International Journal of Community Medicine and Public Health
Kumar S et al. Int J Community Med Public Health. 2023 Jun;10(6):2114-2118
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20231689

Original Research Article

Assessment of the availability and reason for non-utilization of reproductive and child health services at urban primary health centers Lucknow

Santosh Kumar[1]*, Monika Agarwal[2], Prabhaker Mishra[3]

[1]Department of Community Medicine, Autonomous State Medical College Fatehpur, Uttar Pradesh, India
[2]Department of Community Medicine, King George's Medical College Lucknow Uttar Pradesh, India
[3]Department of Biostatistics and Health Informatics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India

Received: 16 March 2023
Revised: 20 April 2023
Accepted: 02 May 2023

***Correspondence:**
Dr. Santosh Kumar,
E-mail: santoshjs87@gmail.com

ABSTRACT

Background: Urban primary health centres are different from conventional rural PHCs in term of size, functions, focus on ambulatory care, limited staff and infrastructure. This study was done to assess the availability of reproductive and child health services at the urban PHCs and to determine the reasons for non-utilisation of RCH services.
Methods: A cross-sectional study conducted in 8 urban primary health centers of Lucknow district and among 320 Recently delivered women and children aged less than 24 months residing in catchment areas of urban PHCs, using multistage sampling technique.
Results: Infrastructure, services and manpower at UPHCs were assessed. Essential tests for ANC were available at only 50 % of U-PHCs. Majority (48.7%) of beneficiaries were not aware of U-PHCs nearby. According to 8.7 %, doctors/staff are not available all time at U-PHCs. About 12.8 % of RDW also reported that the delivery facility was not available. Most (26.7%) common reason cited for non-utilization was the availability of better hospital/ bigger hospitals nearby.
Conclusions: The present study showed that level of infrastructural, manpower and material facilities at urban primary health centers requires improvement. The main reasons of non-utilization of urban primary health centers were lack of awareness about location of U-PHC, presence of a bigger hospital nearby and non-availability of delivery facility.

Keywords: Availability, Urban primary health center, RCH services, Non-utilization

INTRODUCTION

India's urbanization presents a frightening image. According to the census of India 1901, the population residing in urban areas was 11.4 per cent which has increased to 31% after the census 2011, and stands at 35 per cent of the total population in 2020.[1] According to a survey done by United Nations (UN), India's urban population will be 40.76 per cent by the year 2030.[2] Due to rapid urbanization, there is an increase in population in slums and shanty habitations, and a large chunk of the poor population has moved into environmentally deprived urban areas which are overcrowded, have limited access to safe drinking water, proper sanitation, safe shelter and often lack access to basic services.[3]

The National urban health mission (NUHM) was launched in 2013 to address the health care requirements of India's urban population in a systematic manner. The NUHM envisages satisfying the health care requirements of the urban population, with an emphasis on the urban poor, by making critical primary health care services available to

them and decreasing their out-of-pocket expenses for treatment. It has specially introduced the urban primary health centres (UPHCs) to enhance health care access and services to the urban slum populations and urban poor.[4] Urban Primary Health Centres (UPHC)are different from conventional rural PHCs in term of size, functions, focus on ambulatory care, limited staff and infrastructure. UPHC is also expected to deliver certain job-functions of subcentre through its outreach services. In view of these considerations, it is, therefore, appropriate that a separate list of standards are developed. National Quality Assurance Standards for District Hospitals, Community Health Centres (CHC) and Primary Health Centres (24x7) have been released and are being implemented across the country.[5] At the urban primary health centres, services provided include outreach and referral facilities, OPD, basic laboratory diagnosis, drug/contraceptive dispensing, distribution of health education material delivering reproductive and child health services, and counselling for all communicable and non-communicable diseases. Reproductive and child health services provided by urban primary health centres include antenatal care, intra-natal care, postnatal care, family planning practices, immunization, feeding practices of infant and child, treatment of reproductive tract infections/sexually transmitted infections and use of ORS in diarrhoea. Maternal health is important in itself for the health of the children and appropriate care of the mother is also necessary, both before and after the delivery.[4] The public sector, urban health care delivery system, especially for the poor and slums, have so far been infrequent, far from adequate, and very limited in its reach. The utilization of any of the social services, including health services, has never been equitably distributed throughout the society. People who have access to the facilities were generally found to make more use of them than the people who have neither knowledge nor access to the facilities.[6]

Objectives

Objectives of current study were to assess the availability of reproductive and child health services at the urban PHCs, to determine the reasons for non-utilisation of RCH services by recently delivered women and their children residing in catchment areas of urban PHCs.

METHODS

This was a cross-sectional study conducted on 320 Recently delivered women (up to 24 months) and children less than 24 months of age residing in catchment areas of urban PHCs and 8 urban primary health centers of Lucknow district. this study was done from july 2020 to december 2021 using multistage sampling technique. The data was collected by using pre designed semi structured questionnaire.

Inclusion criteria

Recently delivered Women (up to 24 months) and children less than 24 months of age residing in catchment areas of urban PHCs of Lucknow district. Participants willing to participate in the study. Participants currently residing in the study area for at least the past 3 years 8 Urban Primary Health Centres were selected and 40 RDWs (by rounding off) were chosen from each U-PHC making the told figure 320.

Exclusion criteria

Women who will not give consent for the study, women suffering from known mental illness. Migrant population not residing in the study area for past 3 year.

Procedure

At first, the Gomti River, the chief geographical feature, meanders through the Lucknow city, dividing it into the Cis-Gomti regions and Trans-Gomti. Stage I-In the first stage, 4 urban PHCs each were selected from trans Gomti and cis Gomti region by simple random sampling. Stage II-To include the desired sample size of 320 RDW, 40 RDWs were selected from the slums in the catchment area of each U-PHC. The slums in the catchment area of the selected U-PHCs were identified and the distance of each near slum and far slum from the UPHC was determined. Assuming the division of slums into nearby slum areas as those slums lying within 2.5 kms of the UPHC and farther slum as those areas lying more than 2.5 kms from the UPHC. Among the 40 women selected from each UPHC, 20 were from nearby slums and 20 from the farther slums. Now, the ASHAs of the catchment area were contacted with the help of ANMs of the selected UPHCs. A final list of RDW was made for the slum, after compiling the lists given by each ASHA from their respective areas. By simple random sampling, 20 RDWs were selected from each of the slum. However, where the sample size was not fulfilled, remaining RDWs were selected from the next geographically adjacent slum. This process was repeated for each selected UPHCs till the desired number of RDWs were obtained.

Data analysis

The continuous variables were presented in mean ± standard deviation (SD) whereas categorical variables in frequency (%). Independent samples t-test was used to compare the means between two groups. The Chi-square test was used to compare the proportions between the groups. $P<0.05$ was considered as statistically significant. Statistical package for social sciences, version-26 (SPSS-26), and MedCalc software were used for data analysis.

RESULTS

In the present study, 36.2% RDWs belonged to less than 25 years age group. Majority (51.6%) of RDWs were in the age group 25-34 years.

Table 1: Socio-demographic characteristics of the recently delivered women (RDW) (n=320).

Characteristics	N	%
Age (years)		
<25	116	36.2
25-34	165	51.6
≥35	39	12.2
Religion		
Hindu	228	71.3
Muslim	92	28.7
Category		
General	57	17.8
OBCs	184	57.5
SC/STs	79	24.7
Education level of women		
Graduate and above	42	13.2
School education	147	45.9
Illiterate	131	40.9
Employment status of women		
Working	22	6.9
Not working (Including housewife)	298	93.1
Education level of spouse		
Graduate and above	45	14.0
School education	205	64.1
Illiterate	70	21.9
Employment status of spouse		
Skilled worker	26	8.1
Semi-skilled worker	112	35.0
Unskilled worker	175	54.7
Unemployed	7	2.2
Type of family		
Nuclear	245	76.6
Joint	75	23.4
Socio-economic status		
Upper class	3	0.9
Upper middle class	15	4.7
Middle class	55	17.2
Lower middle class	197	61.6
Lower class	50	15.6

About 71.3 per cent of RDWs were Hindu. More than half (57.5%) of RDWs belonged to other backward class (OBC). About 40.9 % of RDWs were illiterate. Most (93.1%) of RDWs were non-working (including housewives). About 76.6 per cent of RDWs belonged to nuclear families, and 23.4 per cent from joint families. Majority (61.6%) of these RDWs belonged to the lower-middle socioeconomic group (Table 1).

The infrastructural availability at urban PHCs showed that clean drinking water for patients was available at only 75 per cent of U-PHCs. Unfortunately, only 50 per cent of the labs were functional. Additionally, essential tests for ANC were available at only 50 per cent of U-PHCs. IEC material related to family planning was available at seven U-PHCs, and similarly, 87.5 per cent of U-PHCs had IEC material for ARI and diarrhoea (Table 2). In the present study found that, 75.0% of U-PHC had availability of color-coded bins for BMW management. While all the U-PHC had posters for BMW management, functional needle cutters and puncture-proof boxes (Table 3).

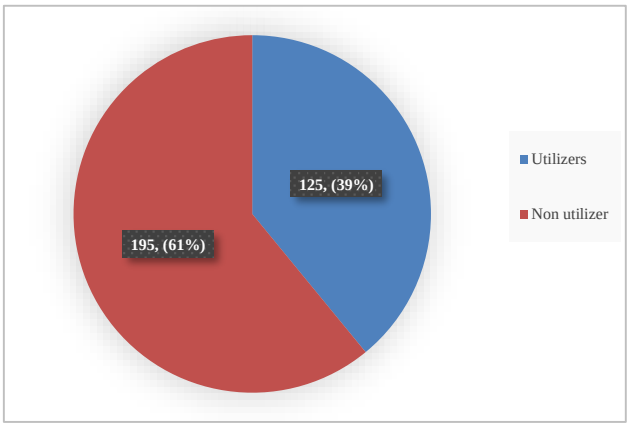

Figure 1: Utilizer vs. non utilizer from urban primary health centre by recently delivered women.

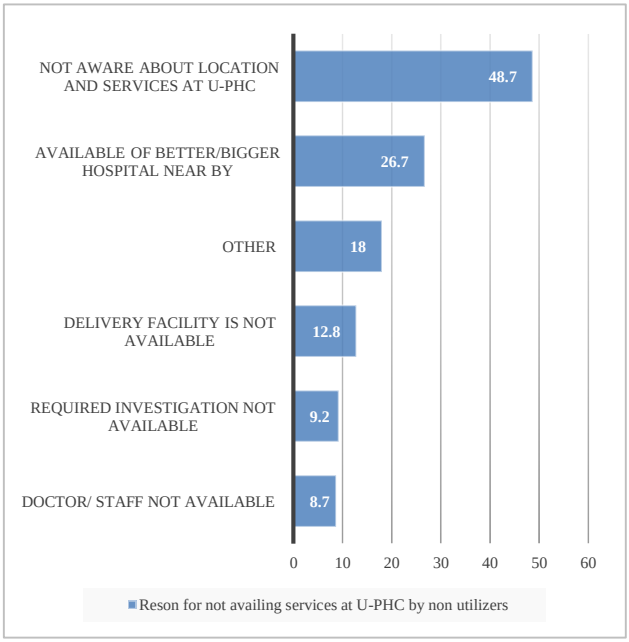

Figure 2: Utilizer vs. non utilizer from urban primary health centre by recently delivered women.

The availability of staff at U-PHCs as per standard guidelines, the requisite number of medical officers, lab technicians, pharmacists and ANMs were found adequate in all the centres. None of the centres had a second medical officer (part-time) and a lady health visitor (LHV). At least two-third (75.0%) of the centres had two nurses (Table 4). Majority of respondents (48.7%) of RDW were not aware

of U-PHCs nearby. Most (26.7%) common reason cited for non-utilization of U-PHCs was the availability of better hospital/ bigger hospitals nearby. According to 8.7 per cent, doctors/staff are not available all time at U-PHCs. The next common (9.2%) reason was "investigation not available." About 12.8 per cent of RDW also reported that the delivery facility was not available. According to 18.0 per cent RDW, several other reasons were unavailability of drugs, inadequate cleanness, distance, staff behaviour, etc (Figure 2).

Table 2: Infrastructure and services available at urban PHCs (as per quality standard for Urban primary health centre) (n=8).[5]

Availability of services		N	%
Adequate space for waiting area		8	100
Fan in the waiting area		8	100
Clean drinking water for patients		6	75.0
Functional toilet for patients		8	100
Lab (functional)		4	50.0
Dedicated ANC room		8	100
Drug	For ARI management	8	100
	For diarrhoea management	8	100
	For ANC	8	100
Essential tests for ANC*		4	50
Instruments and equipment	Stethoscope	8	100
	BP instrument	8	100
	Weight scale	8	100
	Height scale	8	100
Contraceptive	Condom	8	100
	OCP	8	100
	Chhaya	8	100
	Antra	8	100
	IUCD	8	100
All vaccines under Universal Immunisation Programme recommended for pregnant women and children under two years		8	100
IEC material related to ANC/PNC		8	100
IEC material related to breastfeeding		8	100
IEC material related to family planning		7	87.5
IEC material related to ARI and diarrhoea		7	87.5
IEC material related to immunization		8	100

***Essential tests include Hb, blood group, blood sugar, urine sugar, viral markers, VDRL

Table 3: Biomedical waste management availability at Urban PHCs (as per quality standard for Urban primary health centre) (n=8).

Availability of services	N	%
Colour coded bins	6	75.0
Posters related to BMW	8	100
Functional needle cutters	8	100
Puncture-proof box	8	100

DISCUSSION

The present study found that infrastructural availability at urban PHCs (n=8) wherein, clean drinking water for patients was available at 75 per cent of U-PHCs. Unfortunately, only four (50%) labs were functional.

Table 4: Staff available at the urban primary health centres (as per quality standard for Urban primary health centre) (n=8).

Staff availability	N	%
Medical Officer-In-Charge	8	100
Second Medical Officer (part-time)	0	0
Lady Health Visitor	0	0
Nurse		
3	0	0
2	6	75.0
1	2	25.0
Lab technician	8	100
Pharmacist	8	100
Auxiliary Nurse Midwife (3-5)	8	100

Additionally, essential tests for ANC were available at only four (50%) PHCs. IEC material related to family planning was available in 87.5 per cent of U-PHCs, and similarly, 87.5 per cent of U-PHCs had IEC material for ARI and diarrhoea. Similar results were obtained by Sriram et al and Ninama et al. The availability of staff at U-PHCs were as per standard guideline. requisite number of medical officers, lab technician, pharmacist, and auxiliary nurse midwife were found adequate in all the centre (as per quality standard for Urban primary health centre).[5] None of centre had Second Medical Officer (part-time) and lady health visitor (LHV). About at least two-third (75.0%) of the centre had two nurses. About 75.0% of U-PHC had availability of color-coded bins for BMW management. While all the U-PHC had posters for BMW management, functional needle cutters and puncture-proof boxes. This is an accordance with that of Ninama et al in which it was found that 71 per cent of PHCs had different color-coded buckets for bio-medical waste handling. While in contrast to our study, the above study had only 42.8 per cent of PHCs with Instructions for garbage disposal were displayed on the wall above the buckets. In the present study, it was found that about 48.7 per cent of RDW were not aware of U-PHCs nearby. Most (26.7%) common reason cited for non-utilization of U-PHCs was the availability of better hospital/ bigger hospitals nearby. According to 8.7 per cent, doctors/staff are not available all time at U-PHCs. The next common (9.2%) reason was "investigation not available." About 12.8 per cent of RDW also reported that the delivery facility was not available. According to 18.0 per cent RDW, several other reasons were unavailability of drugs, inadequate cleanness, distance, staff behaviour, etc. The finding is similar to that of studies by Wagh et al which stated that the main reason for not availing the services at public health facility was that respondent did not know the location and services available at public health facilities in their area (41.7%).[9]

Similarly, in the study by Bagchi et al.[10] 42.4 per cent of respondents did not utilized public health facilities as they did not know about any nearby facility. In another study by Thimmaiah et al the main reason for not accessing PHC services in the study area was recognized as distance, education level, and income level which was in accordance to the present study.[11]

Limitations

The study was conducted the urban primary health centers of only one district. Hence results of present study may not be generalized to the entire country and thus further studies among urban primary health center and RDW with larger sample is warranted to bring out the true situation of the urban primary health center in the whole state and in the country.

CONCLUSION

The present study showed that level of infrastructural, manpower and material facilities at urban primary health centers requires improvement. Availability of functional laboratory facilities and essential tests for ANC must be improved. Although availability of staff was as per guidelines, none of the centres had a second medical officer (part-time) and a lady health visitor (LHV). The main reasons of non-utilization of urban primary health centers were lack of awareness about location of U-PHC, presence of a bigger hospital nearby and non-availability of delivery facility. Awareness about location and services provided by the UPHCs should be created in the catchment area by health workers. While planning the location of any new UPHC, the availability of services in the area via other centres including private hospitals should be taken into consideration to avoid wastage of resources. Proper planning and implementation of services may improve utilisation of RCH services at UPHCs.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Census 2011. Available at: https://censusindia.gov.in/. Accessed on 20 November 2022.
2. World Urbanization Prospects Population Division. Available at: https://population.un.org/wup/. Accessed on 20 November 2022.
3. Kumar S, Kumar S, Gupta B. Urban health: Needs urgent attention. Indian J Public Health. 2017;62(3): 214-7.
4. National Urban Health Mission Framework for Implementation. Available at: https://nhm.gov.in/images/pdf/NUHM/Implementation_Framework_NUHM.pdf. Accessed on 20 November 2022.
5. Quality Standards for Urban Primary Health Centre. Available at: https://www.nhm.gov.in/images/ pdf/NUHM/Quality_Standards_for_Urban_Primary_Health_Centre.pdf. Accessed on 20 November 2022.
6. Kumar S, Gupta B. View of A cross sectional study to determine the reasons for non-utilization of reproductive and child health services in district Etawah. IJCMPH. 2019;8(3):20.
7. Sriram S. Availability of infrastructure and manpower for primary health centers in a district in Andhra Pradesh, India. J Fam Med Prim Care. 2018;7(6):1256.
8. Ninama R, Thakor N, Vala M, Dund J, Kadri A. Quality assessment of facilities available at Primary Health Care centres in Rajkot district: A Cross Sectional Study. Int J Med Sci Public Heal. 2014; 3(12):1449.
9. Wagh SC, Ukey UU, Sharma SK. Non-utilization of Public health care facilities by women of reproductive age group: a cross-sectional study in an urban area of central India. Cureus. Available at: https://www.cureus.com/articles/59742-non-utilization-of-public-health-care-facilities-by-women-of-reproductive-age-group-a-cross-sectional-study-in-an-urban-area-of-central-india. Accessed on 20 November 2022.
10. Bagchi T, Das A, Dawad S, Dalal K. Non-utilization of public healthcare facilities during sickness: a national study in India. J Public Heal. 2018;12:1-9.
11. Thimmaiah N. Accessibility of primary health care services: a case study of kadakola primary health centre in mysore district. Int J Adv Res Manag Soc Sci. 2005;7:23-5.

Cite this article as: Kumar S, Agarwal M, Mishra P. Assessment of the availability and reason for non-utilization of reproductive and child health services at urban primary health centers Lucknow. Int J Community Med Public Health 2023;10:2114-8.