



FACILITY AND SERVICE SATISFACTION AMONG BENEFICIARIES OF COVID-19 VACCINATION CENTRE IN A TERTIARY CARE INSTITUTE.

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ABSTRACT **Background:** Along with effective vaccine production and distribution, it is necessary to make the whole vaccination experience acceptable and convenient for the beneficiary. In this Pandemic, Vaccination came as a light in the dark and hence it is important to make the experience of this one of its kind adult vaccination drive pleasant for the beneficiary. Assessing the quality, expectations and satisfaction will help us to provide better services in the future.

Objectives: The study aimed to understand the satisfaction of facility and services provided at the COVID-19 vaccination center in a tertiary care institute in a metropolitan city and to study the aspects which are likely to affect the beneficiary satisfaction during implementation of COVID-19 immunization sessions.

Methods: A cross sectional study was conducted in the Covid-19 vaccination center of a tertiary care institute for a period of one and half months. Pre-formed pre-tested semi-structured questionnaire was used to collect data from 750 beneficiaries which were selected using Random sampling method. Data entry and analysis were done using SPSS version 21.0

Results and Conclusions: Overall 94.53% beneficiaries were fully satisfied with the services and facility arrangements at the vaccination center. The major domains of dissatisfaction were availability of the material resources like sanitizers and drinking water, social distancing being compromised due to overcrowding and waiting period. For successful vaccination and prevention of further spread of infection at the vaccination site it is imperative to understand the satisfaction among beneficiaries and identify the bottleneck areas so that remedial measures can be taken.

KEYWORDS : Covid-19, Vaccination, Beneficiary satisfaction.

INTRODUCTION:

The World Health Organization declared the coronavirus outbreak a global pandemic on March 11, 2020⁽¹⁾. Covid-19 has spread relentlessly to almost all the countries causing a serious public health, social and economic turbulence. Vaccination came as a light in the darkness of the deadly infection. India started the biggest adult vaccination drive for Covid19 on 16th of January 2021.

Vaccination against this novel coronavirus offers the possibility of significantly reducing severe morbidity and mortality and transmission when deployed alongside other public health strategies and improved therapies⁽²⁾. The vaccine was rolled out in a phased manner with the first phase involving health care workers, second phase of the frontline workers and then third of the general population. With the current demand for the vaccine and the emerging newer strains threatening to further jeopardize pandemic control measures, it is prudent to efficiently produce, distribute and administer the vaccine on time. Along with effective vaccine production and distribution, it is necessary to make the whole vaccination experience acceptable and convenient for the beneficiary. It has been observed that better beneficiary experience is associated with better vaccine uptake⁶. The overall experience includes ease of access, better communication and co-ordination, time management and advise for follow-up after the first dose. An effective vaccination program improves community participation and better beneficiary experience will not only improve participation; it will increase the proportion of beneficiaries returning for the second dose as well. This study was conducted to assess the facility and service satisfaction of the Covid-19 vaccine beneficiaries as well to understand the challenges faced during implementation of immunization sessions which are likely to affect beneficiary satisfaction.

METHODOLOGY:

A cross sectional study was conducted in the month of April-May 2021 to study the satisfaction among vaccine beneficiaries in view of facility and services at the center. During this period vaccination was conducted for Health Care workers, Senior citizens and individuals with co-morbidities aged 45 plus. The vaccine that was being given

during the study period was Covishield vaccine as per the Government of India guidelines.

Data Collection was done after Ethical Clearance from the Institutional Ethical Committee. Random Sampling of the vaccine beneficiaries was done, and data was collected from 750 people when they sat in Observation area after vaccination using pre-formed pre-tested semi-structured questionnaire after taking written informed consent. All those who were vaccinated for either first or second dose were included in the study. Pregnant females, persons with egg allergy, immune-compromised individuals and those having allergy to vaccine components were excluded from the study as they were not vaccinated in that phase of vaccination as per Government of India guidelines. The demographic information related to age, gender, profession and type of vaccine beneficiary along with information regarding Beneficiary satisfaction by using satisfaction scale was collected. Data entry was done in excel and analysis was done using SPSS version 21.0.

RESULTS:

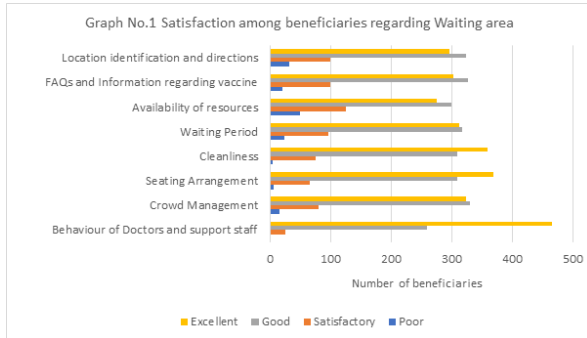
The cross-sectional study among the Covid-19 vaccine beneficiaries regarding satisfaction of the facility and services was conducted to understand the aspects which are leading to dissatisfaction among the beneficiaries so that remedial measures can be taken in time. As this vaccination drive is going on all over the country this study helped to realize the bottlenecks in smooth conduction of the vaccination.

Table no. 1 depicts the Socio-demographic profile of the vaccine beneficiaries. The mean age of the beneficiaries was 42.74 (43 years). Majority of the beneficiaries were health care workers and frontline workers as it was first and second phase of vaccination as per guidelines of Ministry of Health and Family Welfare. The most common reason for taking vaccine was protection of oneself from Covid. Out of 750 beneficiaries 678 (90.4%) had taken first dose of vaccine and 72 (9.6%) had taken both the doses. Majority of the beneficiaries availed the facility of vaccination without any prior appointment i.e by walk in. There was no significant difference gender-wise in the level of satisfaction of the beneficiaries. (Chi square= 0.95, p value >0.05)

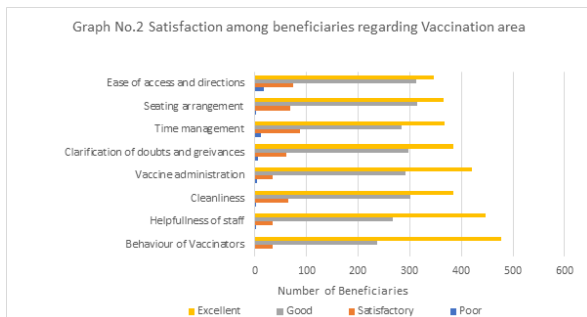
Table No. 1 Socio-demographic profile of the vaccine beneficiaries (N=750)

Sr. No.	Socio-demographic parameter	Sub-categories	Number of Beneficiaries (%)
1	Age	18-44	385 (51.33)
		45-59	215 (28.66)
		60+	150 (20)
2	Gender	Male	385 (51.33)
		Female	365 (48.66)
3	Profession	Doctor	106 (14.13)
		Staff Nurse	118 (15.73)
		Govt. or BMC Service	15 (20)
		Retired	134 (17.86)
		Student	55 (7.33)
		Housewife	63 (8.4)
		Others (achitects, lawyers, fitness trainers, yoga teachers, musicians etc)	259 (34.53)
		4	Reason for taking vaccine
Prevention (self realization)	63 (8.4)		
Mandatory	62 (8.26)		
Immunity	43 (5.73)		
Others (family pressure, to protect kids, taking because its provided free)	33 (4.4)		
5	Type of beneficiary	With appointment	88 (11.73)
		Without appointment	662 (88.26)

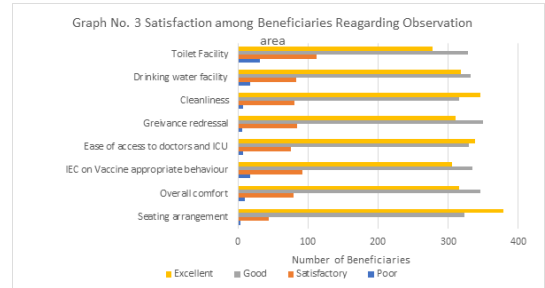
Graph no. 1 depicts the satisfaction among beneficiaries about the services in the waiting area. In the waiting area tokens are distributed and then beneficiaries wait for their turn of vaccination. The behavior of doctor and support staff was appreciated by most of the beneficiaries. The beneficiary dissatisfaction in this area was related to crowd management, waiting period, limited availability of sanitizers, drinking water, temperature recording and toilet facility. Maximum beneficiaries faced problems of availability of resources like drinking water and sanitizers as the crowd is huge and filling of these resources was done thrice in a day.



Graph no. 2 shows the satisfaction regarding services related to vaccination area wherein the service component was appreciated in view of behavior of vaccinators and procedure of vaccine administration. Overall majority of the beneficiaries were satisfied in all domains of this area. The dissatisfaction was related to clarification of doubts, time management and direction markers.



Graph no. 3 depicts the satisfaction about the services in the observation area. The beneficiaries were satisfied with overall services in this area but dissatisfied with the Information material displayed, drinking water facility and toilet facility.



Over all 709 (94.53%) beneficiaries were fully satisfied with the services and facility arrangements whereas 41 (5.46%) were not satisfied. There was no significant difference between satisfaction among first dose and second dose beneficiaries.

About 102 (13.6%) beneficiaries gave suggestions regarding improvement of services.

Most of the suggestions were made in view of the provision of location directions to the vaccination center followed by social distancing measures which were compromised sometimes due to overcrowding, infrastructure availability like toilets, drinking water and sanitizers, app related issues and time taken in the waiting area.

DISCUSSION:

Overall, the beneficiaries were satisfied with the services and the available facilities at the center given the current situation related to Covid pandemic. Covid appropriate behavior was followed at each area in the vaccination center but social distancing was compromised in view of overcrowding on some days like the weekends when people took vaccine so that rest can be taken on Sundays. During the phase of data collection most of the beneficiaries were the health care workers for first dose, front line workers for second dose and remaining were the persons with co-morbidities and senior citizens for the first dose. So, this study was conducted to improvise on the facilities rendered at the center, so that when the general population is being vaccinated best possible services can be given to them.

There are as such no similar studies conducted in view of Covid vaccination, but there are studies related to satisfaction regarding Childhood vaccination services.

In a study conducted by A. Barale et al, satisfaction with the childhood immunization services were studied which revealed that the written/verbal information about the vaccination schedules was either lacking or insufficient. The survey results indicated a need for better training and updating of health care workers so that they can give immunization service users correct information as requested⁷.

Similarly, in the present study one factor of dissatisfaction was limited IEC material displayed at the vaccination center which was improved by vaccinator giving details of information for the next dose as well as where to follow-up in case of an AEFI. Also, videos were played continuously on a television in the observation area regarding all the information to be shared with the vaccine beneficiary.

Another major issue faced was dissatisfaction due to long waiting period. This was also the reason for dissatisfaction among beneficiaries of childhood vaccination. In a study conducted by Udonva NE et al on the client views, perceptions and satisfaction with immunization services at Primary Health care facilities in South Nigeria, it was seen that 51% of the clients were not satisfied with the reception by health care providers as well as the waiting time for vaccination⁹. In the present study the vaccinators were trained beforehand, in view of vaccination procedure and messages to be given to the beneficiary after inoculation of the vaccine. Also, IEC pamphlets supplied by the public health department were distributed to the beneficiaries. The waiting period was reduced from 2-3 hours to 30 minutes on an average by creating separate queues for different age groups and distributing tokens before the start of the session so that the person having token can come as per his/her convenience on the same day before the session end time.

The study conducted by Bhola Nath et al which was a part of the coverage evaluation survey conducted using the WHO 30 cluster sampling methodology in the Urban slums of Lucknow district, north India analyzed a total of 388 respondents of completely or partially immunized children to assess the level of satisfaction and its determinants. The overall satisfaction was more than 90% in the respondents of both the categories of the children, however the difference between the satisfaction rates was found to be significant. Also, the satisfaction with accessibility ($p < 0.04$) and information given by the health worker ($p < 0.00$) differed significantly between completely and partially immunized⁸. In the current study there was no significant difference seen in level of satisfaction between beneficiaries of first and second dose.

The availability of the resources like sanitizers and drinking water facility was ensured as and when the stock was over rather than fixed timings for refilling. The app related issues were solved considering the technicalities depending upon the case of the beneficiary by co-ordination with the COWIN team and for this purpose two interns and one resident were trained under the site manager of the vaccination center. One Medical social worker was also appointed at the vaccination center to counsel and clarify the doubts of the beneficiaries. Security personnel were trained to manage the crowd and distribution of the tokens.

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Conflict of Interest: Nil

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