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On

**Impact of Community Outreach Program on the patient inflow for a
Tertiary Care Hospital in India**

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Dr Pratik Tyagi

(PG/16/037)

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LIST OF ABBREVIATIONS

COP – Community Outreach Program

ROI – Return On Investment

EHC– Executive Health Checkup

IP – In Patient

ICU – Intensive Care Unit

NICU – Neo natal ICU

PICU – Pediatric ICU

OPD – Out Patient Department

GDP – Gross Domestic Product

ATL- Above The Line

BTL- Below The Line

TTL- Through The Line

SECTION: 1

OVERVIEW OF THE ORGANIZATION

AAKASH HEALTHCARE





About the Organization

Aakash Healthcare at Dwarka is the flagship hospital of the Aakash Group, which heralds the group's noble intention to enter the healthcare space. This hospital has been planned and designed as a 230 bedded tertiary care multi-specialty facility and has commissioned 100 beds in the first phase.

The Aakash Hospital is constructed across a sprawling 1.3-acre campus which is 230 bedded having 08 OTs, 70 Medical & Surgical Critical Care, 15 bedded dialysis unit and easily accessible from Delhi, Gurgaon and the Bahadurgarh.

VISION

To become the most desired healthcare brand by providing compassionate, caring and world class services with the help of talented team of doctors, professional and latest technology.

MISSION

To achieve highest patient satisfaction index by delivering patient centric, best healthcare services amongst the local and extended community.

CORE VALUES

I – Integrity **C** – Compassion **A** – Accountability **R** – Respect **E** - Excellence

Specialties

Key Specialties

Orthopaedics & Joint Replacement

General & Minimal Access Surgery

Cardiology & Cardiac Surgery

Ophthalmology & Refractive Surgery

Mother & Child

Nephrology

Other Specialties

Anesthesiology & Pain Management

Medical Oncology

Blood Bank & Transfusion Medicine

Neurology & Neuro Surgery

Critical Care

Physiotherapy & Rehabilitation

Dentistry & Dermatology

Plastic & Cosmetic Surgery

Endocrinology

Preventive Health Check up

ENT

Pulmonology

Gastroenterology

Rheumatology

G I Surgery

Radiology

Hearing & Speech

Surgical Oncology

Internal Medicine

Trauma & Emergency (24X7)

Interventional Radiology

Urology

Lab Medicine

Vascular & Endo Vascular Surgery

SECTION: 2

DISSERTATION REPORT

On

**Impact of Community Outreach Program on
the patient inflow for a Tertiary Care Hospital
in India**

ABSTRACT

COP for large corporate hospitals has become a two way channel where they on one side deliver their CSR and on the other side it helps in the brand building exercise of the organization. Anyhow, new and small level hospitals also engage in COP activities as it always aligns with the central motive of any healthcare provider i.e. service of the community at large.

Now, instead of waiting for patients to arrive at the facility, hospitals are making an effort to involve community in its activities and become their primary healthcare provider at large. It is commonly known that **COP (Community Outreach Programs)** does establish and bind the hospital to the masses but also, the magnitude & utility of same needs to be analyzed & quantified for every new organization to ensure that the right pockets of captive catchment area are encashed.

In an effort to align these activities, the following study was conducted. The study gave us insights on the current drainage and disease pattern from the captive catchment area which further assisted in drafting COPs for the month of March & April. The outcomes of the same have been discussed as a part of the study.

Introduction

With the evolution of mankind and advent of technology in every walk of life post industrial revolution, Hospitals have taken a huge leap since then and tried to benefit from every scientific management principle with an everyday focus to either elevate the benchmark of care or service delivery. We have witnessed majority of leading hospitals adopting practices such as lean and six sigma to ensure best quality services are rendered at the patient interface and also standardization of processes is achieved at the organization level. Where we have achieved such a level of uniformity in Hospital processes in the non-medical operations that Henry ford's assembly lines are now implemented across functions, Hospitals and Healthcare organizations are now aggressively tapping the age old principles of public health and community medicine to attract public at large and increase the footfall to their facility.

Hospitals are public buildings which are aimed to treat the ailing from their diseases. Now days we have super specialty facilities which are operational for only a given part of the day otherwise majority of them function round the clock and cater to all sorts of patients, be it elective or emergency cases. We plan the scope of services of any hospital based on the prevalent disease pattern of the captive catchment area and going further, Community Outreach Program (COP) acts as a reference to understand the changing healthcare needs of the society.

Review of Literature

Concepts used in the study

MARKETING

Marketing is a set of activities and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.

CHANNELS OF MARKETING

Marketing activities today can be divided into three segments – Above the Line (ATL), Below the Line (BTL) & Through the Line (TTL) Marketing. Initially the word TTL was used to divide the two terminologies but later got merged between the two and represents the combination of both. These activities help organization in developing various marketing strategies and help an organization to develop.

- **Above the Line**

Above the Line activities refer to the initiatives which are meant for a large mass of audience and have no specific target customers. It is a very fundamental tool in the brand building exercise and creates a snowball effect amongst the customers thereby increasing the brand visibility. ATL activities are not centered on conversions and focus on marketing

the product/brand amongst the masses. This type of marketing is basically a form of mass marketing.

Mediums for ATL activities are:

- Television, Radio, Print, Advertisements (magazine & newspaper)

Advantages of above the line marketing

- Wider Reach
- Better Connect with the audience
- Brand Building

- **Below the Line**

Below-the-line activities are very customer intensive and are aimed directly at the consumer. Such activities are undertaken to enhance sales conversions for any particular product, service, and organization. Community outreach programs (COP) are part of this segment.

Mediums of Below the Line Activities

- Outdoor Advertising – examples, Flags, Banners, Wraps, Billboards, etc.
- Direct Mail Marketing - examples, direct mails (e-mails, text messages, etc.)

- Sponsorship

Advantages of below the line marketing

- Extremely Targeted
- Better ROI
- Easy Control
- Tailor-Made

- **Through the Line**

It is an overlap of both ATL & BTL activities which focus on ways & means to achieve both brand building and maximize conversions from a given market segment. This 360 degree approach is very cumulative to enhance market presence of the said product; service and organization.

Medium of Through the Line Promotion

- Digital Marketing

AREA OVERVIEW

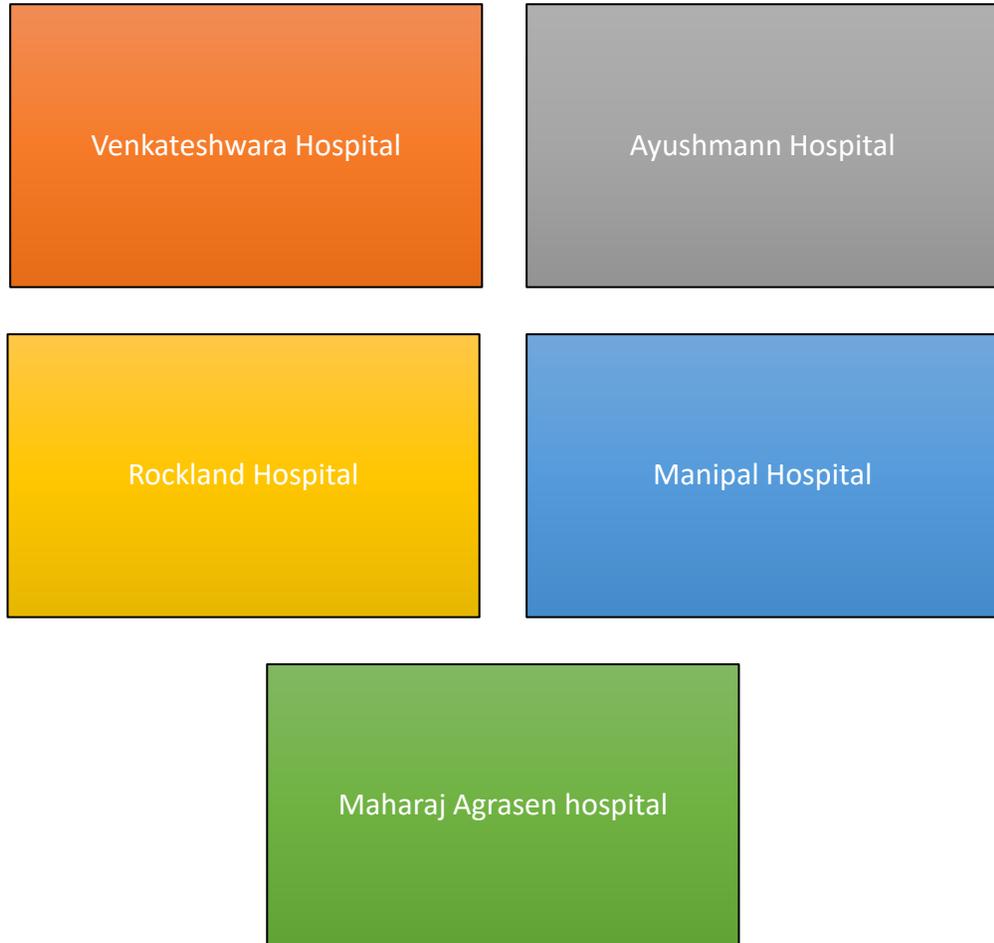
| | |
|---------------------------|---------------------------------------|
| Total Number of Household | 278874 |
| Total Area | 56.48 km ² (21.81 sq. mi) |
| Density | 19,000/km ² (50,000/sq mi) |

Table 1: Demography of Dwarka



Figure 1: Location of Aakash Hospital

Competitor Analysis



Studies/ Papers

1. Sewell J, Oberklaid F, Debelle G, Cullen J, Carmichael A, Finnocchiaro C. in their study on, “Community outreach: an expanding role for hospitals” state that planning for new models of health care delivery has led to the development of the Community Outreach Program (COP), a hospital-based model which utilizes existing community resources to provide early intervention services, training in community paediatrics and integration of hospital and community-based health care¹.
2. Haworth MJ. in his study on, “Hospital-based community outreach to medically isolated elders. The nurse gerontologist is a key link in this health care delivery system in Wisconsin” state that The outreach program has served a community need in that many elderly persons who were previously medically isolated have now been located and linked to the health care delivery system. The outreach program has reinforced the hospital's presence and leadership role in the community through its work with the elderly population. The hospital is seen as being committed to bringing health care services to its elderly neighbors. Through the establishment and coordination of health care services to previously isolated and unconnected elderly persons, there has been a broadened revenue base for hospital operations.
3. Olusola Olawoye, Olufunmilayo I Fawole, Christopher C Teng, and Robert Ritch . in their study on , “Evaluation of community eye outreach programs for early glaucoma detection in Nigeria” state that Community eye outreach programs appear highly useful in the earlier detection of glaucoma in sub-Saharan Africa.

4. Anderson V in his study on, Hospital laboratory outreach: benefits and planning state that “A laboratory outreach program can benefit the hospital in several ways, such as increasing revenues, filling unused capacity, and solidifying relationships with the physician and patient communities. Building rapport with physicians and the community ultimately brings economic value to the hospital. To service this new market it is necessary to modify current systems and processes and develop new services. The areas most likely to be developed are logistics, service centers, client services, physician connectivity, billing, marketing, sales, and finance reporting. Developing efficient customer-related services is a key to reaping the benefits.

AIMS AND OBJECTIVES

General Objective: To understand the drainage pattern to a 230 bedded multi super speciality hospital from its captive catchment area, devising a COP for the same and analysing its outcomes.

Specific Objective:

1. To understand the drainage from captive catchment by analysing the footfall trends.
2. Devising a COP for the said territory.
3. Calculating the impact of COP in terms of Volume.

RESEARCH QUESTION

1. What are the boundaries of captive catchment area to the hospital and also analyse the drainage trends?
2. What interventions were planned to increase the footfall from the drainage area?
3. What was the impact in terms of quantification of interventions made in terms of volumes from the interventions implemented?

Research Methodology

Study Design: Cross-Sectional Study (Before – After Study)

Study Area: Aakash Healthcare, Dwarka

Sample Size : 9568

Study Population: Dwarka, Najafgargh, Nawada , Uttam Nagar, Palam, Chawla, Janakpuri, Mayapuri, Dabri.

Tools: Camp data (checklist attached in annexure 1), Hospital Data (from HIS)

Data Analysis : Descriptive statistics (average and percentage) are used for analyzing the data from HIS & Camp data.

| BASELINE SCENARIO | INTERVENTION PHASE | OUTCOME |
|--|--|---|
| <ul style="list-style-type: none">➤ The study was carried out in Aakash Hospital, Dwarka.➤ Areas approx. 5 KM radius from the Hospital facility were targeted, namely Dwarka, Najafgargh, | <ul style="list-style-type: none">➤ COP activities were planned on the basis of data analysed from 15th March to 30th April, 2018.➤ Checklist was drafted to capture a few vital details of the patients visiting camp activities listing their | <ul style="list-style-type: none">➤ After intervention of COP from 15th March–30th April➤ COP was planned and specialty wise camps were conducted in target areas were |

| | | |
|---|--|---|
| <p>Nawada, Uttam Nagar, Palam, Chawla, Janakpuri, Mayapuri, Dabri.</p> <p>➤ Drainage pattern to the Hospital was analysed.</p> <p>➤ Data was taken from HIS of hospital to analyze current trend of footfall during the period of 5th February to 15th March with the previous COP in action.</p> | <p>Name, Address, Contact, Age, Gender etc</p> | <p>potential was expected. After the intensive camp exercise a good growth in terms of patients was noted.</p> <p>➤ Hence COP had a positive impact in creating awareness & footfall in given period of time.</p> |
|---|--|---|

Table 2: Research methodology – Data Analysis

Study Findings

Baseline Scenario

Upon gathering and analyzing the drainage pattern for select areas of the captive catchment, it was evident that few major pockets of the captive catchment were either untapped or responded very poorly to any sort of marketing campaign. A trend analysis of drainage pattern to the month of February and half of March'18 has shown an upward and promising trend for the major pockets of the captive catchment. Whereas, three territories recorded very discouraging footfall patterns from the expected numbers. The drainage trend is described as under:

| S. No. | Region | Feb | Mar | % Growth |
|---------------|---------------|------------|------------|-----------------|
| 1 | Chhawla | 3 | 13 | 333% |
| 2 | Dabri | 7 | 11 | 57% |
| 3 | Dwarka | 1150 | 2155 | 87% |
| 4 | Janakpuri | 1 | 31 | 3000% |
| 5 | Mayapuri | 1 | 8 | 700% |
| 6 | Najafgarh | 103 | 112 | 9% |
| 7 | Nawada | 2 | 4 | 100% |
| 8 | Palam | 78 | 355 | 355% |
| 9 | Uttam Nagar | 332 | 513 | 55% |
| 10 | Others | 62 | 80 | 29% |

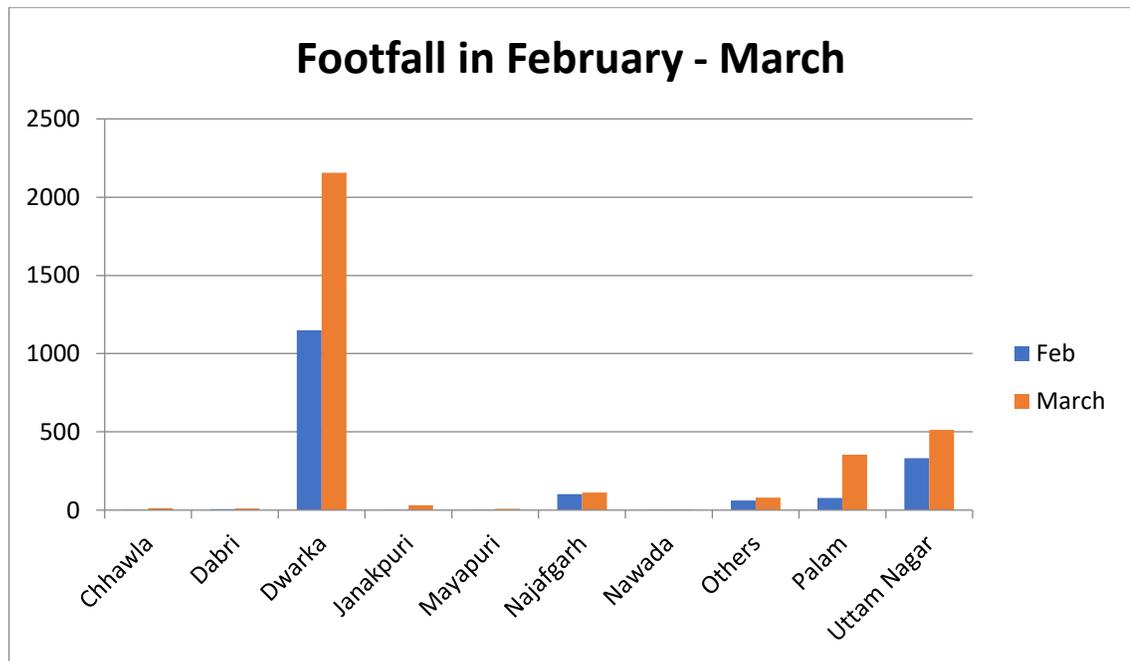
Table 3: Drainage trend

Total footfall in from 5th Feb 18 - 15th March 18 : 1739

Total footfall from 1st march 18 to 15th March 18: 3282

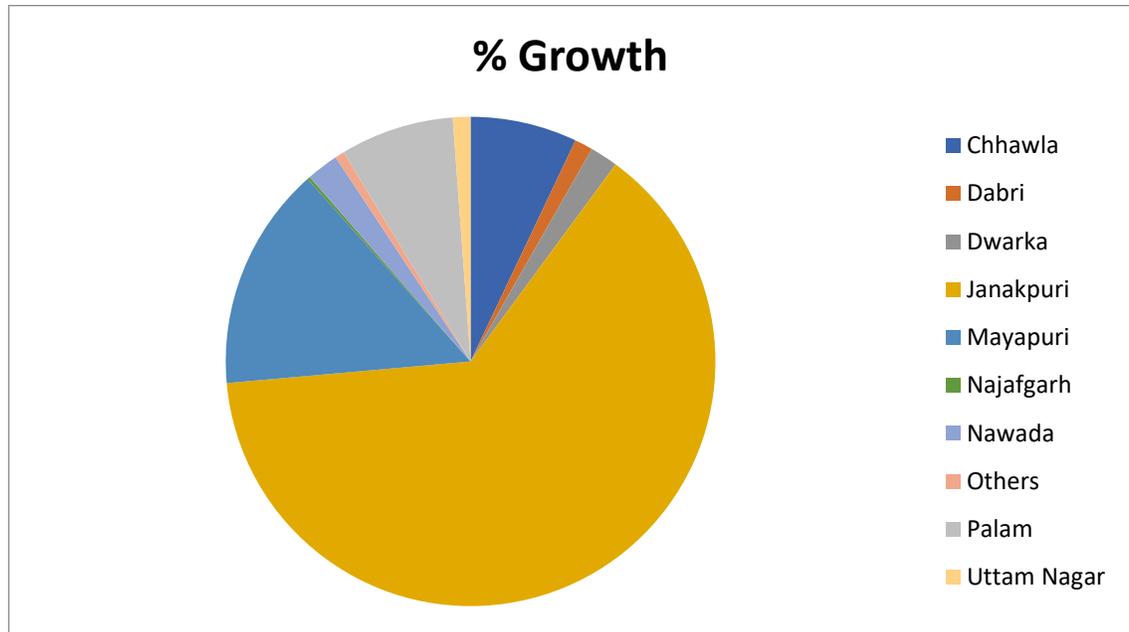
COP not only is a tool to ensure larger footfalls but also ensures engagement with the community. In order to achieve better outcomes from the said territories, an extensive COP needs to be designed from mid-March to end of April'18. The aim of this COP would be to engage the community at large and screen them for various possible diseases. The details of the COP planned from March 15th to April 30th are given as under

GRAPHICAL REPRESENTATION OF FOOTFALL IN THE MONTH OF FEB-MARCH



Graph 1: Footfall in the month of Feb – March

PERCENTAGE GROWTH IN REGIONS IN MONTH OF FEB-MARCH



Graph 2: Percentage growth in Feb – Mar

INTERVENTION PHASE

COP ACTIVITIES & VENUE DURING INTERVENTION PHASE

ACTION PLAN

| <u>Date</u> | <u>Activity Name</u> | <u>Specialty</u> | <u>Territory</u> |
|-------------|----------------------|------------------------|-------------------|
| 15-Mar | Health Camp | General health camp | Najafgarh |
| 16-Mar | Health Camp | General health camp | Others |
| 17-Mar | Health Camp | Single-specialty camp | Najafgarh |
| 18-Mar | Health Camp | Multi-Specialty | Aakash Healthcare |
| 19-Mar | Health Camp | Single- Specialty camp | Dabri |
| 20-Mar | Health Camp | Single- Specialty camp | Others |
| 21-Mar | Health Camp | General health camp | Palam |
| 22-Mar | Health Camp | Single- Specialty camp | Najafgarh |
| 23-Mar | Health Camp | Multi- Specialty camp | Najafgarh |
| 24-Mar | Health Camp | Single- Specialty camp | Aakash Healthcare |
| 25-Mar | Health Camp | Multi- Specialty camp | Others |
| 26-Mar | Health Camp | Single- Specialty camp | Dabri |
| 27-Mar | Health Camp | General health camp | TRAI |
| 28-Mar | Health Camp | General health camp | Uttam Nagar |
| 29-Mar | Health Camp | Multi- Specialty camp | Dabri |
| 30-Mar | Health Camp | Single- Specialty camp | Nawada |

| | | | |
|--------|-------------|------------------------|-------------------|
| 31-Mar | Health Camp | Multi- Specialty camp | Dwarka Mor |
| 1-Apr | Health Camp | Multi- Specialty camp | NLU |
| 2-Apr | Health Camp | Multi- Specialty camp | Dwarka Mor |
| 3-Apr | Health Camp | Multi- Specialty camp | Najafgarh |
| 4-Apr | Health Camp | Single- Specialty camp | Aakash Healthcare |
| 5-Apr | Health Camp | Single- Specialty camp | Others |
| 6-Apr | Health Camp | General health camp | Nawada |
| 7-Apr | Health Camp | General health camp | Uttam Nagar |
| 8-Apr | Health Camp | General health camp | Aakash Healthcare |
| 9-Apr | Health Camp | General health camp | janakpuri |
| 10-Apr | Health Camp | General health camp | Najafgarh |
| 11-Apr | Health Camp | General health camp | Others |
| 12-Apr | Health Camp | General health camp | Najafgarh |
| 13-Apr | Health Camp | Multi Specialty | Aakash Healthcare |
| 14-Apr | Health Camp | Single- Specialty camp | Dabri |
| 15-Apr | Health Camp | Single- Specialty camp | Others |
| 16-Apr | Health Camp | General health camp | Palam |
| 17-Apr | Health Camp | Single- Specialty camp | Najafgarh |
| 18-Apr | Health Camp | Multi- Specialty camp | Najafgarh |
| 19-Apr | Health Camp | Single- Specialty camp | Aakash Healthcare |
| 20-Apr | Health Camp | Multi- Specialty camp | Others |
| 21-Apr | Health Camp | Single- Specialty camp | Dabri |
| 22-Apr | Health Camp | General health camp | TRAI |

| | | | |
|--------|-------------|------------------------|-------------------|
| 23-Apr | Health Camp | General health camp | Uttam Nagar |
| 24-Apr | Health Camp | Multi- Specialty camp | Dabri |
| 25-Apr | Health Camp | Single- Specialty camp | Nawada |
| 26-Apr | Health Camp | Multi- Specialty camp | Dwarka Mor |
| 27-Apr | Health Camp | Multi- Specialty camp | NLU |
| 28-Apr | Health Camp | Multi- Specialty camp | Dwarka Mor |
| 29-Apr | Health Camp | Multi- Specialty camp | Najafgarh |
| 30-Apr | Health Camp | Single- Specialty camp | Aakash Healthcare |

Table 4: List of COP activities

Activities Undertaken

Total number of health camps conducted: 47

General Specialty health camp: 15

Super - specialty health camp : 15

Multi - specialty health camp: 16

| S. No. | Details | Numbers | % |
|---------------|----------------------------------|----------------|----------|
| 1 | General Specialty Health Camp | 15 | 33% |
| 2 | Super – Specialty Health Camp | 15 | 33% |
| 3 | Multi – Specialty Health Camp | 16 | 35% |

Table 5: Number of activities undertaken

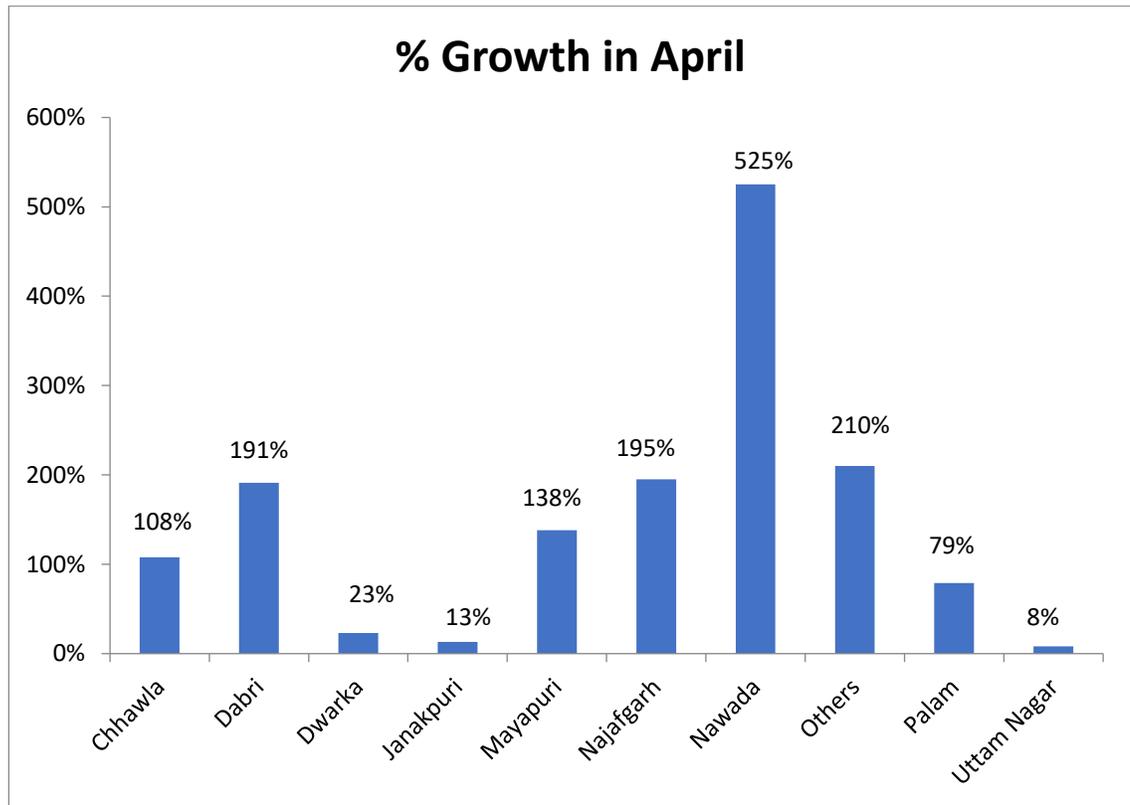
OUTCOME

| S. No. | Region | Feb | March | % Growth | April | % Growth |
|--------|-------------|------|-------|----------|-------|----------|
| 1 | Chhawla | 3 | 13 | 333% | 27 | 108% |
| 2 | Dabri | 7 | 11 | 57% | 32 | 191% |
| 3 | Dwarka | 1150 | 2155 | 87% | 2661 | 23% |
| 4 | Janakpuri | 1 | 31 | 3000% | 35 | 13% |
| 5 | Mayapuri | 1 | 8 | 700% | 19 | 138% |
| 6 | Najafgarh | 103 | 112 | 9% | 330 | 195% |
| 7 | Nawada | 2 | 4 | 100% | 25 | 525% |
| 8 | Others | 62 | 80 | 29% | 248 | 210% |
| 9 | Palam | 78 | 355 | 355% | 635 | 79% |
| 10 | Uttam Nagar | 332 | 513 | 55% | 553 | 8% |

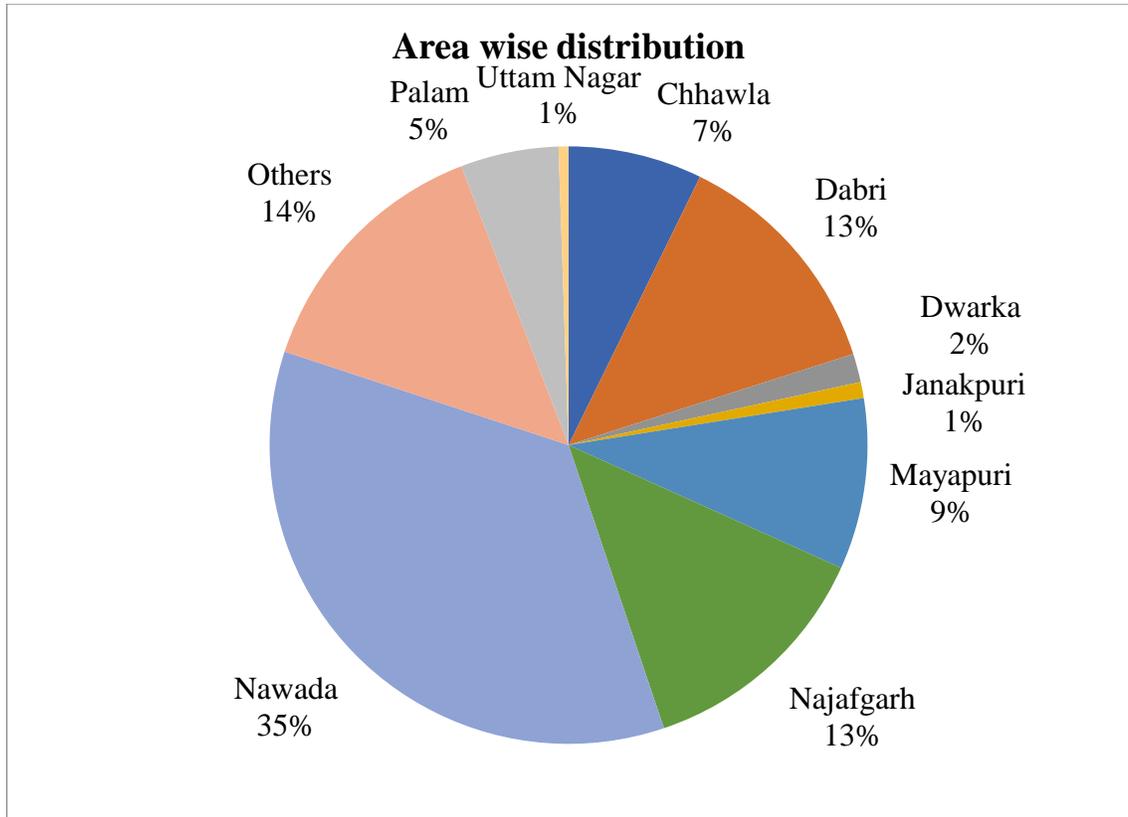
Table 6: % Growth in footfall of patients after COP

OUTCOME ANALYSIS

After intervention of COP from 15th March–30th April, total footfall from 15th March -30th April: 4565



Graph 3: % Growth in footfall of patients after COP in April



Graph 4: Area wise distribution of % growth in patients after COP

COP was planned and specialty wise camps were conducted in target areas where potential was expected. After the intensive camp exercise a good growth in terms of patients was noted and expected to rise in further period. Hence COP had a positive impact in creating awareness & footfall in given period of time.

According to the data above, it can be inferred that all the regions covered during COPs have seen a positive growth rate post intervention (in February). However maximum increase can be seen in Nawada, Najafgarh and Dabri (After April). In other regions especially Uttam Nagar, a huge drop in percentage can be seen in April when compared to the month of March.

Discussion

The analysis shows the current drainage pattern from captive catchment area. It has been concluded that there is a need to intensify activities around Dabri, Najafgarh and Nawada as post COP in April; maximum rise in growth percentage of footfall of patients is seen here. General specialties such as family medicine & internal medicine camps were organized to attract maximum footfall. Such activities have to be continued in order to increase the number of patients.

Conclusion

1. Steep rise in footfall in all three areas namely Dabri, Najafgarh and Nawada was witnessed
2. The footfall was low earlier on a/c of low awareness levels amongst the residents about the facility /consultant/services offered
3. Further pockets of these areas which are still untapped need to be explored where conversion levels are lower
4. COP activities need to be intensified not just in forms of frequency but also the gamut specialties needs to be increased
5. Also after thoroughly understanding the disease pattern focused camps by specialty consultants need to be conducted to engage community at large
6. An average size of 300% was witnessed across the “3” territory after the active intervention taken in COP

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