

Title: PERCEPTION OF PARAMEDICAL STUDENTS ON RABIES AND ITS PREVENTION

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Keywords Paramedical workers, Knowledge, rabies biological

Abstract The study was conducted to assess the knowledge and perception of paramedical workers regarding animal bite & its management coming from training in the field practice area. Ankuli of MKCG Medical College, Berhampur. It was a cross sectional study. A total 108 Paramedical students were interviewed about their knowledge on Rabies.

Original Article

Perception of Paramedical Students on Rabies and its prevention

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Abstract

The study was conducted to assess the knowledge and perception of paramedical workers regarding animal bite & its management coming for training in the field practice area Ankuli of MKCG Medical College Hospital Berhampur. It was a cross sectional study. A total 108 Paramedical students were interviewed about their knowledge on Rabies, Primary wound care and rabies biological. All students knew that Rabies is a fatal disease. 51% students agreed about wound washing with soap & water. 27.7% told that karela leaf / turmeric paste should be applied immediately after animal bite wound. Though NTV has been replaced by TCV since 2004 still 38% have a perception that NTV is given over periumbilical area. Only 6.5% of students have an idea that anti rabies vaccine can be given over gluteal area. 70% told that alcohol should be avoided but non had any perception of avoiding drugs as Chloroquin & steroids.

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Introduction

Rabies is an important public health problem in India. Maximum number of deaths due to human Rabies are reported from our country. It is estimated that In India 1.7 crore animal bite exposures lead to 20,000 deaths. 95% of the 50,000 global rabies deaths are because of dog bites^{1,2}. Rabies is a 100% fatal disease which can be prevented by timely and appropriate Anti Rabies prophylaxis. Primary care of wound, proper categorisation of bite & use of Rabies Biologicals as RIG and Vaccine can prevent such a dreaded disease. Health personnel in our country have an important role in preventing such human casualties. Though Medical Officers have a major role but the gross inequality in the Doctor-Population ratio makes them unavailable to the community. However nearly 95% of the health personnel at a primary health centre are trained paramedics as Nurses, Pharmacist, Health supervisors & workers.

The paramedical personnel constitute one of the pillars for provision of primary health services to the Community. Their presence at a peripheral health institution 24x7 makes them to act as the first contact for health problem faced by the community. The perception and attitude of paramedical health personnel on Rabies & its prevention is very essential as early & appropriate wound care is an important component of Anti Rabies treatment. The present study entitled "Perception of Paramedical students on Rabies and its prevention" was therefore carried out with the following objectives.

Objective

1. To assess the perception of paramedical students on Rabies.

2. To find out their knowledge on primary wound care.
3. To find out the knowledge on rabies biological as RIG & Vaccine.

Methodology

The Para Medical students (LHV, GNM, MSc Nursing students) attending the Urban health centre/Epidemiology unit of Department of Community Medicine, MKCG Medical College Hospital during their coarse study/internship were interviewed regarding their perception on Rabies and its prevention over a pre-tested & scientific designed Questionnaire. The data thus collected was compiled and analysed in the Department of Community Medicine.

Observation and Discussion

A total 108 paramedical students were interviewed about the knowledge & perception of dog bite management & rabies. All students knew that Rabies is a fatal disease but 31.5% have a misconception that pet dog can not transmit Rabies. 20.4% have an idea that rodents like rat can be a vector for Rabies.

Regarding Primary wound care, 51% of students knew about thorough washing of bite wound with soap & water and 30.5% told application of betadine /any topical virucidal on wound but in a study by Vinay M *et al* it was 53% and 35.2% respectively³. In our study 27.7% of paramedical students have an idea of karela leaf or turmeric paste application on bite site but in a study of knowledge of college students on rabies by Vinay M & *et al* was 37.8%. Only 29% of respondents had the knowledge that both RIG and ARV has to be given after animal bite but rest majority (71%) had no perception on RIG.

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Though NTV has been discontinued since 2004 & CCV is used throughout the country, 38% students have still an idea that NTV is given in peri-umbilical area.

In a study by Harish BR & et al 71% of doctors have a perception that TCV should be given over arm or antero lateral part of thigh⁴. But in our study it was 55.5% only.

According to "National Guideline for management of Animal bites" suturing of wound should be avoided as far as possible. If unavoidable, minimum loose sutures should be applied after adequate local treatment along with proper infiltration of anti rabies serum⁵. In this study 12% of students have an idea that bandage and suturing is avoided in dog bite cases.

70% of the students have an idea alcohol should be avoided during treatment. But none had the knowledge

Table
Knowledge on Wound care & Rabies

Knowledge on Rabies		No. & % age n=108
	Rabies is a fatal disease	100%
	Pet dog does not cause Rabies	34(31.5%)
	Rat bite can transmit Rabies	22(20.4%)
Wound care	Wash wound with soap & water	55(51%)
	Using topical virucidal/betadine	33(30.5%)
	Applying karela leaf/ turmeric paste	30 (27.7%)
	To avoid bandage & suturing	12%
Knowledge on rabies biologicals	No idea on RIG	76(71%)
	Both ARV & RIG are given	31(29%)
	ARV on deltoid/ant-lat part of thigh	60(55.5%)
	Persistence of NTV use(abdomen)	41(38%)
	TCV over gluteal area	7(6.5%)
Advice to animal bite victim	To avoid Chloroquine & steroids	0
	To avoid alcohol	76(70%)
	Restriction of some food & work	12(11%)

that immunosuppressives as steroids & Chloroquine are also avoided that period. 11% of students still have an idea that certain foods and heavy works is restricted during the treatment.

Conclusion

The present study revealed that knowledge of paramedical students regarding animal bite management is inadequate. Their study curriculum was also verified and found that a chapter on Rabies and its prevention is not present specially for the grass root level health workers. The paramedical students are the future grass root level health provider of the community. As dog bite is a common problem faced by the community and India reports the highest number of rabies death, it is time that animal bite management should be taken as a study topic for the paramedical students. Formulation of a national programme for prevention and control of Rabies in India will have a definite impact in inclusion of such a dreaded disease as Rabies for the Paramedical students. This will not only enhance their knowledge on rabies prevention but also help in proper management of animal bite victims in rural and far-flung areas of our country.

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