

Original Research Article

Pattern of patients attending in the casualty department of a tertiary health care hospital in western Maharashtra

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ABSTRACT

Background: Casualty department is one of the most sensitive areas of health care system. This sensitivity is based on various factors including urgent health care, crowding and external interference. The objective of this study was to know the pattern of cases attending casualty department of a tertiary health care hospital.

Methods: A retrospective record based cross-sectional study of all cases registered at the casualty department of a tertiary health care hospital from January 2022 to December 2023 was carried out. Data of the patients was collected from the registers of casualty and medical record department. It was entered in Microsoft excel and analysed. Descriptive and inferential statistics was applied.

Results: Total 74916 patients attended casualty department during the study period of two years. The ratio of medical to surgical patients was 1.04:1. Total 33279 (44.42%) medico legal cases and 6858 (09.15%) patients of acute respiratory infection were registered in the casualty. 9339 (11.83%) tetanus toxoid and 3728 (04.72%) anti-rabies vaccine doses were given to the beneficiaries. 18148 (24.22%) trauma and 1051 (01.40%) brought dead cases were managed during the study period. 586 (00.78%) patients absconded and 3536 (04.72%) patients left against medical advice from the casualty during the study period.

Conclusions: Acute respiratory infection, poisoning, trauma, brought dead, discharge on request, left against medical advice, abscond, post mortem examination, emergency death, etc are some of the common emergencies reported in the casualty department. To tackle such cases promptly needs round the clock trained and enough health care workers as well as material resources in the casualty.

Keywords: Casualty, Patient, Tertiary health care hospital

INTRODUCTION

The term casualty means a seriously injured patient. It is predominantly a military word, generally used for service for accidents. After a battle or accident the dead, the wounded and the sick are called together as 'casualties'. Casualty, in respect to personnel, is any individual who is lost to his organisation by reason of being declared dead, wounded, diseased, detained, captured, or missing.¹ Road traffic injuries contribute significantly to the burden of

disease and mortality throughout the world, but particularly in developing countries. The accident and emergency services are one of the mainstays in the medical care offered by the present day hospitals. Emergency care should be of high quality, cost effective and compassionate.² Road traffic injuries are a major public health problem worldwide and it is one of the eight major causes of mortality. Road traffic injuries are responsible for 1.3 million deaths every year.³ Considering high proportion of road traffic injuries among young drivers, school-based road safety awareness

programs should be periodically conducted to decrease high-risk behaviours while driving. Focus should be directed to make use of safety measures such as helmet and seatbelt; especially among the youth.⁴ The common causes of respiratory emergencies include acute severe asthma, chronic obstructive pulmonary disease, pneumothorax, pleural effusion, pulmonary embolism and acute respiratory distress syndrome.⁵

The accident and emergency department of any hospital provides an insight to the quality of care available in the institution. Improvement in the management techniques might unravel the mysteries of death of unknown origin. Management of medical emergencies should be emphasised in the training of emergency health care workers.⁶ Casualty department is one of the most sensitive area of a tertiary health care hospital. Many patients with trivial complaints are attending this department which did not require much attention.⁷ Patil et al in their study in a medical college hospital in Raichur, Karnataka, observed that maximum number of patients visiting the casualty belonged to general medicine and allied specialities.⁸ The large number of patients visiting casualty had minor health problems. This results in increased workload of the casualty department of the hospital. The casualty department constitutes one of the vital entry points of patients into the health care facility of the hospital. This department responds to and manages variety of cases in all the clinical areas. Casualty department of any hospital provides an insight to the quality of health care available in the hospital.⁹

Casualty is an emergency department that is staffed 24 hours a day, 7 days a week and provides unscheduled health care services to the patients who require immediate attention. This is the first point of contact for any critically ill patient, needing immediate medical intervention. The role of casualty department is to provide timely and speedy emergency health care services to the seriously ill patients.¹⁰ The casualty department of a tertiary health care hospital operates continuously and provides initial treatment for a broad spectrum of diseases and injuries, which may be life threatening and require immediate attention. This department also does administrative work related to emergency health care services. The objective of this study was to observe the pattern of patients attending in the casualty department of a tertiary health care hospital.

METHODS

This retrospective record based observational study was carried out in the casualty department of a tertiary health care hospital in Western Maharashtra in the month of May 2024 following complete enumeration method. Necessary permissions and approvals were obtained from the hospital authorities to conduct the study. Inclusion and exclusion criteria were defined. All the patients with complete records were included in the study while the patients with incomplete or missing records were

excluded. The data of all patients who attended in the casualty department of the hospital from January 2022 to December 2023 was recorded in the predesigned, pretested and formatted proforma. It was collected from registers maintained in the casualty department and medical records office. The data was entered in the Microsoft excel and analysed. The descriptive and inferential statistics was applied. The patients were categorised according to their symptoms, injury, illness and health services required by them. They were also grouped under the broad speciality headings of medical, surgical, acute respiratory infection, post mortem examination, discharge on request, brought dead, left against medical advice, trauma, poisoning, abscond etc to study the case mix pattern. The Chi-square test of significance was used to interpret the results. The statistical level of significance was fixed at $p < 0.05$.

RESULTS

During the two years of study period i.e. January 2022 to December 2023, 74916 patients attended casualty department, of which 38272 (51.09%) were with medical and 36644 (48.91%) were of surgical issues. During the year 2022, total 36499 (48.72%) patients attended the casualty of which 17669 (48.41%) were suffering from medical problems and 18830 (51.59%) were suffering from surgical issues. Similarly, in the year 2023, total 38417 (51.28%) patients attended the casualty of which 20603 (53.63%) were suffering from medical problems while 17814 (46.37%) were suffering from surgical problems. Here it is observed that the patients with medical issues increased while with surgical issues decreased from the year 2022 to 2023 ($p < 0.05$). During this two years period, 33279 medico legal cases (MLC) were registered of which 20856 (62.67%) were managed at outpatient department (OPD) level while 12423 (37.33%) were admitted in the hospital and managed. In the year 2022, total 16312 (49.02%) MLC cases while in the year 2023, 16967 (50.98%) MLC were registered. Of the 16312 (49.02%) MLCs in the year 2022, 10286 (63.06%) were treated at OPD level and 6026 (36.94%) were treated at inpatient department (IPD) level. Of the 16967 (50.98%) MLCs in the year 2023, 10570 (62.30%) were managed at OPD level while 6397 (37.70%) required admission in the hospital. Total 6858 patients of acute respiratory infection (ARI) were reported at the casualty during the two years study period of which 2855 (41.63%) reported in the year 2022 and 4003 (58.37%) patients reported in the year 2023. Of the total 6858 patients of ARI, 2638 (38.47%) were treated on OPD basis and 4220 (61.53%) were admitted and treated. Of the 2855 (41.63%) patients in the year 2022, 1152 (40.35%) and of the 4003 (58.37%) patients in the year 2023, 1486 (37.12%) were treated on OPD basis ($p < 0.05$). Rest of the patients were admitted to the hospital in both the years (Table 1).

Distribution of medico-legal cases (MLC) reported at casualty department of a tertiary health care hospital

during the year 2022 and 2023 is shown in Table-2. During the study period total 33279 MLC were registered in casualty of which 16312 (49.02%) were in the year 2022 and 16967 (50.98%) were in the year 2023. Among them registration of chemical poisoning (08.12% in 2022, 08.10% in 2023), dog bite (13.57% in 2022, 13.66% in 2023), road traffic accidents (RTA) victims (36.51% in

2022, 35.78% in 2023) and referred MLC cases (13.52% in 2022, 13.44% in 2023) were more in both the years. These MLC cases are a burden in casualty department of any hospital. Such cases need prompt intervention to reduce mortality and complications where many stakeholders are also involved.

Table 1: Distribution of the patients who attended casualty department during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Type of morbidity						
Medical	38272	51.09	17669	48.41	20603	53.63
Surgical	36644	48.91	18830	51.59	17814	46.37
Total	74916	100.0	36499	48.72	38417	51.28
Chi-square=204.12 p value=0.0000						
Mode of management of medico legal cases (MLC)						
MLC OPD	20856	62.67	10286	63.06	10570	62.30
MLC IPD	12423	37.33	6026	36.94	6397	37.70
Total	33279	100.0	16312	49.02	16967	50.98
Chi-square=2.05 p value=0.15						
Mode of management of acute respiratory infections (ARI)						
Treated on OPD basis	2638	38.47	1152	40.35	1486	37.12
Admitted	4220	61.53	1703	59.65	2517	62.88
Total	6858	100.0	2855	41.63	4003	58.37
χ^2 test	Chi-square=7.33 p value=0.001					

Table 2: Distribution of medico-legal cases registered in the casualty during the study period.

Variables	Total (n=33279)		Year 2022 (n=16312)		Year 2023 (n=16967)	
	N	%	N	%	N	%
Chemical poisoning	2699	08.11	1324	08.12	1375	08.10
Food poisoning	1249	03.75	618	03.79	631	03.72
Snake bite	1958	05.88	976	05.98	982	05.79
Dog bite	4530	13.61	2213	13.57	2317	13.66
Cat bite	181	00.54	89	00.55	92	00.54
Honey bee sting	163	00.49	78	00.48	85	00.50
Monkey bite	46	00.14	17	00.10	29	00.17
Rat bite	58	00.17	15	00.09	43	00.25
Human bite	44	00.13	18	00.11	26	00.15
Other bite	2119	06.37	992	06.08	1127	06.64
RTA victims	16512	49.62	8161	50.03	8351	49.22
Physical assault	2754	08.28	1357	08.32	1397	08.23
Sexual assault	335	01.01	148	00.91	187	01.10
Burn	631	01.90	306	01.88	325	01.91
χ^2 test	Chi-square=25.56 p value=0.0000					

During study period of two years total 78944 injections were given to the beneficiaries in the casualty of which 9339 (11.83%) were TT injections, 3728 (04.72%) were anti rabies vaccine injections and 65877(83.45%) were other injections. Of the 9339 (11.83%) TT injections given in the casualty 83 (00.89%) were 10 years TT, 169 (01.81%) were 16 years TT and 9087 (97.30%) were other TT injections. The distribution of Tetanus Toxoid (TT), anti rabies vaccine and other injections is given in the Table 3. Total 51 (01.24%) ten years TT and 83

(02.03%) sixteen years TT were given to the beneficiaries during 2022. While during 2023, 32 (00.61%) ten years TT and 86 (01.64%) sixteen years TT were given to the beneficiaries. Here the proportion of boys is more in both the years. During 2022, 3961 (96.73%) and during 2023, 5126 (97.75%) other TT doses were also given in the casualty. Thus total 4095 (43.85%) and 5244 (56.15%) TT doses were given to the beneficiaries during 2022 and 2023 respectively. Total 3728 anti rabies vaccine injections were given to the patients in the casualty during

study period of two years of which 1611 (43.21%) were given in the year 2022 and 2117 (56.79%) were given in the year 2023. Total 33679 (85.51%) and 32198 (81.39%) other injections were also given to the patients during

year 2022 and 2023 respectively. Overall 39385 (49.89%) and 39559 (50.11%) injections were given to the beneficiaries who had attended casualty during year 2022 and 2023 respectively (Table 3).

Table 3: Distribution of tetanus toxoid (TT), anti rabies vaccine and other injections given to the patients and beneficiaries in the casualty during the study period.

Variables and categories		Total		Year 2022		Year 2023	
		N	%	N	%	N	%
10 yrs TT	Boys	58	69.88	37	72.55	21	65.63
	Girls	25	30.12	14	27.45	11	34.37
Total		83	00.89	51	01.24	32	00.61
16 yrs TT	Boys	111	65.68	57	68.67	54	62.79
	Girls	58	34.32	26	31.33	32	37.21
Total		169	01.81	83	02.03	86	01.64
Other tetanus toxoid		9087	97.30	3961	96.73	5126	97.75
Total tetanus toxoid		9339	100.0	4095	43.85	5244	56.15
Anti-rabies vaccine		3728	100.0	1611	43.21	2117	56.79
Other injections		65877	83.45	33679	85.51	32198	81.39
Total injections		78944	100.0	39385	49.89	39559	50.11

Table 4: Distribution of physical trauma cases registered at casualty during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects >12 years						
Male	11506	65.31	6088	70.90	5418	60.00
Female	6111	34.69	2499	29.10	3612	40.00
Total	17617	97.07	8587	48.74	9030	51.26
χ^2 test			Chi-square=230.73 p value=0.0000			
Subjects ≤12 years						
Boys	367	69.11	117	67.63	250	69.83
Girls	164	30.89	56	32.37	108	30.17
Total	531	02.93	173	32.58	358	67.42
χ^2 test			Chi-square=0.26 p value=0.61			
Trauma cases and its mode of management						
Admitted and treated	5706	31.44	2407	27.48	3299	35.14
Managed at OPD level	12442	68.56	6353	72.52	6089	64.86
Total	18148	100.0	8760	48.27	9388	51.73
χ^2 test			Chi-square=123.46 p value=0.0000			

During the study period of two years, total 18148 trauma patients were registered in the casualty of whom 17617 (97.07%) cases were >12 years of age while 531 (02.93%) cases were children. During the year 2022, total 8760 (48.27%) and during 2023, total 9388 (51.73%) trauma cases were registered. In the year 2022, 2407 (27.48%) while in the year 2023, 3299 (35.14%) trauma cases were admitted in the hospital and treated. 3520 (40.18%) trauma cases were undergone minor surgery in the year 2022 while 3251 (34.63%) cases in the year 2023. It was observed that many cases of trauma were absconded from the hospital which was a serious matter. Necessary measures should be taken to prevent this issue in the casualty. Distribution of trauma a cases in the year 2022 and 2023 among adults and adolescents, children,

their place and mode of management in the hospital is shown in Table 4.

Total 51601 patients undergone minor procedures in the casualty during two years study period of which 50872 (98.59%) cases were >12 years of age and 729 (01.41%) were children ≤12 years. 22263 (43.14%) subjects undergone minor procedures in the casualty in the year 2022 of which 21932 (98.51%) were >12 years of age while 29338 (56.86%) subjects undergone minor procedures in the casualty in the year 2023 of which 28940 (98.64%) were >12 years (p<0.05). Total 729 (01.41%) subjects ≤12 years of age undergone minor procedures of which 433 (59.40%) were boys and 296 (40.60%) were girls. 331 (01.49%) children in the year

2022 and 398 (01.36%) children in the year 2023 undergone minor procedures ($p<0.05$). During the study period, the minor procedures included dressing of 10515

(20.38%) patients, ECG of 26791 (51.92%) patients and 14295 (27.70%) patients underwent other minor procedures (Table 5).

Table 5: Distribution of minor procedures conducted at casualty during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects >12 years						
Male	30249	59.46	12654	57.70	17595	60.80
Female	20623	40.54	9278	42.30	11345	39.20
Total	50872	98.59	21932	43.11	28940	56.89
χ ² test	Chi-square=49.80 p value=0.0000					
Subjects ≤12 years						
Boys	433	59.40	182	54.98	251	63.07
Girls	296	40.60	149	45.02	147	36.93
Total	729	01.41	331	45.40	398	54.60
χ ² test	Chi-square=4.90 p value=0.02					
Minor procedures						
Dressing	10515	20.38	6073	27.28	4442	15.14
ECG	26791	51.92	13196	59.27	13595	46.34
Plaster	5782	11.20	1306	05.87	4476	15.26
Minor surgery	6341	12.29	1218	05.47	5123	17.46
Other	2172	04.21	470	02.11	1702	05.80
Total	51601	100.0	22263	43.14	29338	56.86

Table 6: Distribution of discharge on request (DOR) cases registered during the study period.

Variables	Total		Year 2022		Year 2023	
	n	%	n	%	n	%
Subjects >12 years						
Male	649	52.13	301	49.51	348	54.63
Female	596	47.87	307	50.49	289	45.37
Total	1245	95.40	608	48.84	637	51.16
χ^2 test			Chi-square=3.27 p value=0.07			
Subjects ≤ 12 years						
Boys	31	51.67	12	60.00	19	47.50
Girls	29	48.33	08	40.00	21	52.50
Total	60	04.60	20	33.33	40	66.67
χ^2 test			Chi-square=0.83 p value=0.36			
Overall	1305	100.0	628	48.12	677	51.88

Total 1304 patients took discharge on request (DOR) in the study period of two years of which 628 (48.12%) were in the year 2022 and 677 (51.88%) were in the year 2023. In the year 2022, 608 (49.51% male and 50.49% female) and in the year 2023, 637 (54.63% male and 45.37% female) DOR cases were recorded. It is observed that the DOR cases increased from the year 2022 to 2023 ($p<0.05$). As far as children are concerned, in the year 2022, 20 (60.00% boys and 40.00% girls) while in the year 2023, 40 (47.50% boys and 52.50% girls) DOR cases were recorded in the casualty (Table 6).

During the study period of two years, 3536 patients left against medical advice (LAMA) of which 2004 (56.67%)

were in the year 2022 and 1532 (43.33%) were in the year 2023. Of the 3536 LAMA patients, 3462(97.91%) were >12 years of age while 74 (02.09%) were ≤12 years of age. In the year 2022, 1961 (56.64%) patients ≤12 years of age left casualty against medical advice (LAMA) while in the year 2023 this number reduced to 1501 (43.36%) patients. There is decrease in the number of LAMA cases from year 2022 to 2023 ($p<0.05$). Also 43 (58.11%) and 31 (41.89%) children with health issues were taken away by the parents from hospital against medical advice in the year 2022 and 2023 respectively. It is noticed that the LAMA is a common practice in the community. The distribution of the LAMA cases is shown in Table 7.

Table 7: Distribution of left against medical advice cases registered during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects >12 years						
Male	2581	74.55	1433	73.07	1148	76.48
Female	881	25.45	528	26.93	353	23.52
Total	3462	97.91	1961	56.64	1501	43.36
χ² test	Chi-square=5.20 p value=0.02					
Subjects ≤12 years						
Boys	48	64.86	28	65.12	20	64.52
Girls	26	35.14	15	34.88	11	35.48
Total	74	02.09	43	58.11	31	41.89
χ² test	Chi-square=0.00 p value=0.96					
Overall	3536	100.0	2004	56.67	1532	43.33

Table 8: Distribution of abscond patients from casualty registered during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects > 12 years						
Male	425	76.03	143	71.14	282	78.77
Female years	134	23.97	58	28.86	76	21.23
Total	559	95.39	201	35.96	358	64.04
χ^2 test			Chi-square=4.11 p value=0.04			
Subjects ≤12 years						
Boys	20	74.07	07	77.78	13	72.22
Girls	07	25.93	02	22.22	05	27.78
Total	27	04.61	09	33.33	18	66.67
χ^2 test			Chi-square=0.09 p value=0.75			
Overall	586	100.0	210	35.84	376	64.16

Table 9: Distribution of emergency deaths (ED) happened and brought dead cases (BD) to the casualty during the study period.

Emergency deaths (ED)	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects >12 years						
Male	173	74.57	86	73.50	87	75.65
Female	59	25.43	31	26.50	28	24.35
Total	232	84.98	117	50.43	115	49.57
χ^2 test			Chi-square=0.14 p value=0.70			
Subjects $\leq$ 12 years						
Boys	19	46.34	08	47.06	11	45.83
Girls	22	53.66	09	52.94	13	54.17
Total	41	15.02	17	41.46	24	58.54
χ^2 test			Chi-square=0.00 p value=0.94			
Overall	273	100.0	134	49.08	139	50.92
Brought dead cases (BD)						
Male >12 years	810	83.59	404	83.99	406	83.20
Female >12 years	159	16.41	77	16.01	82	16.80
Total	969	92.20	481	49.64	488	50.36
χ^2 test			Chi-square=0.11 p value=0.74			
Boys	36	43.90	22	42.55	14	42.86
Girls	46	56.10	25	57.45	21	57.14

Continued.

Emergency deaths (ED)	Total		Year 2022		Year 2023	
Total	82	07.80	47	57.32	35	42.68
χ^2 test	Chi-square=0.38 p value=0.54					
Overall	1051	100.0	528	50.24	523	49.76

Table 10: Distribution of post mortem (PM) examinations conducted during the study period.

Variables	Total		Year 2022		Year 2023	
	N	%	N	%	N	%
Subjects >12 years						
Male	931	81.67	470	81.31	461	82.03
Female	209	18.33	108	18.69	101	17.97
Total	1140	90.91	578	50.70	562	49.30
χ^2 test	Chi-square=0.09 p value=0.75					
Subjects ≤12 years						
Boys	46	40.35	24	44.44	22	36.67
Girls	68	59.65	30	55.56	38	63.33
Total	114	09.09	54	47.37	60	52.63
χ^2 test	Chi-square=0.71 p value=0.40					
Overall	1254	100.0	632	50.40	622	49.60

In the year 2022, 201 (35.96%) patients aged >12 years while in the year 2023, patients aged >12 years got absconded. The proportion of male patients getting absconded from casualty was more in both the years compared to female patients ($p<0.05$). 09 (33.33%) and 18 (66.67%) ill children got absconded during year 2022 and 2023 respectively. Necessary measures to be taken to prevent this act by the patients at a tertiary health care hospital on priority basis. The distribution abscond patients from casualty is shown in Table 8.

In the year 2022, 117 (73.50% male and 26.50% female) and in the year 2023, 115 (75.65% male and 24.35% female) emergency deaths were recorded among adults. In the year 2022, 17 (47.06% boys and 52.94% girls) while in the year 2023, 24 (45.83% boys and 54.17% girls) emergency deaths happened among children in the casualty. The number of emergency deaths among children increased from year 2022 to 2023 while in case of adults it has decreased. During the year 2022, 481 (49.64%) cases (83.99% male and 16.01% female) while in the year 2023, 488 (50.36%) cases (83.20% male and 16.80% female) were brought dead to the casualty. 47 (57.32%) children (42.55% boys and 57.45% girls) and 35 (42.68%) children (42.86% boys and 57.14% girls) were brought dead to the casualty in the year 2022 and 2023 respectively (Table 9).

Total 1254 post mortem examinations were conducted during study period of which 1140 (90.91%) were of subjects >12 years and 114 (09.09%) were of subjects ≤12 years of age. In the year 2022, 578 (81.31% male and 18.69% female) and in the year 2023, 562 (82.03% male and 17.97% female) post mortem examinations were performed among subjects >12 years. 54 (44.44% boys and 55.56% girls) while 60 (36.67% boys and 63.33%

girls) post mortem examinations were performed in the year 2022 and 2023 respectively among children. The number of post mortem examination conducted on children increased while on subjects aged >12 years, it has decreased from year 2022 to year 2023 (Table 10).

DISCUSSION

In the present study of two years duration from January 2022 to December 2023, 74916 patients attended casualty department, of which 38272 (51.09%) were with medical issues and 36644 (48.91%) were of surgical issues. During the year 2022, 36449 patients attended the casualty of which 17669 (48.41%) were suffering from medical problems and 18830 (51.59%) were suffering from surgical issues. Similarly, in the year 2023, 38417 patients attended the casualty of which 20603 (53.63%) were suffering from medical problems while 17814 (46.37%) were suffering from surgical problems. Here it is observed that the patients with medical issues increased while with surgical issues decreased from the year 2022 to 2023. During these two years period, 33279 MLC cases were registered of which 20856 (62.67%) were managed at OPD level while 12423 (37.33%) were admitted in the hospital. During the study period of two years, 78944 injections were given to the beneficiaries in the casualty of which 9339 (11.83%) were TT injections, 3728 (04.72%) were anti rabies vaccine injections and 65877 (83.45%) were other injections. Total 51601 patients underwent minor procedures in the casualty during two years study period of which 50872 (98.59%) cases were >12 years of age and 729 (01.41%) were cases ≤12 years. Similar few studies were conducted all over the world. Kamruzzaman et al in their study in Bangladesh among patients attending casualty department of a tertiary health care hospital observed, male and female ratio of 3:1.¹ Road traffic accident victims and injury due to fall

were the common mode of casualty especially in the young population within the study area. Prakash et al seen 1753 injured patients in the emergency department during the 12 months study period in a medical college hospital, Karnataka. Out of these, the maximum (70.27%) patients were in the age group of 11-45 years. Roy et al observed among 375 road traffic injuries patients, a total of 1390 injuries were recorded yielding a mean of 3.7 injuries per patient.³

In the present study, it is observed that 1304 patients took discharge on request (DOR) during two years of study period of which 628 (48.12%) were in the year 2022 and 677 (51.88%) were in the year 2023. In the year 2022, 201 while in the year 2023, 358 patients aged >12 years got abscond. In the year 2022, 117 (73.50 % male and 26.50% female) and in the year 2023, 115 (75.65% male and 24.35% female) emergency deaths were recorded among adults. During the year 2022, 481 cases (83.99% male and 16.01% female) while in the year 2023, 488 cases (83.20% male and 16.80% female) were brought dead to the casualty. In the year 2022, 578 (81.31% male and 18.69% female) and in the year 2023, 562 (82.03% male and 17.97% female) post mortem examinations were performed among subjects >12 years. Some observations of the present study are matching with the observations of other studies. Misra et al studied 900 victims of road traffic injuries victims in the emergency department of a tertiary care trauma centre in New Delhi, of which 84.00% were male and 16.00% were female.⁴ The mean age of the victims was 32.7 years. Raj et al observed breathlessness (100.0%), followed by cough with expectoration (58.00%) and dry cough (22.00%) are the most common clinical features among the patients attending casualty department of a tertiary health care hospital in Maharashtra.⁵ Ekere et al in their study in Nigeria observed, of the 22,791 patients attending accident and emergency department of an urban hospital in Nigeria, 446 died, giving a crude mortality rate of 02.00%.⁶ The male to female ratio was 1.5:1; the trauma subset and the non traumatic subset being 4.6:1 and 1.2:1 respectively.

Talwelkar et al in their study among patients attended in casualty department of a tertiary health care hospital in Rajkot observed, the common morbidities among medicine patients were myocardial infarction (29.80%), poisoning (19.80%), convulsions (06.70%), unconsciousness (05.50%), diabetes mellitus (06.13%), fever (04.80%) and the common morbidities among surgical patients were road traffic accident (25.25%), head injury (15.21%), abdominal pain (13.53%), assaulted injury (15.25%) and fall down (13.25%).⁷ Patil et al in their study in Raichur, Karnataka observed that the many patients visiting the casualty department had minor health issues.⁸ Due to this there is much more workload in the casualty department. Patil et al in his study in casualty department of a hospital in Navi Mumbai observed males outnumbered females in attending the casualty department.⁹ The male to female

ratio was 1.65:1. He also observed that the medico legal cases compromised 16.8% of the total 500 cases while non medico legal cases were 83.2%. Khekale et al in their study in multi-speciality hospital mentioned that to provide timely and speedy health care services to serious patients there should be availability of every resource on time in casualty.¹⁰

This study has limitation. This is a retrospective record based cross sectional study. Prospective study will give better insight into the subject.

CONCLUSION

It is observed that there is massive influx of patients in the casualty department resulting in an increase in the workload of health professionals. This department manages various types of emergencies promptly and provides comprehensive health care services to the patients attending it. It also responds to emergency calls and provides assistance to those in need. Casualty services are a crucial and essential component of health care system. Smooth functioning of this department will definitely help in reducing morbidity and mortality to a large extent. Necessary measures should be taken to prevent patients from getting absconded from the casualty.

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