

Morbidity Profile of Patients attending the Outpatient Department at the Urban Health and Training Center of a Medical College in India

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ABSTRACT

Introduction: We are moving from millennium development goals to sustainable development goals, having universal health care as a key. To achieve universal health care, we need morbidity patterns and data in order to plan for the fulfilment of the health care needs of the community effectively.

Objectives:

- To assess the morbidity patterns of patients attending the outpatient department (OPD) at the urban health and training center (UHTC)
- To determine the antenatal care (ANC) of cases attending the OPD on a monthly basis at the UHTC.

Materials and methods: The information was collected from the OPD registers of the UHTC. The data were taken for a 12-month duration from January 1, 2015 to December 31, 2015. We collected the information of all the patients, even those who visited the center for collecting medicines or for reviewing of the disease conditions and treatments. There were no exclusion criteria adopted to exclude the patients and his/her disease-related information. All the patients who visited the UHTC during a 1-year period were included in this study.

Results: A total of 8,115 patients, including new, old, and review patients, attended the OPD of the UHTC during the 1-year period. Out of total, 2,524 were males, 5,591 females, 1,273 under 5 children, 157 ANC women, and 68 elderly.

Conclusion: The overall performance of the UHTC was assessed regularly based on the records of both the old and the new patients including children, ANC women, and the elderly.

Keywords: Morbidity pattern, Morbidity profile, Outpatient department, Patients, Urban health and training center.

How to cite this article: Upadhyay D, Singh A, Joshi HS, Agarwal M, Katyal R. Morbidity Profile of Patients attending the Outpatient Department at the Urban Health and Training Center of a Medical College in India. *Int J Adv Integ Med Sci* 2018;3(1):22-26.

Source of support: Nil

Conflict of interest: Not any

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INTRODUCTION

The UHTC of Rohilkhand Medical College has been mainly serving the six urban slum localities. We know that the definition of a urban slum can vary and depends upon those given by the central governments of the countries.^{1,2} So, here, we have taken the definition of urban slum based on the United Nations operational definition³ of a slum, which describes that the slum is "one or a group of individuals living under the same roof in an urban area, lacking in one or more of the following five amenities."

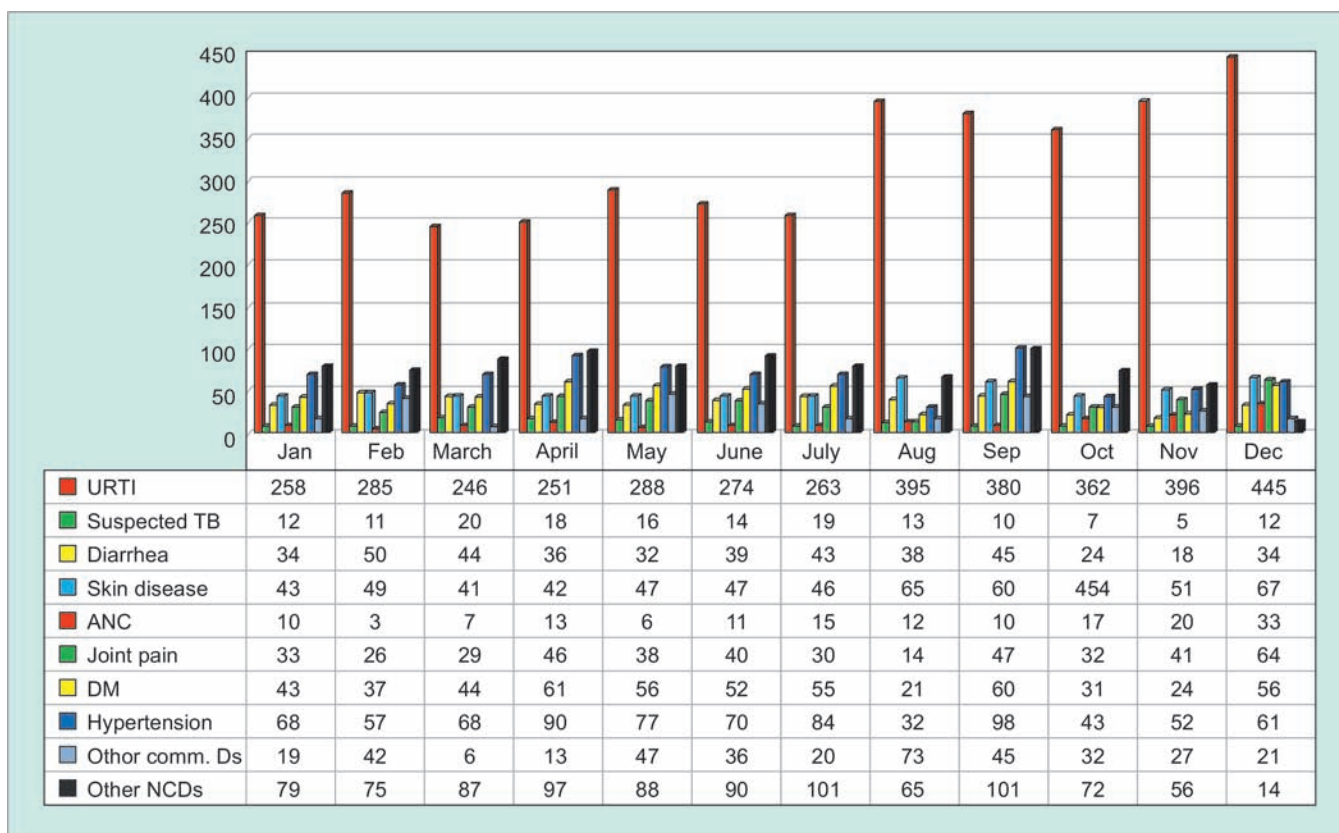
1. Durable housing (a permanent structure providing protection from extreme climatic conditions);
2. Sufficient living area (no more than three people sharing a room);
3. Access to improved water (water that is sufficient, affordable, and can be obtained without extreme effort);
4. Access to improved sanitation facilities (a private toilet, or a public one shared with a reasonable number of people); and
5. Secure tenure (*de facto* or *de jure* secure tenure status and protection against forced eviction).

Based on this definition, we can conclude that the urban slums have been facing deficiencies of several basic needs of human life.⁴ This subsequently may result in various communicable^{5,6} and noncommunicable diseases (NCDs)⁷⁻⁹ among the dwellers of these localities.

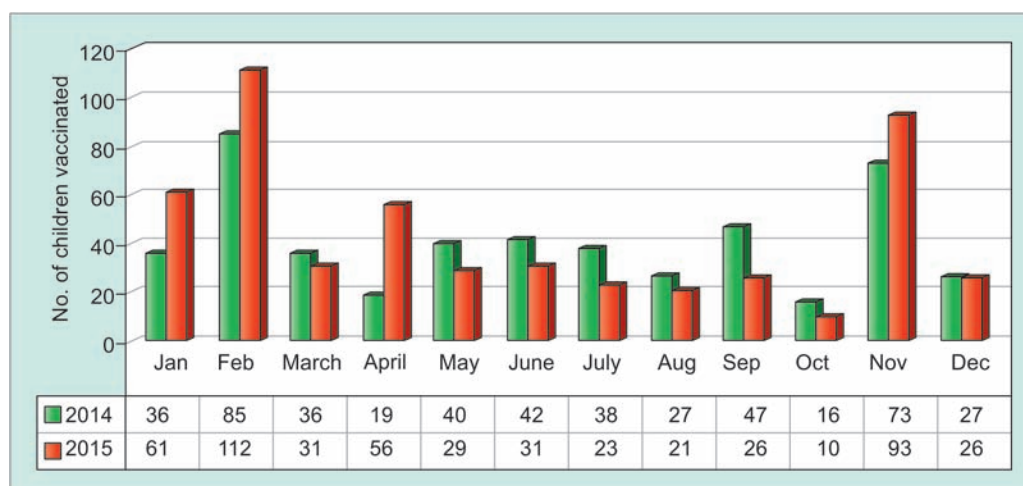
Therefore, it is the responsibility of the UHTC to provide health care services to these urban slum dwellers. The UHTC has taken up this responsibility voluntarily, and for serving these localities, there is a need for updating the population profile of the area. Also, the morbidity profile of the patients attending the OPD of the UHTC needs to be updated frequently. With this view, the present study was conducted with the following objectives (Graphs 1 and 2).

OBJECTIVES

- To assess the morbidity patterns of patients attending the OPD at the UHTC
- To determine the ANC cases attending the OPD on a monthly basis at the UHTC



Graph 1: Morbidity patterns of OPD patients. URTI: Upper respiratory tract infection; TB: Tuberculosis; DM: Diabetes mellitus



Graph 2: Monthwise comparison of vaccinations

MATERIALS AND METHODS

The study was conducted, and information was taken for a 12-month duration from January 1, 2015 to December 31, 2015. We collected information from all the patients who visited for the treatment of any disease or health-related issue, or visited for follow-up or ANC as well as the baby clinic visit for counseling and immunization. All the patients who visited the UHTC during a 1-year period and have been registered were included in this study. There were no exclusion criteria adopted to exclude

any patient and his/her disease-related information. The information was collected from the OPD registers of the UHTC (Tables 1 to 12). The records taken from the following registers available at the UHTC were as follows:

- Morbidity pattern register
- Old and new patient record register
- Antenatal care register with follow-up
- Vaccination register with follow-up
- Register for new survey of catchment area
- Noncommunicable disease/geriatric clinic register

Table 1: Distribution of OPD patients

Month	Male	Female	ANC	Under 5	Geriatric	Total patients
January	175	424	10	102	54	599
February	201	434	03	111	63	635
March	192	400	07	102	51	592
April	181	486	13	106	72	667
May	219	465	6	97	67	684
June	218	455	11	95	64	673
July	211	465	15	87	53	676
August	222	506	12	116	77	728
September	247	609	10	134	52	856
October	212	452	17	69	59	664
November	191	421	20	148	49	612
December	255	474	33	106	68	729
Total (year 2015)	2,524	5,591	157	1,273	729	8,115

Table 2: Antenatal care visits and free iron–folic acid supplements distribution

Month	IFA distribution	TT	Visit to ANC home
January	180	2	90
February	90	0	80
March	140	3	120
April	130	8	130
May	100	5	50
June	130	5	50
July	180	5	90
August	170	3	80
September	150	4	130
October	160	2	110
November	180	5	60
December	231	3	117

IFA: Iron–folic acid; TT: Tetanus toxoid

Table 3: Referred ANC to the tertiary care level hospital

Month	ANC	Referred ANC
January	10	2
February	03	3
March	07	1
April	13	5
May	6	3
June	11	4
July	15	5
August	12	3
September	10	4
October	17	7
November	20	11
December	33	15

Table 4: Family planning

Month	MALA-N (packets with 28 tablets)	Condoms (packets with 10 condoms)
January	33	31
February	13	14
March	38	35
April	37	24
May	35	42
June	26	57
July	43	64
August	23	57
September	16	61
October	29	29
November	35	31
December	32	52

Table 5: Vaccination

Month	Free vaccines	Paid vaccines	Total vaccination
January	51	10	61
February	99	13	112
March	19	12	31
April	39 + 52	17	108
May	20	9	29
June	20	11	31
July	18	5	23
August	13	8	21
September	17	9	26
October	6	4	10
November	80	13	93
December	11	15	26
Total (year 2015)	445	126	571

- Antenatal care camp register
- Family folders (4,508 houses completed)

RESULTS

The UHTC serves approximately 16,754 population of six slum localities, namely Hata phaltoon ganj, Kaalibadi, Shiklapur, Semalkhera, Khurramgotiya one,

and Khurramgotiya two. These six slum localities are in the two urban wards namely Rabdi Tola and Rampur Baag in Bareilly city. We recorded a total of under-five 1,437 cases, ANC's were 423, the elderly were 4,038 in these six localities.

A total of 8,115 cases including new, old, and review patients attended the OPD of the UHTC during 1 year from January 1, 2015 to December 31, 2015. Out of the total, 2,524 were males, 5,591 females, 1,273 under 5 children, 157 ANC women, and 68 elderly.

DISCUSSION

The OPD register of the UHTC provides the morbidity profile/patterns of the patients of the catchment areas of the Department of Community Medicine, and the records of both the old and the new patients including children, ANC women, and the elderly provide comparative assessments of the overall performance of the UHTC. The management committee of the college has been frequently reviewing the records of the Center after certain period of time since the date of its establishment for the above-mentioned purposes.



Table 6: Free vaccinations

	<i>BCG</i>	<i>DPT</i>	<i>OPV</i>	<i>Hepatitis B</i>	<i>Measles</i>	<i>Vitamin A</i>	<i>TT</i>	<i>Total</i>
January	2	3	37	4	2	1	2	51
February	0	7	83	3	5	1	0	99
March	2	5	4	5	0	0	3	19
April	1	5	64	6	3	2	10	91
May	0	4	5	4	2	0	5	20
June	0	3	1	3	8	0	5	20
July	1	4	1	3	4	0	5	18
August	1	4	1	2	2	0	3	13
September	0	3	1	1	7	0	5	17
October	1	1	0	1	1	0	2	6
November	1	3	66	2	1	0	7	80
December	3	4	0	1	0	0	3	11
Total (year 2015)	12	46	263	35	35	4	50	445

BCG: Bacillus calmette-guérin; DPT: Diphtheria pertussis tetanus; OPV: Oral polio vaccine; TT: Tetanus toxoid

Table 7: Paid vaccination

	<i>Chicken pox</i>	<i>Rota virus</i>	<i>MMR</i>	<i>Pentavac</i>	<i>Typhoid</i>	<i>Cervical cancer</i>	<i>Total</i>
January	0	0	2	6	2	0	10
February	0	0	3	6	4	0	13
March	0	0	2	6	4	0	12
April	0	0	1	12	3	1	17
May	0	0	3	5	1	0	9
June	0	0	4	4	3	0	11
July	0	0	1	3	1	0	5
August	0	0	4	3	1	0	8
September	0	0	1	4	4	0	9
October	0	0	1	2	1	0	4
November	0	0	4	3	6	0	13
December	0	0	5	6	4	0	15
Total (year 2015)	0	0	31	60	34	1	126

MMR: Measles-mumps-rubella

Table 8: Laboratory services

<i>Month</i>	<i>Hb</i>	<i>RBS</i>	<i>UPT</i>	<i>WIDAL</i>	<i>VDRL</i>	<i>MP</i>	<i>Urine A and S</i>	<i>Total</i>
January	1	14	3	0	0	0	0	18
February	2	11	8	0	0	1	0	22
March	5	12	1	0	0	0	0	18
April	6	17	2	2	0	1	2	30
May	9	11	4	0	0	0	1	25
June	7	13	3	0	2	1	2	28
July	7	26	5	0	1	0	0	39
August	19	19	4	0	2	2	4	50
September	11	22	4	8	1	4	2	52
October	6	17	7	9	0	2	0	41
November	6	10	6	4	1	1	0	28
December	6	16	9	1	0	0	1	33
Total (year 2015)	85	188	56	24	7	12	12	384

Hb: Hemoglobin; RBS: Random blood sugar; UPT: Urine pregnancy test; WIDAL: Widal test; VDRL: Venereal disease research laboratory test; MP: Malaria parasite; Urine A and S: Urine albumin and sugar

Table 9: Camps

Month	No. of camps	Total patients	ANC camps
January	6	1,098	
February	4	665	
March	3	520	
April	4	957	
May	3	628	
June	0	0	
July	4	790	
August	4	593	
September	3	300	
October	0	0	
November	0	0	1
December	4	490	5
Total (year 2015)	35	6041	6

Table 10: Families visited by medical social worker

Months of year 2015	No. of families visited by MSW
January	254
February	106
March	227
April	241
May	114
June	107
July	132
August	103
September	207
October	189
November	253
December	163

Table 11: Growth monitoring

Month	Growth monitoring
January	61
February	112
March	31
April	108
May	29
June	31
July	23
August	21
September	26
October	10
November	93
December	26
Total (year 2015)	571

Table 12: National vector-borne disease control programme testing

Month	MP card test done	Patient positive
January	0	0
February	1	0
March	0	0
April	1	1
May	0	0
June	1	0
July	0	0
August	2	1
September	4	3
October	2	2
November	1	0
December	0	0
Total (year 2015)	12	7

CONCLUSION

These records give certain clues about the performance of the medical, paramedical, and medical social workers of the UHTC, and can be utilized by the planners and policymakers of the teaching institute/hospital to develop the center better for providing quality health care services to the community, particularly the urban slum community.

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