

Profile of Brought in Dead Cases in a Tertiary Care Centre of South India

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Abstract

Most of the times it is noticed that incidence of Brought in dead (BID) cases in a tertiary care hospital is very high. But there are limited data of the statistics of such cases due to lack of records or audit. These cases can be due to natural cause or unnatural. The doctor attending such cases should be aware of all procedures and formalities associated with BID cases. Diagnosis of death should be ascertained clinically and hospitals should be aware of the legal responsibilities of these cases.

This study was conducted in a tertiary care institution where BID cases were profiled with the available data and records. The study throws light in to not only the demographic profile like age, sex, month wise distribution but also to time of reporting to Emergency department (ED) as well as the probable cause based on history of the informant. Males dominated in the total number of 307 cases compiled in 4 years, i.e, 2015 to 2018. Age of above 60 years cases made the major share with sudden death as well as road traffic accident (RTA) being the major culprits. Maximum number of BID were reported during early morning hours (12am to 6 am) followed by late evening hours (6pm to 12am).

Key words: Brought in dead cases, Emergency department, demographic profile

Introduction

The incidence of brought in dead (BID) is high in tertiary hospitals, but there is a lack of proper audit and relevant data of these cases. Brought in dead cases are those cases, where the patient on arrival to the emergency department (ED) was found to be clinically dead, hence also named as 'Dead on arrival'. Persons 'brought in dead' (BID) often contribute to hospital ED mortality statistics ^(1,2,3,4).

Even though not an emergency, ED of a hospital has to provide necessary documentation and has to undergo all the legal issues regarding a BID case. Most of the

times, it is important for the emergency clinician to confirm the death and to distinguish it from 'apparent death'. There are many factors associated with brought in dead cases which could be neglect from the patient attenders, concealing crime by offenders, lack of infrastructure or lack of awareness. Almost always, all brought in dead cases are considered medicolegal and it is the duty of doctor to intimate the police according to the law of land. It is also important to know about the premorbid conditions of patients and to collect the previous treatment records of the deceased. This study is an attempt to collect material data about such cases and to compile the demographic profile with associated parameters which is a unique one in this region.

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Materials and Method

The demographic profile of all BID from year 2015 to 2018 were analysed, which were presented to ED of a tertiary care medical college hospital in South India by

a cross sectional study. The age wise, gender wise and month wise distribution were tabulated and graphically represented. The pattern of cases based on history and time of reporting to ED were also recorded.

Results

This retrospective study was conducted in an 800 bedded tertiary care private teaching institution from 2015 to 2018. In all the four years, males dominated in number of BID. The total number of cases in 4 years came up to 307. In the year 2015, 61% were males whereas the year 2016 there were 82.7% males. The year 2017 had 70.3% male cases and 2018 recorded 69.3% male dominance (Fig.1).

The age wise classification was done by grouping into <20 years, 20 to 40 years, 40 to 60 years and above 40 years.43.6% cases belonged to above 60 years category from total number of cases in 4 years. There was clear majority of this age group BID in all the 4

years (Table.1)

Month wise distribution was done which showed month of May the maximum number of cases in 2015 and 2016, whereas July topped in 2017 and April in 2018 (Fig.2).

Time of reporting to ED on given day were analysed for all the 4 years by classifying into four groups. Maximum number of BID was reported during 12 am to 6 am (39%) followed by duration of 6pm to12am (35%) (Table.2).

The pattern of cases based on history available were recorded. Of which sudden deaths and RTA formed the major share (Fig.3). Most of the cases which belonged to elderly age group, i.e., above 60 years had various comorbidities in the past like COPD, CAD, renal failure, diabetes mellitus and systemic hypertension. BID following RTA belonged to younger age groups. Sudden death cases were also reported rampantly without any known comorbidities and chronic illnesses in past.

TABLE.1 AGE WISE DISTRIBUTION OF BID FROM 2015 TO 2018

YEAR	<20 YRS	20-40	40-60	>60	TOTAL
2015	3	14	21	37	75
2016	2	14	35	42	93
2017	3	21	16	24	64
2018	5	13	26	31	75

TABLE.2 TIME OF REPORTING OF BID TO ED FROM 2015 TO 2018

YEAR	12 am -6am	6am -12pm	12pm-6pm	6pm-12am	TOTAL
2015	27	10	14	24	75
2016	39	17	5	32	93
2017	25	12	3	24	64
2018	29	17	11	28	75

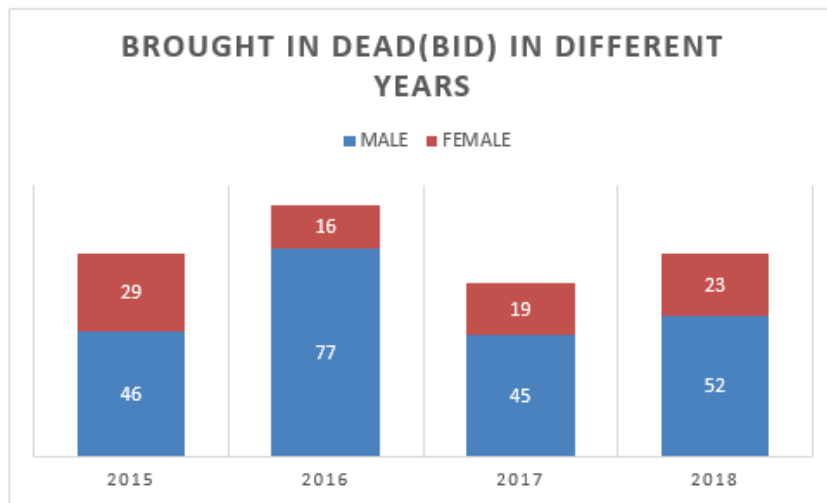


FIG.1 GENDER WISE DISTRIBUTION OF BID FROM 2015 TO 2018

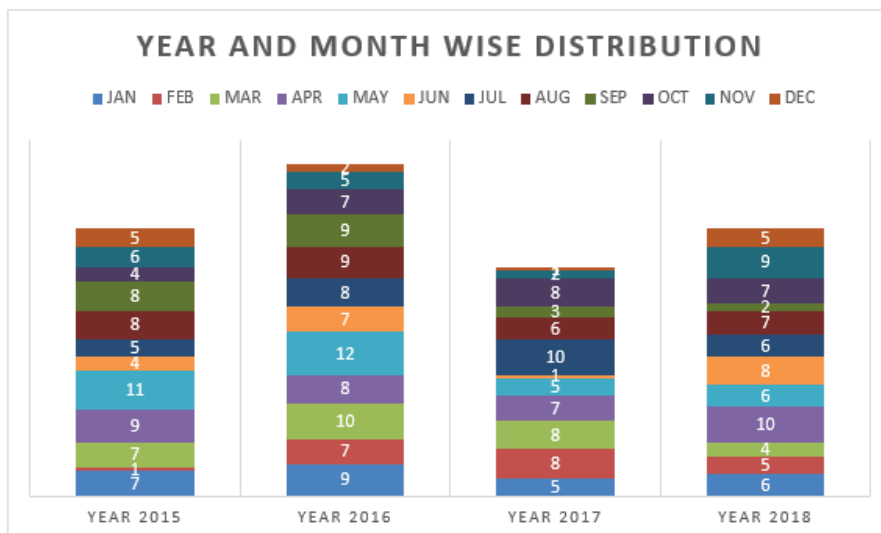


FIG.2 MONTH WISE DISTRIBUTION OF BID FROM 2015 TO 2018

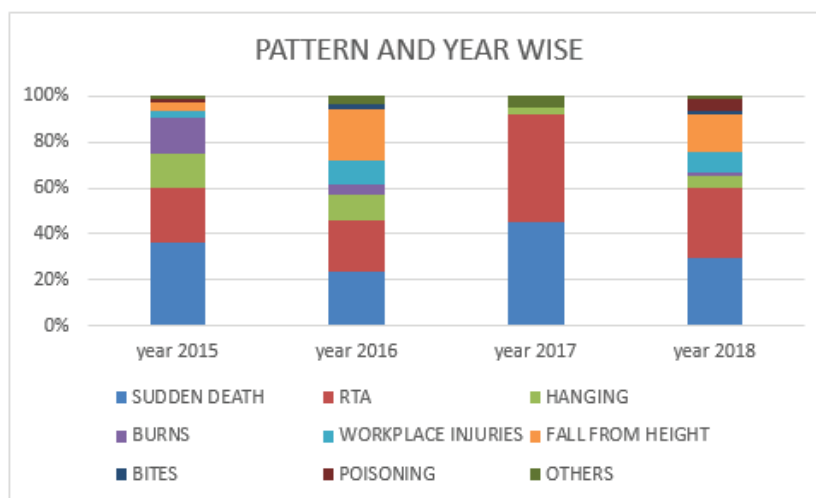


FIG.3 BID PATTERN FROM 2015 TO 2018

Discussion

Death is permanent and irreversible stoppage of the all three vital systems of the body, including the circulatory, respiratory and neurological systems. The moment of death points to the exact moment when the person dies. Khan et al. has mentioned that about 10-50% of such deaths occur before reaching the hospital and hence recorded as brought in dead cases^[5]

In the present study, almost 43.6 % involved were above 60 years. The age group of 61-75 years constituted the largest group in a study done by Wang JS et al which is similar to our study^[6]. The main reasons for the involvement of this age group may be the undiagnosed fatal illness or neglect of alarming symptoms of diseases in the community.

In our study, it was noted that there was clear cut male dominance in all the 4 years. This finding was consistent with other studies as well^[7,8]. Month wise distribution of all the 4 years were also tabulated but no statistical significance or varied differences were noted.

It is interesting to find that most of the BID cases reported to the ED during 12 am to 6 am (39%) followed by duration of 6pm to 12am (35%). This indicates that the late evening hours and early morning hours brings more BID cases to a hospital which may be due to delay in transport, inaccessibility and neglect.

Conclusion

The profile of BID cases presented to a tertiary care hospital in South India was similar to previous studies conducted. It is important for all hospitals to be aware of the legal formalities in handling BID cases. It is mandatory for all hospitals to maintain a proper BID register with all details. A doctor should be aware of his legal and ethical duties of such cases apart from confirmation of death.

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Ethical Clearance: Obtained from institutional research board and ethical committee

Abbreviations

BID – brought in dead

ED – Emergency department

RTA – road traffic accident

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