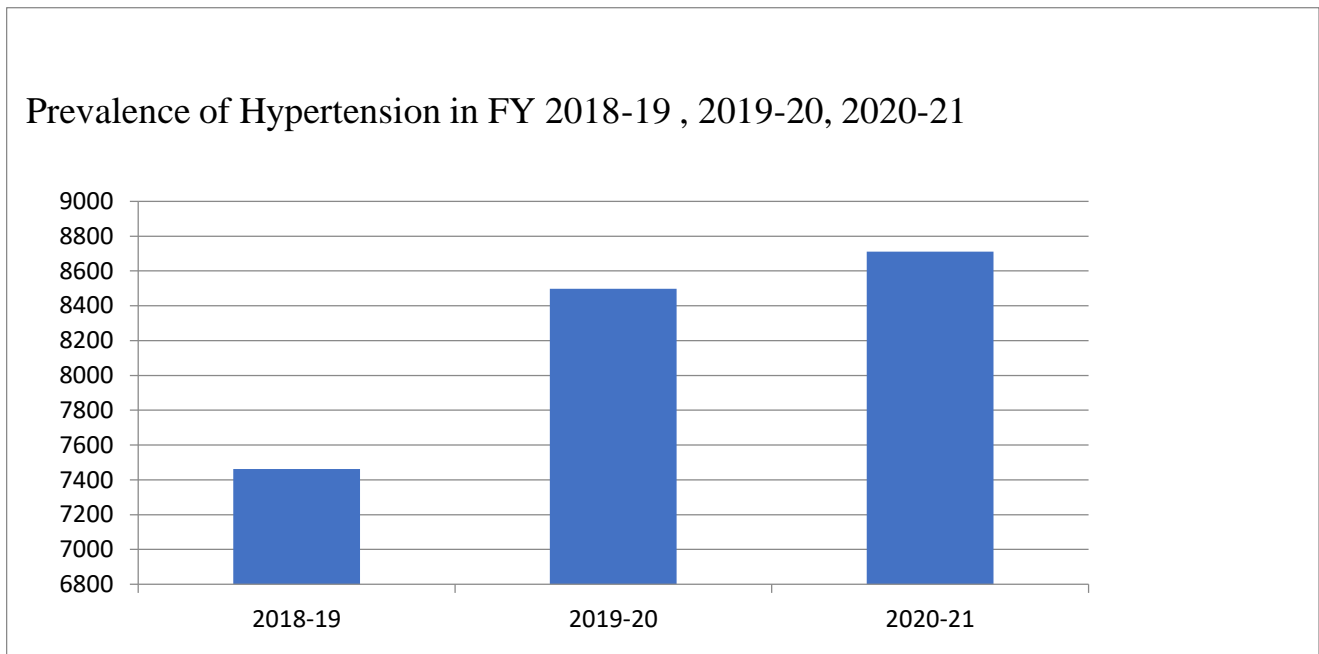


Figure 2: This Bar chart shows that in these 3 years the numbers are increasing for the prevalence of hypertension. The graph is going alarmingly up.

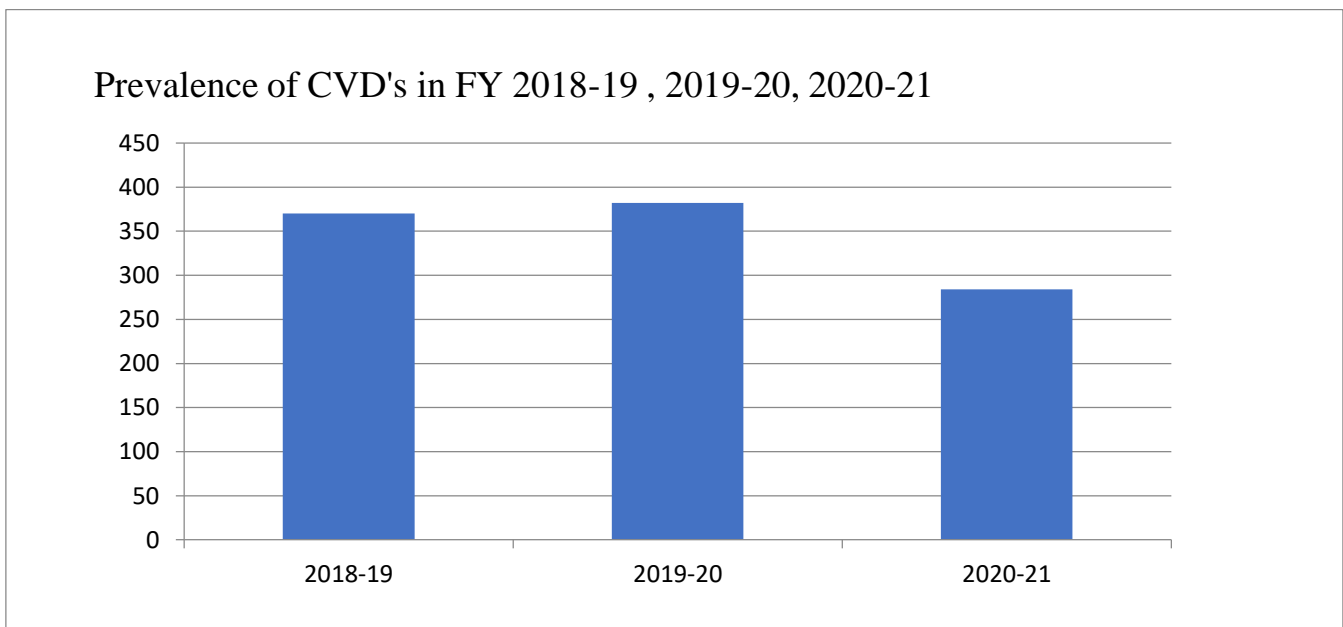


Figure 3: The bar chart shows that the CVD's in these 3 years are not in an increasing pattern but the rate is still high

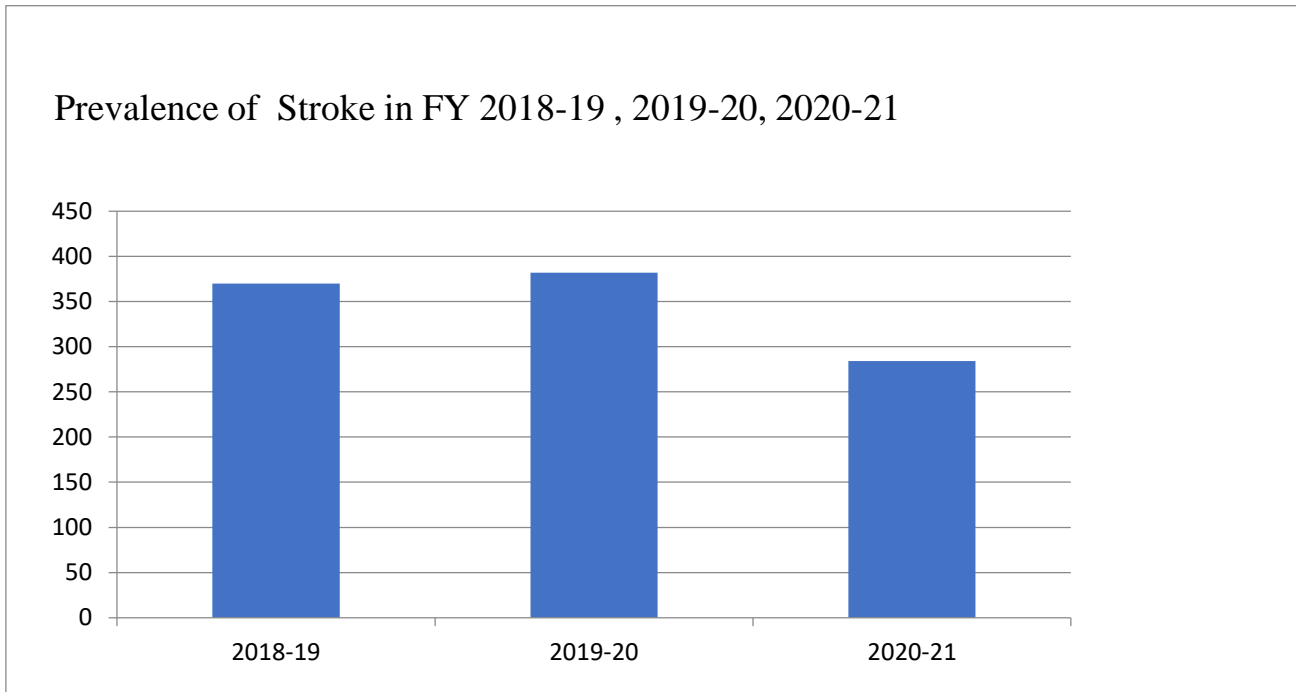


Figure 4: The bar chart shows that the Stroke in these 3 years is not in an increasing pattern but the rate is still high.

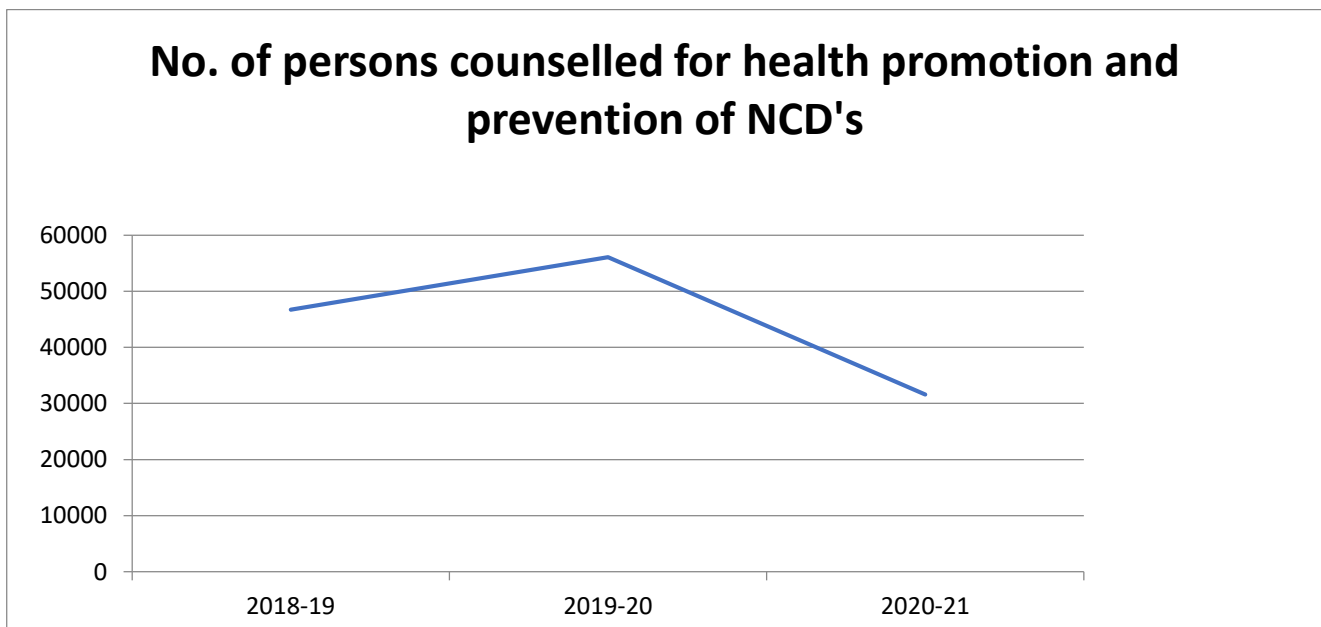


Figure 5: The graph shows that in 2018-19 that counseling was going in higher rates till 2019-20 but there is a sudden drop in the rate of counseling sessions as the reason can be Covid 19 pandemic situation in the year 2020-21.

DISCUSSION

The aim of this study was to evaluate and monitor the NPCDCS Programme. The data for the prevalence of NCD's can be collected through various strategies, i.e., through surveys, hospital records, national and central registries. Whereas this study used data from NCD cells, it's the record-based data. The increase in the rate of chronic diseases could be the lack in awareness about the treatment of anti-hypertensive and anti-diabetic treatment. In the initial stages of diabetes and hypertension, the patient is usually



asymptomatic. So, sometimes the patients can be left undiagnosed or even if the patients are diagnosed also, they develop negligence towards the disease as its asymptomatic initially and skip the treatment often, which puts them on a greater risk. As we know medication of diabetes and hypertension are lifelong treatments, so the negligence aggravates the disease to chronic stages. Counseling plays an important role in this area. If counseling sessions are done to as many patients as possible, the negligence by the patients on their level could be corrected. As per the data the patients counseled were rapidly on rise before the pandemic situation but there is marked decline in the counseling sessions due to Covid-19 pandemic situation.

LIMITATION OF THE STUDY

The data collection of this study is from NCD cells, camps, district hospitals and the actual population-based study was not possible. The data analyzed is from that part of the population which are registered under NPCDCS programme. Though, longitudinal studies can be done to check the trend or disease burden of non-communicable diseases.

CONCLUSION

The NPCDCS programme focused on awareness for behavioral and life style modifications. Early screening and early diagnosis will help to tackle NCD's at very larger rates. The medication supplies were adequate and the patients get medication (diseases which come under NPCDCS programme) free of cost. The infrastructure and human resource system is well developed. Many cases which couldn't be reached out and were hidden were diagnosed by the help of camps and regular OPD's at NCD cells. In a long run it will be very beneficial as the burden of diseases will be reduced to some extent. As seen in the data, the cancer detection is not as it is desired to be. The early screening for oral cancers in males and breast and cervical cancer in females should be achieved through awareness campaigns to make NPCDCS programme more successful.

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