

Tetanus Knowledge of Health Care Workers working in Casualty Department of Tertiary Care Hospital, Swat

ABDUL JABBAR¹, WASIL KHAN¹, IMTIAZ AHMAD², ABDUL AHAD¹, AMIN UL HAQ¹, AKHTAR NAWAB¹

¹Department of Medicine, Saidu Medical College/ Teaching Hospital, Swat.

²Department of Pathology, Saidu Medical College/ Teaching Hospital, Swat.

Correspondence to: Dr. Abdul Jabbar, Assistant Professor of Medicine, Saidu Medical College, Swat.

ABSTRACT

Aim: To assess the basic level of knowledge of health care workers working in the casualty and emergency department of a tertiary care hospital about tetanus.

Duration of Study: From April-2018 to September 2018.

Methodology: This is a cross sectional study including 152 health care workers working in the Casualty department of Saidu group of teaching hospital Swat. A predesigned Performa, having questions, was given to each health care worker and was asked to fill it according to the question asked, after taking an informed consent. The data was analyzed by SPSS Version 20.

Results: Among them, 90.8% of health care worker knew that tetanus is a complication of wound injuries. Only 47.4% of doctors were aware of the correct dosage of tetanus vaccine. Of these, 34.2% of health workers had correct knowledge of mortality. 21.7% of health workers were not administering TT to patients with tetanus prone injuries.

Conclusion: Most of the health care workers have poor knowledge about tetanus prone injuries. Training needs to be arranged for health workers at every level to reduce the outcome of tetanus illness.

Key words: Tetanus vaccine, Knowledge, Healthcare workers

INTRODUCTION

Clostridium tetani is the source of causing disease called tetanus. The spores of this species are present in the soil and enter the body through wounds. The species release tetanus toxin which goes to CNS and cause symptoms of tetanus. In one study by WHO, 15,516 cases of tetanus are seen in 2005 all over the world. 290,000 deaths by tetanus are seen between 2000 and 2003. In the world including Pakistan, tetanus is mostly present in neonates and adults showing poor health facility. Pakistan is one of 34 countries which has not achieved neonatal tetanus global elimination target¹. Tetanus vaccination coverage ranges from 60% to 74%. Education of people plays an important role in getting immunization². Proper Knowledge of tetanus vaccination for all health care workers is necessary for the control of tetanus in injuries³.

The present study has been conducted to know the basic level of awareness of health care workers working in emergency department of a tertiary Care hospital and to promote the level of knowledge of health professionals. It will provide benefits to the public as well.

METHODOLOGY

All the participants were explained about the study and informed consent was taken. A proforma, which contained questions regarding tetanus prone injuries, history of prior immunization, TT availability, administration, proper dosage, prevention, development of tetanus as complication of tetanus prone injuries and mortality of tetanus, were given to fill. All the data obtained was analyzed by SPSS version 20.

Received on 12-12-2018

Accepted on 03-03-2019

RESULTS

A total of 152 health care workers participated in the study. Of patient with tetanus, 34.2% were received from fields, 34.9% from road traffic accident, 7.9% streets and 22.4% from homes. The detail of results is given in tables 1,2,3,and 4.

Table 1: Past history of TT Vaccination

Past history	n	%age
Yes	132	86.8
No	20	13.2
Total	152	100

Table 2: Availability of TT Vaccination at place

Vaccine availability	n	%age
Yes	138	90.8
No	14	9.2
Total	152	100

Table 3: Preservation of TT Vaccination

Places	n	%age
Refrigerator	127	83.6
Open Shelf	20	12.5
Box	05	3.9
Total	152	100

Table 4: Administration of TT Vaccine to injured persons

Administration	n	%age
Yes	119	78.3
No	33	21.7
Total	152	100

DISCUSSION

This study shows that most of the doctors have poor knowledge of tetanus immunization. In our study, correct schedule was known to only 47.4% as compared to 72% in another study by Ghori et al⁴. Majority of the patients were

received from fields and road traffic accidents (34.2%) and 35.5% reflecting high tetanus prone injuries and such levels of knowledge prone to develop tetanus when comparing with a study by Ahmad SL et al at Karachi which show that only 25% of general practitioners had adequate knowledge of prophylaxis⁵.

Our study also showed that 9.2% of the health workers had no knowledge that whether TT was available in the casualty department or not, such ignorance about TT non availability would lead to non immunization of patients with tetanus.

In one of a study by Harrison et al, 39% of health workers carried vaccination as mandatory step.⁶ In another study by Hasnain S et al, 35.3% of the mothers could not complete TT immunization just because of the poor attitude of health workers⁷. Immunization during antenatal care is an effective measure to prevent tetanus in female population⁸.

In the present study regarding mortality of tetanus, only 52(34.2%) of the health workers were aware about the mortality correctly. The most important reason of not vaccinating is lack of motivation from physician side⁹. Moreover tetanus is a prevalent disease in developing countries and awareness of tetanus prophylaxis is of utmost impotence¹⁰.

CONCLUSION

Most of the health workers have poor knowledge about tetanus prone injuries. Training needs to be arranged for health care workers at every level to help curtail the deadly illness.

REFERENCES

1. Torre GL, Scalingi S, Garrwo V et al. A compliance study of the preventive inoculation rules concerning the medical/nursing staff of a Greek General Hospital Health Sciences Journal vol 3(3):166-174.
2. Mamoro MD, Hanfore LK. Tetanus Toxoid Immunization Status and Associated Factors among mothers in Damboya Woreda, Kembata Tembaro Zone, SNNP, Ethiopia. JNM, V: 2018; 9
3. Chowdhury R, Mukherjee A, Lahiri SK. A study on the knowledge of tetanus Immunization among interneers in a Government Medical College of Kolkata. National journal of Community Medicine vol 2. issue 3 oct-dec 2011 :432-439.
4. Ghorri U, Basir F, Ahuja G et al. Tetanus immunization knowledge amongst health care workers of emergency department at a tertiary care hospital. Pakistan journal of medicine and dentistry. 2015; vol.4(01)
5. Ahmad SI, Baig LA, Siddique MI et al. Knowledge, attitudes and practices of general practitioners in Karachi district central about tetanus immunization in adults. Pak Med Assoc. 2001;51(10)367-9.
6. Harrison N, Brand A, Forstner C et al. Knowledge, risk perception and attitudes towards vaccination among Austrian health care workers: A cross sectional study. Hum vaccine immune other, 2016; 12(9): 2459-2463).
7. Hasnain S, Sheikh NH. Causes of low tetanus toxoid vaccination coverage in pregnant women in Lahore. Mediterr health J. 2007 vol.13 (5)
8. Galazka A, Gasse F. The Presence of tetanus vaccination. Curr Top Microbial Immunol 1995; 195:31-53.
9. Saltoglu N, Tasova Y, Midikli D et al. Prognostic factors affecting deaths from adult tetanus. ClinMicrobid infect 2004; 10(3); 229-33.
10. Khan W, Jabbar A. The clinical characteristics and treatment outcomes of tetanus patients in tertiary care hospitals. Medical forum V:28.2017(56--59).