ORIGINAL ARTICLE

Evaluation Of Urban Primary Health Centres Operating Under The Public-Private Partnership Model In The State Of Uttarakhand

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ABSTRACT

Background: The National Urban Health Mission (NUHM) was launched to improve the health status of the urban poor. **Aim:** This study assessed the performance of Urban Primary Health Centres (UPHCs) functioning within the PPP healthcare delivery model. **Methodology**- We evaluated 27 UPHCs facilities based on the indicators like infrastructure as per IPHS / NUHM guidelines, human resources position as per norm, accessibility, utilization of services, client satisfaction, outreach activities, and comparative assessment between UPHCs under different zonal NGOs. **Results**- All evaluated UPHCs operated in rented buildings, lacking key infrastructure elements like cold chain rooms, AYUSH facility, generator room and separate offices. Human resources were inadequate, with all 2nd Medical Officer positions and 81.5% of LHV roles vacant. Community awareness of services like ANC (56.6%), PNC (51.1%), immunization (65.9%), and non-communicable diseases (63.6%) was notable. The availability of drugs at most UPHCs was not as per the demand placed. The irregular flow of funds restricted the smooth functioning of UPHCs. **Conclusion**: The study revealed that most community members preferred UPHCs for their health needs. The main challenges that deferred the functioning of the UPHCs were the irregular flow of funds, lack of human resources, and lack of required drugs.

KEYWORDS

Evaluation; Public-Private Partnership; UPHCs; Urban Health; NUHM; Challenges

INTRODUCTION

The world's urban population has grown from 751 million in 1950 to 4.2 billion in 2018. According to the United Nations report, India will add 416 million urban dwellers by 2050. (1) In the cities with one lakh and above population, the 3.73 crore slum population increased to 7.66 crores by 2011. (2,3) A rapid increase in the urban poor population who live in slums and other squatter settlements had put tremendous strain on the urban infrastructure, leading to restricted access to healthcare because of a limited number of urban public health delivery systems. (4) Migrants found navigating the complex and fragmented health systems challenging (5) The urban poor (individuals from the lowest quartile of the wealth index) had worse health and nutrition outcomes; 38% of urban poor children under five years were stunted. Approximately 36% of urban children missed full immunization, which was higher (58%) in the urban poor. (6, 7) Poor environmental conditions and high population density in slums increase vulnerability to diseases. (8) The National Urban Health Mission (NUHM) was launched in 2013 to improve the health status of the urban poor, notably slum dwellers and other marginalized sections. (4) The government of India decided to expand urban health centers through PPP due to limited public resources and existing

non-government service providers. (9) PPP in the health sector enhances public health by promoting collaboration among government, private, and non-profit entities. (10) Approximately 32 lakh NGOs are registered in India, roughly 4 NGOs per 1000 population. (11) Only 3% of these NGOs are dedicated to health. In urban areas of Uttarakhand,14.3% of NGOs provide health services to the urban population. (12) The evaluation of UPHCs working under the PPP model in Uttarakhand is critical for understanding how this approach impacts healthcare delivery in the region of varied topography.

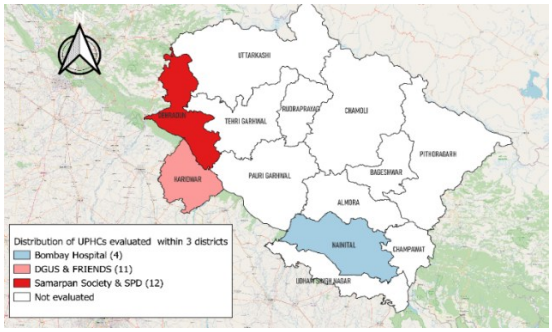
Aim: To assess the performance of UPHCs functioning within the PPP healthcare delivery model in Uttarakhand.

Objective: To assess the performance of UPHCs functional within the Public Private Partnership healthcare delivery model and identify the impediments to achieving their potential in Uttarakhand.

Material & Methods

Study design: Mixed-methods study, Study setting: The study was conducted in Uttarakhand to evaluate UPHCs under five zonal NGOs in 3 districts. The districts selected were Dehradun and Haridwar from the Garhwal region, along with Nainital from the Kumaon region. These districts were chosen randomly from the Garhwal and Kumaon regions of Uttarakhand. Study Population: All the service providers of the UPHCs and their clients were interviewed. Available infrastructure and support services under each UPHC were also included in the evaluation. In this period, we evaluated twelve UPHCs from Dehradun, four from Nainital, and eleven from Haridwar. All the UPHCs which were functioning under public-private partnerships in the three districts were included in the evaluation. The NGOs working in these districts were the Samarpan Society, Society for People's Development (SPD), Bombay Hospital, Dharam Gramin Utthan Sansthan (DGUS) and FRIENDS (Figure 1)

Figure 1 Distribution of UPHCs evaluated in Uttarakhand



A total of 27 Urban Primary Health Centers (UPHCs) were operating under the Public-Private Partnership (PPP) model in Dehradun, Haridwar, Roorkee, and Nainital. Key stakeholders of the National Urban Health Mission (NUHM) were identified and categorized into six groups for in-depth interviews, using a structured questionnaire. The groups included the Chief Medical Officer, managers of the NGOs operating the UPHCs, paramedical staff, and Medical Officers at the UPHCs. Additionally, five patients from each UPHC (totalling 135 patients) who were present at the centre on the day of the visit of the evaluation team and ten community members from within a one-kilometre radius of each UPHC (totalling 270 community members) were selected for interviews regarding the utilization of services. The community members were selected purposively with 10 members comprising two children, two adolescents, four adults and two geriatrics with the male: female as 1:1. The total number of members who were interviewed for the study was 467; it included 3 Chief Medical officers, 5 NGO Managers, 27 Medical Officers-in-charge, 27 Paramedical Staff, 135 patients and 270 Community members. We evaluated the facilities based on the following indicators- infrastructure as per Indian Public Health Standards / NUHM guidelines, human resources position as per norm, accessibility, utilization of services, client satisfaction, outreach activities, and comparative assessment between UPHCs under different zonal NGOs. Study Duration: Data collection was done from March 1st to 23rd, 2021.

Four teams, consisting of faculty members, residents, and students, were formed within a medical college for data collection. Each team varied in strength (ranging from 6-12) as per the number of UPHCs within each city/district. We used a structured interview schedule and checklist for primary and secondary data collection. Exit interviews were conducted with the clients.

The ethical approval for conducting this study was obtained from the institutional ethics committee of AIIMS Rishikesh.

Data Analysis: Data were entered and descriptive analysis was performed in the Microsoft excel 2016. The findings are reported in percentages. The service providers' and community members' suggestions were transcribed and translated, and common themes were identified for the given suggestions.

Results

All the UPHCs in the study were functional from 9 am to 5 pm daily. Almost all UPHCs cover a population of more than 50,000, with a distance of the farthest urban cluster ranging from 3-10 km. All 27 UPHCs were operating out of buildings rented by

the public partner. A separate Out-Patient Department room (OPD) was present in all UPHCs, along with a waiting lounge with chairs, a pathology laboratory, a pharmacy, a ward with at least one bed, toilets, drinking water facilities, and a hand washing station. The ward was used chiefly for ANC cases requiring observation or waiting for referral transportation, for first aid, and as an injection room. A few infrastructure elements, like a cold chain room, AYUSH facility, generator room, and a separate office, were absent in all 27 UPHCS. There was no separation for the injection room, first aid room, or minor OT facility. Patients requiring these facilities were attended in the wardroom, usually containing 1-2 beds. Biomedical waste bins were present throughout, but BMW management pits were absent. Toilets were ill-maintained in many UPHCs. Pharmacies at several places were not assigned a separate room and were accommodated in the open near the reception. Since all UPHCs were equipped with inverters for electricity backup, the private partners did not feel the need for a generator room anywhere (Table 1).

Table 1- Distribution of human resources, infrastructure and services provided at the UPHCs managed by different NGOs under PPP models

S.NO.	INDICATOR	NGO				
		SAMARPAN SOCIETY (n=6)	SPD (n=6)	BOMBAY HOSPITAL(n=4)	DGUS (n=6)	FRIENDS (n=5)
A	GENERAL					
1	Percentage people visiting UPHC regularly	78.3%	81.67%	20%	68.3%	74%
2	Source of information regarding availability of services at UPHC	77% through ANMs/ASHAs	77% through ANMs/ASHAs	68% through ANMs/ASHAs	68% through ANMs/ASHAs	72% through ANMs/ASHAs
B	MANPOWER					
1	Medical Officer In-Charge (Sanctioned-1/UPHC)	Post filled in all centres				
2	2nd MO (Sanctioned-1/UPHC)	Vacant post in all centres	Vacant post in all centres	25% of the centres have a part time MO	Vacant post in all centres	Vacant post in all centres
3	Nursing Officer (Sanctioned - 3/UPHC)	2 vacant posts in all centres	2 vacant posts in all centres	Not present in 25% centres, 1 vacant post in almost all centres	Adequate in all centres	2 vacant posts in all centres
4	Lady Health Visitor (Sanctioned – 1/UPHC)	Vacant post in 66% centres	Vacant post in 50% centres	Vacant post in all centres	Vacant post in all centres	Vacant post in all centres
5	Pharmacist (Sanctioned – 1/UPHC)	Post filled in all centres				
6	ANM (Sanctioned – 3/UPHC)	All posts filled	All posts filled	All posts filled in 75% centres	All posts filled	All posts filled
7	Supporting staff (Sanctioned – 3/UPHC)	Inadequate in all centres	Inadequate in 83% centres	1 vacant post at all centres	Inadequate in all centres	Inadequate in all centres
8	M&E Unit	None present				
9	Orientation MO / training	50% MO have undergone	100% MOs have undergone	50% MO have undergone an orientation	50% MO have undergone	About 60% MO have undergone

	sessions to staff	an orientation	an orientation.		an orientation	an orientation
	Staff	All staff has undergone an orientation				
C	INFRASTRUCTURE					
	Ownership of UPHC building	All rented	All rented	All rented	All rented	All rented
1	OPD room, Injection Room, First Aid room, Laboratory, Emergency beds	33% do not have a first-aid room, rest of the facilities adequate	33% centres do not have a separate injection room, rest of the facilities adequate	50% centres do not have a separate injection room and first aid room	Present in all centres	20% centres do not have a separate injection room, rest of the facilities adequate
2	Waiting lounge, Power supply, Water supply, Toilets	Present in all centres				
3	Signage, Fencing, Dispensing cum store area, Office	16% Centres do not have a proper boundary wall. 33% do not have a separate office.	16% Centres do not have a proper boundary wall. 83% do not have a separate office.	25% centres do not have a separate office while 75% do not have a storage area.	33% of centres do not have a dispensing cum store area, 83% do not have a separate office.	40% of centres do not have a dispensing cum store area while 60% do not have a separate office.
4	Minor OT, Ambulance, AYUSH facility, Cold chain room, Generator room	Except for Minor OT present in 33% centres and generator room in 16%, all else absent	Except for Minor OT present in 33% centres and generator room in 16%, all else absent	Not present in any of the centres.	Except for generator room present in 33% centres, all rest absent at all centres	Except for Minor OT present at 20% centres, rest all absent throughout
D	SERVICES PROVIDED					
1	ANC, PNC, Immunization, Family Planning	Available at all centres				
2	Treatment of common ailments	Available at all centres				
3	NCD (Hypertension, Diabetes)	Available at all centres				
4	Malaria	Available at 100% of the centres	Available at 66% of the centres	Available at 100% of the centres	Available at 67% centres	Available at 20% centres
5	Tuberculosis	Available at none of the centres. Cases are refereed to district hospital or nearest DOTS centre.				
6	Specialist services (Cancer, Orthopaedics, Eye and ENT)	All cases referred to higher centres.				

7	Other services	Weekly yoga sessions at 50% UPHCs	Weekly yoga sessions at 33% UPHCs		infertility and OBGd clinic at 16% centres	
8	Status of availability of drugs	Satisfactory in all centres	Unsatisfactory in 66% centres	Satisfactory at 50% centres	Unsatisfactory in 16% centres	Unsatisfactory in 40% centres
E	HEALTH CAMPS					
1	Frequency of organization of health camps	70% centres conduct regular health camps	70% centres conduct regular health camps	Only 10% centres conduct regular health camps	25% UPHCs conduct health camps regularly	60% UPHCs conduct health camps regularly
F	OTHERS					
1	Fund received	Delay reported at all the centres	83% centres face a delay in receiving funds	75% centres face a delay	83% centres face a delay	Delay reported by all centres.

The medical officers' and pharmacists' posts were filled in all 27 centres. The monitoring and evaluation unit was absent in all the evaluated centres. All the centres provided ANC, PNC, Immunization, family planning, treatment of common ailments, and common NCDs. (Table 1) Drug demand was generated through the e-Aushadhi portal, which was transferred to the Central Medicine Service Department (CMSD) under the CMO office. The proper chain of funding mechanism flowed from the National Health Mission to the State Health Department to the District office. The public partners took overall care of the funding distribution; the private partners were responsible for managing the human resources. At UPHC Tibdi (Haridwar), Purani Tehsil, and Mahigran (Roorkee), the Medical Officer Charge (MOIC) was unaware of the fund flow mechanism. Mahila Arogya Samiti (MAS) was functional in place of Rogi Kalyan Samiti (RKS) at all UPHCs in all the districts. Across the 27 UPHCs, 37% of MOs found the functioning of the UPHC under them very good, whereas 40% found it good.

The NGOs conducted everyday activities under various National Health Programmes. All centres provided services under the programs Reproductive, Maternal, Newborn, Child Health, and Adolescent (RMNCH+A). Under the Revised National TB Control program, after being examined in OPD, sputum from patients is collected and transferred to a higher centre for examination. ASHAs conduct door-to-door surveys under the National Leprosy Eradication Program. HIV Testing was conducted on all the females coming for ANC services under the National AIDS Control Programme. Regular community surveys, monitoring, and counselling were conducted under the National Vector Borne Disease Control Programme for Diagnosis, treatment, and referral of terminally ill cases. The Universal Immunization Program was implemented as per the guidelines. Under the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke, centres conducted population-based screening for diabetes, hypertension, and oral and cervical cancer by filling out the CBAC forms with daily reporting at the portal. Regular counselling sessions with the community members were organized under the National Tobacco Control Program. Initial screening and referral of patients were done under the National Mental Health Program.

Table 2 – Awareness regarding services provided, utilization of services and perceived behaviour of UPHC staff reported by patients visiting the UPHCs

Variable	**n (%) (N=135)**
Education status	
Illiterate	33 (24.4)
Literate	8 (5.9)
Primary	14 (10.4)
Upper primary	23 (17)
High School	35 (25.9)
Graduate and above	22 (16.3)
Frequency of visiting UPHCs	
Regular	69 (51.1)
Occasional	61 (45.2)
First visit	5 (3.7)
Awareness of availability of specialist services at UPHCs in patients	
***Answered more than one answer**	
Tb	21 (15.6)
Diabetes	101 (74.8)

Variable	n (%) (N=135)
Hypertension	115 (85.2)
Cancer	6 (4.4)
Orthopaedic	14 (10.4)
Eye & ENT	10 (7.4)
Awareness among patients about the frequency of organization of Health Camps	
Regular	28 (20.7)
Occasional	42 (31.1)
Not at all	10 (7.4)
No response	55 (40.7)
Frequency of Patients Attending Health Camps	
Regular	9 (6.7)
Occasional	29 (21.5)
Not at all	45 (33.3)
No response	52 (38.5)
Preferred health facility for health needs	
Hospital	13 (9.6)
Dispensary	4 (3)
UPHCs	104 (77)
Others	14 (10.4)
Perceived behaviour of the medical officer towards the patient	
Good	116 (85.8)
Indifferent	14 (10.4)
Not good	2 (1.5)
No response	3 (2.2)
Perceived behaviour of the nurse towards the patient	
Good	120 (88.8)
Indifferent	13 (9.7)
Not good	1 (0.7)
No response	1 (0.7)
Perceived behaviour of the administrative staff toward the patient	
Good	122 (90.3)
Indifferent	9 (6.7)
Not good	2 (1.5)
No response	2 (1.5)

More than 50% of the patients visited the UPHCs regularly. Most patients were aware of the availability of speciality services like hypertension (85.2%) and diabetes (74.8%). The perceived behaviour of medical officers, nurses, and administrative staff were reported as good by more than 85% of the patients (Table 2)

Table 3 – Awareness regarding available services, preference of health facility, and rating of UPHCs reported by community members of the catchment areas of UPHCs

Variable	Percentage (N=270)
Awareness of the availability of Health Services at the UPHC	
***Answered more than one answer**	
ANC	153 (56.6)
PNC	138 (51.1)
Immunization	178 (65.9)
Family Planning	109 (40.3)
Common Ailments	152 (56.2)
Communicable Diseases (Malaria, Tb)	119 (44)
Non- Communicable Diseases (Hypertension, Diabetes)	172 (63.6)
Specialist services (Arthritis, IDDD, Ortho, ENT)	77 (28.7)
Source of Information	
Pamphlets	2 (0.7)
Relatives/friends	46 (17)
TV/Radio	24 (8.8)
ASHA/ANM	184 (68.1)
Not answered	14 (5.1)
Awareness about the frequency of organization of Health Camps	
Regular	110 (40.7)
Occasional	70 (25.9)
Not at all	14 (5.1)
No response	76 (28.1)
Frequency of Community members Attending Health Camps	
Regular	87 (32.2)
Occasional	62 (22.9)
Not at all	49 (18.1)
No response	72 (26.6)
Preferred health facility for health needs	
Hospital	35 (12.9)
Dispensary	13 (4.8)
UPHCs	182 (67.4)
Others	40 (14.8)
Rating of UPHCs	
Poor	13 (4.8)
Fair	45 (16.6)
Good	161 (59.6)
Very Good	34 (12.5)
No Response	17 (6.2)

Community members were aware of ANC (56.6%), PNC (51.1%), Immunization (65.9%), and Non-Communicable Diseases (Hypertension, Diabetes) (63.6%) services provided at the UPHCs. ASHAs (68.1%) were the primary source of information regarding UPHCs and their services. Awareness about the health camps in the vicinity was among 40.7% of the community members, whereas 32.2% attended the camps regularly. Almost 60% of the members rated UPHCs as good (Table 3).

Bottlenecks reported by the service providers were the movement of people from rural to urban areas, leading to many unaccounted people, which were difficult to cover by the UPHC—rental buildings for

setting up UPHCs led to irregular payments to landlords. Inadequacy in the availability of a range of drugs with no room to place demand for particular or non-essential drugs in patient-centric needs was a shared theme. The patient eventually buys drugs from other sources or is referred to a higher centre, which leads to out-of-pocket expenditure, defeating the purpose of UPHCs. They acknowledged a lack of specialist services at the UPHCs. The financial crunch affected the functioning of the UPHCs as funding was through the state office, which took a long time and delayed staff members' salaries. They felt there was a lack of communication between public and private partners. Paramedical workers reported limited diagnostic tests, equipment, and reagents at the UPHCs.

Verbatim of the bottlenecks reported by the service providers-

"There is a lack of rural-urban demarcation of the district with an inadequate population record. The rapid and regular movement of the rural populace to urban areas calls for constant monitoring and surveys. The suggested population is too large to be covered under a UPHC, and that makes for poor coverage and inefficient handling of services at the private end."- Chief Medical Officer, Dehradun.

"With long passages without salary payments, the NGOs face high staff attrition rates. It becomes challenging for us to maintain staff motivation. When faced with financial barriers, this trained staff opts out, putting the NGO at a greater deficit."- NGO Manager

Table 4 Suggestions provided by the service providers and beneficiaries to improve the functioning of UPHCs

Categories	Service Providers	Beneficiaries
Population coverage	The rapid and regular movement of the rural population to urban areas calls for constant monitoring and surveys.	The poor should be given appropriate care and treatment alongside the urban social elite. The sick and geriatric should be given priority during treatment.
Infrastructure	The public partner should provide the infrastructure (building) with timely insurance. Inclusion of a broader range of tests should be made available, like thyroid profile, lipid profile, Widal test, Hepatitis B testing kit, and Pap smear kit. Upgradation of equipment for Ultrasonogram and Electrocardiogram is necessary, along with the availability of personal ambulance and emergency services around the clock.	Inclusion of USG, ECG, X-Ray, and range of blood testing panel A functional labour room should be included to manage emergencies.
Manpower and training	MO should be trained in specialist services so that the remote population can be served and managed primarily at the UPHC. Better training opportunities should be provided to all the staff. Employment of specialist doctors and AYUSH practitioners to care for diverse health needs.	Availability of a lady doctor for attending female patients. Provision of specialist services like dentists and paediatricians
Funds and logistics	The flow of funds should be through the district and not through the state, thus minimizing the time the funds take to reach their respective destinations.	Proper stock-up of medicines
Strengthening services	Establishing proper and prompt communicative channels between private and public counterparts. Availability of specialist services. To strengthen ANC/PNC services. To publicize the establishment of a UPHC and its services in the community.	Timings of the UPHC should be extended so that the working population can visit. Maintenance of toilets and hand-washing stations. Service provision for the geriatric population who cannot travel to the UPHC. The catchment of the urban poor and vulnerable population should be strengthened.

Suggestions (Table 4) included the provision of buildings by the public partner, availability of specialist services, and strengthening of services by including USG, ECG, X-Ray, and a range of blood testing panels.

DISCUSSION

An evaluation project was undertaken involving 27 UPHCs belonging to three districts of Uttarakhand, namely, Dehradun, Nainital, and Haridwar, operating under the management of 5 NGOs. All the UPHCs were functional between 9 am and 5 pm daily, providing services free of cost with a registration fee of Rs. 13 on the first visit. The suggested timings in the guidelines are 12 pm to 8 pm, with a provision for morning and evening OPD sessions. (4) In Kerala, the evaluated UPHCs served fishermen from 2 pm to 8 pm, and 96.8% of the respondents felt its convenient. (13) In our study, the beneficiaries have suggested extending the timings of the UPHC to make it convenient for them. As most beneficiaries are daily wagers, the evening OPDs might encourage them to utilize the healthcare services from the nearby UPHCs. All evaluated UPHCs were operating in buildings rented by the public partner. A few infrastructure elements, like a cold chain room, AYUSH facility, generator room, and a separate office, were absent in all the 27 UPHCS. The monitoring and evaluation unit was absent throughout the UPHCs. Blood testing facilities fell short at most UPHCs due to the unavailability of the range of reagents required. While some UPHCs were stocked with testing kits for HIV, Hepatitis B, and Hepatitis C, many lacked them overall. Most laboratories were found working with basic pathological instruments lacking some reagents. The private partners (NGO managers) received funds through the State Health Department through the National Urban Health Mission. The state was responsible for staff salaries and rent of the building where the UPHCs were operating.

Human resources were inadequate; the positions of the 2nd Medical Officers in all centres and LHV in 81.5% of centres were found vacant. There were unfilled positions of nursing staff and supporting staff in some centres. Mehta K et al. reported similar findings of a lack of human resources in the UPHCs of Vadodara. (14) Staff shortage contributes to extra patient burden falling entirely on the existing staff, which can further contribute to their burnout and patient dissatisfaction with the services.

More than half of the population interviewed from the community surrounding the UPHCs were aware of the services provided under it. About 67% of them sought health care services through them. Most communities residing near 27 UPHCs reported that they learned about the UPHCs through ASHAs (68.1%) of the area. More than 85% of the patients rated the staff's behaviour as good, and 67% of community members said they would prefer UPHCs for treatment. The findings differed in the case of UPHCs in Amritsar, where only 32% of families were aware of UPHCs nearby. Most families (62%) preferred treatment from a private doctor, and only 10.3% of families visited the government health centre (UPHC). The rest relied on a chemist shop, self-medication, or alternative systems of medicine like ayurveda or homoeopathy at the time of sickness. (15) More reliance on private healthcare providers was also reported by Papelu S et al. in their study. (16) In the present study, the high awareness can be attributed to the awareness drives conducted by the frontline workers. In our study, 40.7% of the community members knew about the regular conduction of camps. Similar results were reported in Amritsar, where 47.6% of families knew about the health camps conducted in their vicinity. (16)

The irregular flow of funds reaching the UPHCs caused several inadequacies, restricting the smooth functioning of the private partners, who had to pay rent for the building. Staff remunerations were usually met through direct expenditure from private partners. Drugs at most UPHCs were not available according to the demand placed. The unavailability of essential drugs failed to garner community trust and compliance. In in-depth interviews with groups of stakeholders, certain findings corroborated the observations of the evaluation, which were the untimely flow of funds, lack of infrastructure, logistics, and recommended staffing. The suggestions were to include specialist services at the UPHCs and increase the range of diagnostic/screening tests. The population of patients and community members from the vicinity of the UPHC echoed similar concerns and opinions about improving healthcare delivery, services and facilities. Patients and community members complained of the unavailability of essential drugs to treat everyday ailments at several UPHCs. Many felt that the continuous availability of female doctors and specialist doctors such as gynaecologists and paediatricians should support ANC services. The service providers and beneficiaries voiced the need to widen the scope of diagnostic facilities. In a study conducted by Nair S et al. in Kerala, 44% of the respondents felt the need for specialists in the UPHC, followed by the conduction of awareness classes (28.5%) and the requirement for more space (25%). The other

suggestions were the availability of all medicines from UPHC, the inpatient facility, family planning services requirements, the thyroid testing facility, and the demand for an ECG facility. (13) Poor infrastructure, irregular medicine supply, and shortage of skilled allied health professionals were barriers to optimal care delivery in UPHCs of Odisha. (17) UPHCs functioning under the PPP model was the solution to the rapidly increasing urban population and limited government infrastructure. However, they still cannot provide comprehensive services due to a lack of infrastructure, human resources, and funds. Laharia C et al. evaluated certain initiatives undertaken at the PHC level to increase access to health services. They recommended that assuring basic quality standards, providing a broader service package, and focusing on continuity of care improve patient attendance. (18)

Conclusion

The study revealed that the UPHCs were preferred by most community members for their health needs and were rated good by more than half of the respondents. The main challenges in the smooth functioning of the UPHCs were the irregular flow of funds, lack of human resources, and a mismatch between ordered and received drugs.

Recommendation

A decentralized and more flexible approach by vesting powers to the NGOs and MO in taking grassroot-level implementation decisions can smoothen the functioning of each UPHC. Regular meetings and a prompt response system are essential in managing the strategic challenges faced at the private partner end and UPHC level. Broadening the basket of services and facilities at the UPHCs can further increase the footfall of patients. A more comprehensive range of blood testing facilities, diagnostic modalities like ECG, fetal heart rate monitor, USG, etc. coupled with essential drugs, can prevent life-threatening situations, avoiding hospitalization and out-of-pocket expenditures for patients. With a limited staff present to tackle the heavy patient inflow, staff-appropriate yet advanced training can boost skills in existing staff, allowing them to manage a broader range of patient requirements.

Limitation of the Study

There can be variability in the implementation of PPP models across various states, thus affecting the generalisability of the study. Evaluation was conducted for a short period, which does not tell about the long-term impact of UPHCs working under the PPP model.

Relevance of the Study

The study provides a comprehensive status of UPHCs operating under PPP model in the state of Uttarakhand. The identified challenges and actionable suggestions highlighted in the study will serve as a valuable resource for program officers, enabling them to make evidence-based decisions to strengthen urban healthcare services in the state.

Authors Contribution

All authors have contributed equally.

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Conflict of Interest

There are no conflicts of interest.

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Declaration of Generative AI and AI Assisted Technologies in the Writing Process

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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