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BASIC KNOWLEDGE AND ATTITUDE AMONG COLLEGE STUDENTS TOWARDS SNAKES IN AMRAVATI

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ABSTRACT

Snakes belongs to class reptilian, plays a vital and critical role in any ecosystem as a prey as well as a predator. Due to lack of knowledge and misguidance snakes can be categorized under threatened species. Students and youths are important part of any society. They play an important role in framing the society. Their perspective towards environmental education is very crucial for conservation and preservation of any flora and fauna especially the snakes. A cross-sectional study was conducted among the under graduate students of Vidya Bharati Mahavidyalaya College Amravati, Maharashtra during the period of January 2018 to know their knowledge of snakes and attitude toward snakes. In the present study majority of the participants had basic knowledge about venomous snake, snake bite and their conservation and they show a positive attitude towards snake



KEYWORDS : Snakes, Conservation, Venomous, Attitude, Amravati.

INTRODUCTION:

Snakes belongs to class reptilian, plays a vital and critical role in any ecosystem as a prey as well as a predator. Humans in various cultures have feared snakes, provoking an aversion and persecution that hinders conservation efforts for these reptiles (Alves *et al.*, 2014). Snakes may be keystone predators especially in agricultural and grassland ecosystems, because snakes are effective predators of rodents and they indeed likely help to regulate food webs in important ways that other predators cannot (Mills *et al.*, 1993, and Kotliar *et al.*, 1999). Snakes are also excellent ecological indicators due to their sensitivity to temperature and climate change (Beaupre and Douglas, 2009). Therefore, disappearance of snakes can have negative impacts on interactions in ecosystems and may affect predator–prey population dynamics in different ways. Snakes were the fifth most dislike fauna in animal kingdom due to fear (Kellert, 1980). The lack of knowledge is dangerous for both human and snakes because when people get frightened they tend to make irrational decisions that often results in snake death or increased risk of snake bite, this also became a human snakes conflict (Chrstoffel, 2007).

In India most of the people have lack of proper knowledge about snakes. They have learned about snakes more by traditional knowledge, through movies than factual knowledge from books and literatures.

Snakes provide a variety of ecosystem services to human but their populations are decreasing globally and locally. There can be both positive and negative attitude towards snakes from human. Due to lack of knowledge and misguidance snakes can be categorized under threatened species. We should ensure that future conservation planners and policymakers, who determine the future of snakes, express positive

attitude towards snakes or demonstrate a capacity to view snakes objectively (Calderon-Arrieta 2017). In order to ensure the need of conservation of snakes which directly or indirectly affects the health of an ecosystem, we need to develop an informed population to understand the need and importance of snakes in an ecosystem.

Students and youths are important part of any society. They play an important role in framing the society. Their perspective towards environmental education is very crucial for conservation and preservation of any flora and fauna especially the snakes. Through Environmental Education, students can be agents of change as well as future decision makers on sustainable use of biodiversity. Such education will make them become active and responsible environmental to value our biodiversity.

The present study was undertaken to assess the knowledge, current attitude and myths about snakes in undergraduate students of Vidyabharti Mahavidyalaya College Amravati (M.H).

MATERIAL AND METHODS

Prior the study, permission was taken from the Principal Vidyabharti Mahavidyalaya College. This cross-sectional study was conducted among the under graduate students of Vidya Bharati Mahavidyalaya College Amravati, Maharashtra during the period of January 2018. Simple random survey method was adopted. Questionnaire was used to interview the study participants and various in depth questions regarding knowledge, current attitude and myths about snakes were asked. Three pictures of venomous snakes were shown to study participants for identification based questions. Statistical analysis was done by using Microsoft Excel and the results were calculated in percentages.

RESULTS

Out of the total 200 study participants, 88 (44%) were males and 112 (56%) were females. To assess the knowledge regarding species identification and venomosity of snakes, four images of locally prevalent venomous and non-venomous snakes were shown to the respondents. Among the 3 venomous snake 175 (87.5%) of the study participants correctly identified Indian spectacled Cobra, 37 (18.5%) identified common Krait correctly, 30 (15%) study participants identified Russell viper correctly and 22 (11%) study participants were not able to identify any one of three venomous snake.

From the venomous snakes 167(83.5%) study participants correctly identified Indian Spectacled Cobra as venomous and 17 (8.5%) identified viper correctly as venomous and 5 (2.5%) identified krait correctly as venomous.

When asked about measures taken upon encountering a snake near human settlement, maximum number of respondents 147 (73.5%) opined calling a forest official or a snake friend, followed by leaving the snake as it is 39 (19.5%) and kill 16 (8%).

When asked about the immediate measures taken by the study participants if a person is bitten by a snake, 136 (68%) of the study participants stated that they would prefer to take the victim to the nearest health facility while 64 (32%) of the study participants stated that they would prefer first aid measure. 156 (78%) of the study participants knew that medical treatment is available for snakebite while 130 (68.5%) participants knew about antivenom. Nearly 191 (95.5%) of the total study participant opted myth instead of fact for the question that snake's drinks milk and 196 (98%) opted myth for the question that snakes seek revenge when somebody harms them.

178 (89%) study participants know about that snakes are protected under wild life protection act 1972 but none of the students know about that under which schedule of wild life protection act they are protected. 147 (73.5%) of student participants opined that if they found someone trafficking snake they will inform the forest official and 53(26.5%) will ignore it.

100% of the study participants believed that snakes are very important for our ecosystem and removal of snake from any area can have direct or indirect negative impact on the health of that ecosystem. When asked about the knowledge they acquired about snakes, 78(39%) study participants opted knowledge

from books and lectures, 87 (43.5%) opted from movies and 35 (17.5%) opted traditional knowledge and folklore knowledge.

DISCUSSION

In the present study 175 (87.5%) of the total study participants could identify the Spectacled Cobra correctly and 167 (83.5%) correctly identified it to be venomous which was significantly more as compared to other snakes. This could be due to the fact that Spectacled Cobra has a prominent hood which makes them easily identifiable and also they are mentioned and portrayed in many Indian religious literatures and also in many Indian movies and daily soaps. Similar results have been found in the studies done by Duminda *et al.*, (2014) in Sri Lanka. According to study done by Pandey (2015) in Nepal, 95% study participants were aware that Common spectacled Cobra is venomous. Alves *et al.*, (2014) assumed that the cultural beliefs associated with snakes might be related with the fear of snakes that they found in their primary-education student sample size.

One of the major positive findings in our study was that 156 (78%) of the participants knew about medical treatment being available for snake bite which was quite similar to the study done by Pandey *et al.*, (2016).

It was noted that 136 (68%) study participants opted that they will rush to the nearest hospital if someone is bitten by Snake followed by first aid measures 64 (32%). Also, it was wonderful to know that in the present study all participants would prefer going to hospital than considering a traditional healer as a treatment option after snake bite, this finding was similar to the study done by Pandey *et al.*, (2016). While in other similar studies 86% of snakebite victims in Bangladesh, 75% in Pakistan, and 61% in Maharashtra, India still visit traditional healers (Inamdar *et al.*, 2007 and Chandio *et al.*, 2000).

CONCLUSION

In the present study majority of the participants had basic knowledge about venomous snake, snake bite, their conservation and myths related to snake. Majority of the students were in the favor that snakes should be protected and conserved, which shows a positive attitude. Most correctly identified venomous Snakes were Spectacled Cobra followed by Russell's viper and common krait respectively. All the participants knew that there is medical treatment available for snakebite, although majority of the participants were not aware about antivenom. Also most of the participants considered the concept of snake's drinks milk and take revenge if they are harmed as a myth as they were aware of the fact that snakes are strictly carnivores. Most of the participants believed that Snakes are important part of the ecosystem and also know the importance of snake to the ecology and ecosystem and also they are protected under Indian wild life protection Act 1972 but they were not aware about the schedule of wild life protection Act 1972 under which they are protected.

Students play an important role in the society therefore their proper knowledge is important for the conservation of any wildlife. Therefore awareness camps, seminars and workshop on basic knowledge about snake identification, snakebite prevention, conservation strategies of snakes and clearing misconceptions should be held in schools, colleges, universities several other institutions. Proper first aid measures for snakebites should be demonstrated through various outreach activities, workshop and increased awareness about snake and snakebite identification among students and general population should also be done for conservation of the snake fauna.

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