

THE ANALYSIS OF THE RURAL OUTREACH PROGRAMME OF A TERTIARY CARE HOSPITAL IN GHAZIABAD AND THE MORBIDITY PROFILE OF OUT-PATIENTS ATTENDING THE PROGRAMMERavi Kant Sehgal¹, Rinku Garg², Sharmila Anand³, P. S. Dhot⁴**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: BACKGROUND: Considering that the rural areas in India are generally deprived of adequate medical facilities, a Rural Outreach Programme was launched by Santosh Hospital in order to provide free out-patient services to the rural population of some villages in Ghaziabad as part of its social obligation to the society. The aim of this study is to analyse the morbidity profile of the patients attending these outreach clinics. **MATERIAL AND METHODS:** A weekly OPD was run in nine villages with each village being visited once a week on a fixed day every week by a team of resident doctors. A record based descriptive study was carried out to find out the morbidity profile of patients based on the information about their age, sex, residence, new or old case and diagnosis as recorded in the out-patient register. **RESULTS:** Maximum patients were in the 26 to 50 years age group and there were more females than males attending the clinics. Maximum cases were of Eye diseases followed by Respiratory diseases, GIT diseases, Bone and Joint diseases and CVS diseases in that order. **CONCLUSION:** The data provided in this study which describes the morbidity profile of patients attending the Rural Outreach Programme of Santosh Hospital can help in planning health services as per the actual needs of the community as well as help in training of health staff.

KEYWORDS: Rural Outreach Programme, Village Pradhans, Morbidity Profile, Health Problems.

INTRODUCTION: It is a well-known fact that most of the medical facilities in our country are located in the urban areas and the rural population has to travel long distance even for minor sickness. With the motto of 'Reaching the Unreached', Santosh Hospital has been carrying out Rural Outreach Services in the outskirts of Ghaziabad since beginning of Aug 2014. The data recorded about the patients attending these outreach OPDs was compiled and analyzed to find out the morbidity profile of these villages. Attendance rates of Out-Patient Department are used for assessing ill-health of the community.¹ Such studies help in making a 'Community Diagnosis' on important health problems and their socio-demographic characteristics which in turn help in organizing health care for the community.²

OBJECTIVES:

- To reach out to the community by providing free specialist services to the people near their homes.
- To increase the clinical exposure of PGs and interns.
- Increase the outpatient and inpatient load in Santosh Hospital in the long run.
- To study the morbidity profile of the rural population in the area covered.

METHODOLOGY: Nine villages in District Ghaziabad at a distance of 12 to 18 KM where least Government medical facilities were available were selected, in consultation with the Ghaziabad

ORIGINAL ARTICLE

Development Authority, for running the programme. The programme was started on 04 Aug 2014 in five villages. Each village was visited on a fixed day every week from Monday to Friday. The timings of the camp were 10 AM to 1 PM. The publicity about the camp was carried out by local munadiwalah and by announcement made in religious establishments. The visiting team consisted of resident doctors in Medicine, Pediatrics, Ophthalmology, ENT and Dentistry. After eight weeks, four more villages were taken up and weekly visits were continued in these villages. A total of 3111 patients were seen during these visits. The total population covered was 45020. A common register was maintained for all out-patients and information like age, sex, residence, new/old case and principal diagnosis was recorded. In this record based descriptive study, the data concerning morbidity pattern of patients attending as out-patients in these clinics has been analyzed. Ethical approval was taken from the research committee of the Institution before starting the study.

STATISTICAL ANALYSIS: Statistical analysis was done by using Pearson's Chi-square (χ^2) statistical test and percent ratios wherever applicable. The level of significance was set at 5% ($p < 0.05$).

Inclusion and exclusion criteria: The analysis of Morbidity Profile was done on the basis of new patients only, if the same patient came for consultation more than one time for a particular illness then he/she was considered once only.

ANALYSIS OF RURAL HEALTH PROGRAMME OF SANTOSH HOSPITAL:

Activities/Services Provided:

- OPD services were run at a convenient place in the village. Free specialist consultation was provided to the villagers.
- Health check-up was carried out free of charge for those asking for it.
- School Health examination of children studying in the Government schools located in the village was carried out without charging any money. On the days when School Health Examination was carried out, the other patients were also seen at the school location only.
- Health education about personal hygiene, hand-washing, prevention and control of communicable diseases especially insect-borne and food and water borne diseases was carried out by the PG and Interns from Dept of Community Medicine.
- Those patients who required further investigation and treatment were referred to Santosh Hospital.
- These patients were provided free transportation in vehicle of Santosh Hospital.
- The patients were received on arrival in the hospital and guided by the hospital staff and after getting all investigation/ treatment etc, they were dropped back in the same vehicle.
- They were provided 15% concession for all investigations and indoor treatment facilities.

Constraints/ Difficulties:

- Working conditions were poor at many places. There was no electricity in the villages in daytime and the weather was hot and sultry.
- Most of the patients were unwilling to spend money on purchase of medicines and demanded free medicines. The attendance in the camp declined drastically after the first visit due to this factor alone.

ORIGINAL ARTICLE

- For proper conduct of the camps, cooperation of the village Pradhans is a must which was lacking at many places.
- For prior publicity about the camp, one had to depend on the village Pradhan but invariably the same was not carried out properly.
- Attendance was poor in the camps sometimes because of the festival (Dussehra/Diwali) season and harvesting season keeping people busy.

Value/Benefits to the Hospital:

- Increased awareness about Santosh Hospital and facilities available here.
- Lot of patients have been brought from the camp site for treatment and investigation in our transport.
- Lot of patients are coming directly from these villages to the hospital after the programme has started.
- Community based studies can be carried out in these villages by the PG students.
- Higher standing of Santosh brand in society in view of the social work.

Lessons Learnt:

- The number of patients reporting for the medical camp declined drastically during the second and subsequent visits in all the villages. The reason for that was that the patients were not satisfied with consultation and advice only, without medicines being given to them free of charge. Thus there is a need to revise the strategy for running the camps in order to get more patients to avail the facility. The camps can be run in collaboration with Government agencies who can provide the medicines while we provide the specialist manpower.
- The second difficulty being faced was lack of proper publicity. Involvement of Government dept can resolve this issue as well as they have their Anganwadi Workers/ASHA and other social workers in these areas who can take care of the publicity aspect.

RECOMMENDATIONS:

- Extended timings till 2.30pm/3.00pm-in the morning hours the villagers go to work in the fields and are not available to avail the facilities unless acutely ill.
- Reduce frequency of visits – once in three/four weeks- after initially running the camp for few weeks, the frequency of visits should be reduced to once in 3 to 4 weeks.
- Include other specialists e.g., orthopaedics/surgery and dermatology.
- There is a need to sensitize the hospital staff especially the HODs, reception, billing staff etc regarding the 15 percent concession that is to be given to these patients as many patients reported about difficulty in obtaining the concession.
- Involvement of government agencies–Public Private Partnership. Santosh Hospital has got trained manpower in the form of PGs of various specialities as well as nursing and paramedical staff to run outreach programmes but we lack in infrastructure at the rural level and cannot provide free medicines to the patients. These requirements can be met by having a partnership with government health agencies where our manpower and resources can be utilised to provide medical cover to the rural/urban slum population.
- Involvement/role in implementation of national health programmes eg. immunization, dots etc.

ORIGINAL ARTICLE

- Involvement of government/voluntary organisations/drug dealers- One of the main reasons for the poor response to the outreach programme amongst the villagers was the non-availability of free medicines which all of them demanded.
- Provide lab facilities eg. random blood sugar testing etc.
- Mobile van with dental chair which can provide treatment of minor dental ailments should be made available to increase satisfaction level of village population.
- Publicity in the village before the visit. If involvement of government agencies is there, then the Anganwadi Workers can carry out this activity.
- Publicity through print media should be undertaken about outreach activities by Santosh Hospital.
- Interaction with village Pradhans. A meeting can be held with the village Pradhans over a cup of tea where they can interact with the hospital staff and can be taken around the hospital and told about the facilities being provided in the hospital.
- Community based research activities in the villages adopted – by the Faculty and PG students.

MORBIDITY PROFILE OF PATIENTS ATTENDING THE PROGRAMME:

RESULTS AND DISCUSSION: The total population of the villages covered under the programme was 45020 which included 23002 males and 22018 females. Table 1 shows the distribution of patients according to their age and sex. Maximum attendance was observed in 26-50 years age group (41.56%) followed by those in over 50 age group (38.77%) and minimum attendance was observed in less than 12 years age group (7.52%). These findings were similar to those observed by Dutta and Kale³ who too reported maximum attendance in the age group of 25-44 years. However our findings differ from the study done by Singh⁴ which reported maximum attendance in under-fives and in the age group of 15-24 years. One reason for the lower attendance of 0-12 years in the present study could be because the outreach camps were conducted from 10 AM to 1 PM when most of the children were away to their schools.

Gender-wise analysis reveals that there were more females (54.20%) attending the clinics than males (45.80%). Similar findings were observed in other studies done by Rao et al⁵ and Sangeeta Kansal et al.⁶ Maximum difference was observed in the age group of 26 to 50 years in which there were 25.84% females and 15.72% males. This could be so because during the time of the camp, most of the men were away to their places of work.

Distribution of reported cases of different types of diseases according to sex is given in Table 2. It was found that out of total reported cases in the clinics, maximum cases were of Eye diseases (15.59%) followed by Respiratory diseases (10.06%), GIT diseases (6.20%), Bone and Joint diseases (5.86%) and CVS diseases (5.20%) in that order. Similar pattern of reported cases was also found by Singh IJ⁴, Sangeeta Kansal et al.⁶ Dutta et al,⁷ Seal SC et al⁸ and Arti Gupta et al.⁹ The present study differs from other studies in having highest reported cases of Eye diseases. This could be explained by the fact that there were larger number of elderly people reporting to the clinics as compared to other age groups during the camp timings because the children and younger adults had gone to schools and places of work respectively and the elderly people have a high incidence of eye diseases especially presbyopia and cataract.

ORIGINAL ARTICLE

The case rate per 1000 population for different types of diseases was found to be higher for females than male population with the exception of cases of Injuries and accidents which were more amongst males. Similar findings were reported by Singh⁴ and Sangeeta et al.⁶

CONCLUSION: The Rural Outreach Programme was started in Santosh Hospital as a Community Benefit Programme with the aim of increasing clinical exposure to the medical/dental students besides increasing the social standing of Santosh brand amongst the local population. The programme was partially successful in meeting its social as well as professional objective. However, it is felt that the experience gained in running this programme should not be allowed to go waste and the programme should be continued in a slightly modified pattern in collaboration with State Government Health authorities so that the two problems of providing free medicines as well as adequate publicity prior to the camp are taken care off. The analysis of the data pertaining to patients attending the clinics revealed that maximum patients were in the 26 to 50 years age group and there were more females than males attending the clinics. Maximum cases were of Eye diseases followed by Respiratory diseases, GIT diseases, Bone and Joint diseases and CVS diseases in that order. The data about the morbidity profile of the patients attending the Rural Outreach Programme can help the public health planners in planning health services as per the actual needs of the community as well as help in training of health staff.

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ORIGINAL ARTICLE

Annexure 1:

Age (in years)	Male		Female		Both	
	No. of Patients	%	No. of Patients	%	No. of Patients	%
0-12	123	3.95	111	3.57	234	7.52
13-25	207	6.65	171	5.50	378	12.15
26-50	489	15.72	804	25.84	1293	41.56
>51	606	19.48	600	19.29	1206	38.77
Total	1425	45.8	1686	54.2	3111	100

Table 1: Distribution of patients according to Age and Sex

Annexure 2:

Morbidity	Male(n=23002)			Female(n=22018)			Both(n=45020)		
	No	%	Case Rate per 1000	No	%	Case Rate per 1000	No	%	Case Rate per 1000
Respiratory Diseases	218	15.30	9.48	235	13.94	10.67	453	14.56	10.06
GIT Diseases	129	9.05	5.61	150	8.90	6.81	279	8.97	6.20
CVS Diseases	107	7.51	4.65	127	7.53	5.77	234	7.52	5.20
CNS Diseases	18	1.26	0.78	20	1.19	0.91	38	1.22	0.84
Eye Diseases	312	21.89	13.56	390	23.13	17.71	702	22.57	15.59
Ear Diseases	40	2.81	1.74	41	2.43	1.86	81	2.60	1.80
Skin Disease	79	5.54	3.43	95	5.63	4.31	174	5.59	3.86
Bone & Joint Diseases	112	7.86	4.87	152	9.02	6.90	264	8.49	5.86
Dental Diseases	54	3.79	2.35	67	3.97	3.04	121	3.89	2.69
Anaemia & Nutritional Deficiency	69	4.84	3.00	126	7.47	5.72	195	6.27	4.33
Endocrine Disorders	30	2.11	1.30	36	2.14	1.63	66	2.12	1.47
Injuries & Accidents	99	6.95	4.30	78	4.63	3.54	177	5.69	3.93
Others*	166	11.65	7.22	183	10.86	8.31	349	11.22	7.75
Total	1433#		61.95	1700#		76.57	3133		69.10

Table 2: Distribution of Reported Cases of Different Diseases according to Sex

$X^2 = 19.51$ df= 12 $p > 0.05$.

*Others mainly included diseases like general weakness, myalgia, menstrual disorders and vaginal discharge etc.

#Some of the patients had more than one disability due to which the total is more than the actual no. of patients.

ORIGINAL ARTICLE

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