

Title: A STUDY ON DROUP OUT AMONG ANIMAL BITE CASES (PROVOKED VERSUS UNPROVOKED) ATTENDING THE ARV CLINIC OF SCB MEDICAL COLLEGE, CUTTACK

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Keywords Provoked, Unprovoked, Dropout

Abstract Rabies is the tenth most common cause of death. The present study has shown dropout in provoked versus unprovoked animal bite cases receiving IDRV.

Original Article

A study on drop out among animal bite cases (provoked versus unprovoked) attending the ARV clinic of SCB Medical College, Cuttack.

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ABSTRACT**Introduction:**

Rabies is the tenth most common cause of death. The present study has shown dropout in provoked versus unprovoked animal bite cases receiving IDRV.

Objective of study:-

1. To study the over all drop out among provoked versus unprovoked animal bite cases attending the ARV clinic.
2. To identify the reasons of drop out and suggest remedial measures

Material & methods:-

Place of study:- ARV Clinic of SCB Medical college, Cuttack
Duration of study:-Feb 2013 & March 2013
Study instrument: Predesigned & Pretested questionnaire
Study subject: All new cases coming to the ARV clinic during the month of Feb 2013
Type of study:-Follow up study

Observation:-

Out of 1085 cases treated with IDRV there were total 102 dropout cases. Majority(10.6%) of dropout was observed among unprovoked bite cases as compared to provoked bite cases. Dropout was also more in case of pet animal bite which was provoked in nature. Dropout in stray animal was more in case of unprovoked bite. Dropout in category II provoked bite cases was more in comparison to category III bites. The most common reason of dropout as stated by the vaccinees was personal work for which they could not come in time.

Conclusion:-

Dropout in IDRV can have fatal consequences. Appropriate counseling & use of IEC materials especially in the waiting area can prevent dropout & thereby rabies.

Key words: Provoked, Unprovoked, Dropout.

INTRODUCTION

Among all human infection rabies is the tenth most common cause of death¹. Human rabies is endemic in India and annually estimated 20,000 persons die of this disease². The reason for this high number of deaths due to a disease that is preventable is attributable to lack of awareness among people about management of animal bites which prevent them from obtaining medical care including post exposure prophylaxis(PEP) and non

compliance to PEP schedule^{3,4,5}. This situation exists in spite of appropriate PEP being available, the use of which would further bring down the occurrence of rabies deaths in India significantly. The study has shown dropout in provoked versus unprovoked animal bite cases receiving IDRV.

OBJECTIVES OF STUDY

1. To study the over all drop out among provoked versus unprovoked animal bite cases attending the ARV clinic.

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2. To identify the reasons of drop out and suggest remedial measures.

MATERIAL & METHODS

Place of study:- ARV Clinic of SCB Medical college, Cuttack

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Drop out cases are those cases who have received the ARV but have not turned up as per the schedule date. Those who have totally not turned up for complete vaccination are taken as complete dropout & those who have come on a later date to complete the course of vaccination is considered as partial dropout.

OBSERVATION

Out of total 1085 cases attending the ARV OPD 102 were dropout cases. Maximum number of dropout were seen among unprovoked bite cases i.e. (62.7 %) as compared to provoked cases which was (37.3 %). Taking age into consideration, the proportion of dropout cases were more i.e (14.2 %) in the age group of 21-30 year. Dropout cases was least in 0-10 yrs age group (7.1%). The overall dropout among the provoked bite cases were more in case of males (9.4%) than in case of females (9.3%). The dropout in unprovoked bite was also more in case of males i.e 10.8% compared to 10.3% in case of females. Also the total dropout among males and females were 9.4% & 9.3% respectively. With regards to biting animals, the proportion of

dropout was found to be more (10.1%) among the cases bitten by animals other than dogs in comparison to dogs bite cases (8.2%). Taking the provoked verses unprovoked bite into consideration, the dropout among unprovoked bite was more (10.6%) compared to provoked bite (7.9%) The dropout was (10.8%) in case of stray animal compared to pet animal (7.4%). Again the dropout in case of provoked pet animal bite was (8.8%) compared to unprovoked pet animal bite (6.2%). Dropout in stray animal was more in case of unprovoked bite (13.6%) compared to provoked bite (7.2%). Residence wise analysis of dropout among beneficiaries showed that it was 18.7% in urban beneficiaries compared to rural cases (20.3%). In urban cases dropout was more in unprovoked bite (20.3%) as compared to provoked bite (17.4%). Category wise breakup of the animal bite cases and the prevalence of dropout showed that dropout was more (8.8%) among category II bite cases than category III (5.1%). The dropout was most commonly encountered in 3rd dose (41.2%). Partial dropout was 77.5% of the total dropout which was more than the complete dropout (22.5%). Partial dropout case in provoked bite was (76.3%).

The common reason of partial dropout as mentioned by the beneficiaries was personal work (58.2%) for which they could not come on time.

DISCUSSION

Out of total 1085 cases 102 dropout cases were seen. Maximum proportion of dropout were seen in unprovoked bite i.e. 10.6% as compared to provoked bite cases which was 7.9%. The number of dropout cases were more i.e. 14.2% in the age group of 21-30 year compared to other age group. In a study conducted by Satapathy D.M et. al it was found that the dropout were more in the age group 16-45 years (62.1%). Dropout in case of both male & female were almost similar. In the study conducted by Satapathy D.M et.al male to female ratio was 3:1 & dropout in rural area was nearly two third (68.9%) as compared to urban area. But in the present study dropout was more in case of urban beneficiaries (23.5%) compared to rural cases (76.5%). Dropout in urban provoked bite cases (17.4%) was less compared to unprovoked bite (20.3%). Category wise breakup of the animal bite cases and the prevalence of dropout showed

Table 1
Reason for irregularity in following the schedule (among the partial dropout cases)

| Sl No. | Reasons for partial dropout | Number | % |
|--------|--|--------|------|
| 1 | Personal work | 46 | 58.2 |
| 2 | Could not arrange money for transportation | 13 | 16.5 |
| 3 | Very far from home | 9 | 11.4 |
| 4 | Social function | 6 | 7.6 |
| 5 | Other illness | 3 | 3.8 |
| 6 | Forgot | 2 | 2.5 |
| 7 | Total partial dropout | 79 | 100 |

that dropout was more (8.8%) among category II bite cases than category III (5.1%). Partial dropout case in provoked bite (76.3%) was more compared to complete dropout in provoked bite (23.7%).

CONCLUSION

Out of the total of 102 dropout cases maximum number of dropout were seen in unprovoked bites as compared to provoked bite. Probably it could be due to negligence of the victims of unprovoked bites. The numbers of dropout cases were more in 21-30 year. This age group is more prone to animal bite because of more outdoor activity by this age group. Dropout cases were less in 0-10 yrs age group as because this age group were more dependent on their parents and parents always want to protect their children from Rabies. The total dropout in case of male & female were almost similar. Proportion of dropout cases were more among cases bitten by animal other than dogs as people were aware that dog bite causes rabies but mostly they were unaware that other animal bites could also cause rabies. Dropout in case of pet animal bites were more in provoked bite than unprovoked bites. The reason could be that the victim thought that their pet was healthy and not carrier of rabies & as because it was a provoked bite so vaccination was not so important. Total dropout was more in case of urban beneficiaries compared to rural cases may be due to lack of time & work pressure they were unable to come to the ARV OPD for vaccination. Dropout in urban provoked bite

cases was less compared to unprovoked bite. The proportion of dropout was more among category II bite cases as in category II bite there is no bleeding so may be the victim concluded that vaccination is not so important. The proportion of dropout was more in 3rd dose. Probably the victims of category II & pet dog bite thought that just 2 dose of vaccine will give them adequate protection.

Dropout in IDRV can have fatal consequences. Appropriate counseling & use of IEC materials especially in the waiting area can prevent dropout & thereby rabies. People must be made aware about the prevention of rabies & that animals other than dogs are also carriers of rabies & even pet dog bite can cause rabies. The victim of animal bite needs to complete the course for proper immunity.

REFERENCES

1. WHO.WHO Drug Information 2002,16(I):4-5
2. Association For Prevention and control of Rabies in India. Assessing burden of rabies in India : WHO-APCRI National Multi-Centric Rabies Survey, A Report.
3. Iechpujani RL, Chhabra M, Mittal v, Bhattacharaya D, Singh J, Lal S, Knowledge ,attitude and practices about animal bite and rabies in general community. A multi- centric study J.Comm Dis 2006 Dec 38(4);355-61
4. U.S Singh, SK Choudhary , knowledge attitude , behavior and practice study on dog bites and its management in context of rabies in rural community of Gujarat, Indian Journal of Community medicine, Vol, No3, Jul-Sep2005.
5. Mahendra BJ, Harish Br, Vinay M,A study of factors influencing compliance to IDRV at Anti- Rabies Clinic of Mandya Institute of Medical Sciences,Mandya ,APCRI Journal volXI, issue I July 2009.
6. Satapathy D.M, Reddy SSS,Drop Out Cases in IDRV: A cause of concern,APCRI Journal volXII, issue I July 2010

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