

Original Research Article

MYTHS AND CULTURAL PRACTICES AMONG ANIMAL BITE CASES ATTENDING THE ANTI-RABIES CLINIC IN A SECONDARY-LEVEL HOSPITAL

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Received : 05/06/2025
Received in revised form : 22/07/2025
Accepted : 10/08/2025

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DOI: 10.70034/ijmedph.2025.3.315

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2025; 15 (3); 1715-1721

ABSTRACT

Background: Animal bites pose a considerable global public health threat, particularly in developing countries where the frequency of diseases transmissible from animals to humans, such as rabies, remains notably elevated. The challenges associated with animal bite incidents are not limited to just the immediate physical harm, they also involve various myths and cultural customs that shape community responses. The objective is to enlist the myths related to post-animal-bite practices and cultural practices related to wound care among patients attending the anti-rabies clinic, to document distribution of bites in relation to different variables (type of animal, body part involved, category of wound), to ascertain the first aid measures adopted by people after animal bite, to predict the independent variables associated with myths and cultural practices related to animal bites by binary logistic regression.

Materials and Methods: This hospital-based cross-sectional study was conducted among patients attending the animal bite clinic at a secondary-level hospital in the Srikalahasti area of the Tirupati district in Andhra Pradesh. A total of 409 participants were selected using a convenient sampling method. Each participant was recruited only once during the study period to avoid duplication. Before data collection, all selected subjects were provided with detailed information about the study in the local language, and written informed consent was obtained from each participant. Data were collected through face-to-face interviews using a pre-tested, semi-structured schedule. The responses were recorded using Google Forms. Data analysis was performed using EPI INFO software, version 7.2.6.

Results: This study reveals that 66% of the subjects had myths and 45% followed cultural practices pertaining to animal bites. Rural residence is emerging as a key predictor of myth adherence, while lack of first aid is strongly associated with cultural practices. Traditional remedies like chili/turmeric (34.8%) and food taboos (33.6%) were prevalent, while delayed ARV administration (>24 hours) correlated with reliance on cultural methods. Logistic regression revealed that cultural practices were significantly associated with the absence of first aid (AOR=6.9, $p<0.001$) and delayed ARV administration ($p=0.03$), while myths were significantly more common among rural residents (AOR=1.7, $p=0.01$).

Conclusion: Despite availability of effective prophylaxis, myths and cultural practices remain widespread, especially in rural areas and among those not adopting appropriate first aid, highlighting the urgent need for community awareness and health education on evidence-based post-exposure care.

Keywords: Animal bites, myths and cultural practices, anti-rabies vaccination (ARV), post-exposure prophylaxis (PEP).

INTRODUCTION

Animal bites pose a considerable global public health threat, particularly in developing countries where the frequency of diseases transmissible from animals to humans, such as rabies and other zoonotic diseases, remains alarmingly high. Bites from domestic animals, primarily dogs and cats, constitute the majority of reported cases, although bites from wild and exotic animals are not uncommon.^[1] The challenges associated with animal bite incidents are not limited to just the immediate physical harm. They are further impacted by traditional customs and widespread myths that play a role in guiding community reactions.^[2]

Epidemiology of Animal Bites

Animal bites, particularly those from dogs, are a major public health concern and a leading cause of morbidity and mortality associated with rabies. Globally, dog-mediated rabies is responsible for an estimated 55,000 to 60,000 human deaths annually. Alarmingly, India alone accounts for approximately one-third of these fatalities.^[3] The annual estimated number of dog bites in India is around 17.4 million, leading to approximately 18,000 to 20,000 human rabies cases each year. These figures underscore the urgent need for effective public health interventions and improved rabies control strategies.^[4]

Epidemiological studies have shown that males, particularly younger adults, are disproportionately affected by animal bites. Dog bites constitute the majority of reported cases across both urban and rural settings. The epidemiology of animal bites varies widely based on geographic region, cultural practices, and levels of urbanization. In low- and middle-income countries like India, the public health burden is intensified by limited access to prompt medical care and inadequate post-exposure prophylaxis (PEP). In contrast, high-income countries generally offer better access to healthcare and rabies vaccines.^[5]

Myths and Cultural practices surrounding Animal Bites: Myths and cultural practices significantly influence individuals' perceptions and responses to animal bites, often leading to delayed or inappropriate treatment. In many communities, particularly in rural or underserved areas, traditional healers or home remedies are commonly relied upon instead of evidence-based medical care. Individuals may apply plant extracts, oils, turmeric, ash, or even tie tourniquets, believing these methods can neutralize the venom or infection.^[6] In some regions, animal bites, especially from dogs, are wrongly perceived as minor injuries or are interpreted as bad omens or spiritual retribution, leading families to consult spiritual healers instead of visiting health centers. Furthermore, low health literacy, fear of vaccine side effects, cost concerns, and long distances to medical facilities further contribute to the underutilization of life-saving rabies vaccines.^[7] This reliance on traditional or religious rituals often results

in inadequate wound care and failure to seek timely medical intervention, including post-exposure prophylaxis (PEP), which is essential for rabies prevention.^[8] With this background, the current study aims to assess the myths and cultural practices related to animal bites.

Objectives:

- To enlist the myths related to post-animal-bite practices and cultural practices related to wound care among patients attending the anti-rabies clinic.
- To document distribution of bites in relation to different variables (type of animal, body part involved, category of wound)
- To ascertain the first aid measures adopted by people after animal bite
- To predict the independent variables associated with myths and cultural practices related to animal bites by binary logistic regression.

MATERIALS AND METHODS

A hospital-based cross-sectional study in a secondary-level hospital at Srikalahasti, Tirupati district, Andhra Pradesh, was done with a sample size of 409. By using the formula $N = (Z_{\alpha})^2 PQ/L^2$ with a 5% allowable error and 41.1% prevalence of myths and cultural practices in a study conducted by Hymavathi CH et al. (2022)⁹, the sample size was 372. Assuming a 10% non-response rate, the final sample size is estimated to be 409. Participants who gave written informed consent were included, while non-cooperative individuals were excluded. The study was carried out over a period of three months. The study was approved by the institutional ethics committee of Sri Venkateswara Medical College, Tirupati (Lr. No. 03/2025, dated 03/02/2025), and necessary permissions were obtained from the authorities of the secondary-level hospital in Srikalahasti. The purpose of the study was explained to all the participants attending the anti-rabies clinic in the hospital, and written informed consent was obtained from the study participants. A total of 409 participants were selected through convenient sampling and interviewed using a pre-tested semi-structured questionnaire. This consists of details regarding socio-demographic profiles and questions related to myths related to post-animal bite practices and cultural practices related to wound care and first aid measures adopted by people after animal bites. The data was collected using Google Forms and analyzed using EPI INFO version 7.2.6 (WHO, CDC, Atlanta). All categorical variables were presented as frequency and percentages, and continuous variables were presented as mean and SD. The chi-square test was used to compare the difference between proportions. Binary logistic regression analysis was done to identify the most significant predictor variables. The level of significance value (α) less than 0.05 was considered statistically significant.

RESULTS

A total of 409 study participants were included in the study; among them, the majority of participants were young adults, with 38.6% (n=158) aged 20-29 years, followed by 38.4% (n=157) in the 12-19 age group. Older age groups were only 3.2% (n=13) aged 50 and above. The mean age of the study participants was 23.86 ± 9.19 (range 12 to 65 years). There was a slight male predominance, with 54.8% (n=224) males compared to 45.2% (n=185) females. A significant proportion of participants had secondary education (27.1%, n=111) or professional qualifications

(26.9%, n=110). However, a notable percentage were illiterate (17.8%, n=73) or had only primary education (20.5%, n=84). More participants resided in rural areas (59.2%, n=242) than in urban settings (40.8%, n=167), the highest proportion in Class III (23.7%, n=97), followed by Class I (22.5%, n=92) and Class V (21.1%, n=86). The nuclear family structure (55.7%, n=228) was the most common, followed by joint families (38.2%, n=156). Only a small proportion lived in three-generation households (6.1%, n=25). Participants with little or no travel had a higher proportion (55%) compared to those with some or extensive travel (45%).

Table 1: Sociodemographic variables of study participants

Variable	Category	Number (n)	Percentage (%)
Age group (years)	12–19	157	38.4
	20–29	158	38.6
	30–39	58	14.2
	40–49	23	5.6
	≥50	13	3.2
Gender	Male	224	54.8
	Female	185	45.2
Educational level	Illiterate	73	17.8
	Primary school	84	20.5
	Secondary school	111	27.1
	Higher secondary (HSC)	31	7.6
	Professional	110	26.9
Residency	Urban	167	40.8
	Rural	242	59.2
Socioeconomic status	Class I	92	22.5
	Class II	75	18.3
	Class III	97	23.7
	Class IV	59	14.4
	Class V	86	21.1
Family type	Nuclear	228	55.7
	Joint	156	38.2
	Three generations	25	6.1
Occupation	Least/No travel	225	55.0
	Some/Extensive travel	184	45.0
Total	—	409	100

[Table 2] shows Dogs were the most common biting animal (82.1%, n=336), followed by monkeys (8.6%, n=35), while cat and rat bites were rare (5.1% and 4.2%, respectively). Anatomically, the lower limbs were the most frequently affected (82.9%, n=339),

with fewer bites on the upper limbs (8.8%), trunk/abdomen (3.4%), or head/neck/face (4.9%). In terms of severity, Category II bites (58.4%, n=239) were followed by Category I bites (31.1%), while Category III bites were (10.5%, n=43).

Table 2: Characteristics of animal bites: type, anatomical site & severity

Variable	Category	Number (n)	Percentage (%)
Type of animal bitten	Dog	336	82.1
	Cat	21	5.1
	Monkey	35	8.6
	Rat	17	4.2
Anatomical distribution of bite	Lower limb	339	82.9
	Upper limb	36	8.8
	Trunk/Abdomen	14	3.4
	Head/Neck/Face	20	4.9
Categorization of bite	Category I	127	31.1
	Category II	239	58.4
	Category III	43	10.5
Total	—	409	100

Table 3: Distribution of study participants according to Cultural practices

Cultural practices	Number (n)	Percentage (%)
Application of chili powder/turmeric powder	64	34.8
Application of lime	9	4.9
Tying/squeezing of wound	10	5.4

Burning of wound	16	8.7
Application of thread at wound	13	7.1
Application of Sap leaves	55	29.9
Burning of wound + lime application	5	2.7
Burning of wound and thread application	12	6.5
Total	184	100

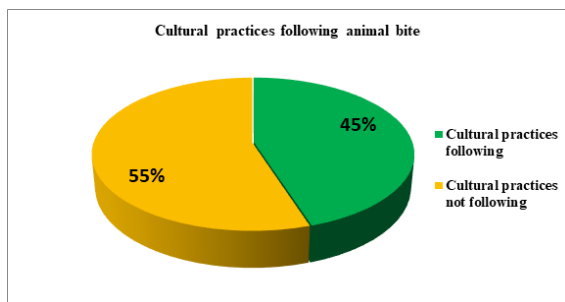


Figure 1: Distribution of study participants according to cultural practices followed after animal bite

[Figure 1 & Table 3] show that among the study participants, 45% were following cultural practices. Application of chili/turmeric was the most predominant practice (34.8%), followed by the application of sap leaves (29.9%).

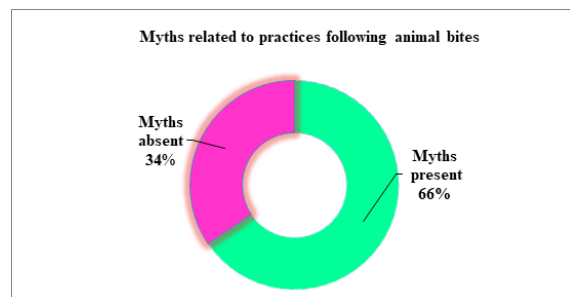


Figure 2: Myths related to practices following animal bites

[Figure 2] shows that among study participants, 66% were having myths related to animal bite practices. [Table 4] shows that among the study participants with myths related to post-animal bite practices, food-related myths were the most predominant.

Table 4: Distribution of study participants according to Myths related to practices following animal bites

Myths	Number (n)	Percentage (%)
Not taking bath	82	30.58
Not drinking filter water	34	12.70
Food taboos	90	33.58
Food taboos and baths	62	23.13
Total	268	100

Table 5: Logistic regression analysis of the factors associated with Cultural practices

Variable	Cultural practices	Following n (%)	Not following n (%)	Adjusted OR (CI)	P value
Age group	<20 yrs	134 (46.2)	156 (53.8)	1.6 (0.9–2.7)	0.08
	≥21 yrs	50 (42.0)	69 (58.0)		
Gender	Female	77 (41.6)	108 (58.4)	1.6 (0.9–2.6)	0.051
	Male	107 (47.8)	117 (52.2)		
Residence	Urban	71 (42.5)	96 (57.5)	1.1 (0.7–1.7)	0.52
	Rural	113 (46.7)	129 (53.3)		
Education	Literate	143 (42.6)	193 (57.4)	1.6 (0.9–2.8)	0.055
	Illiterate	41 (56.2)	32 (43.8)		
SES	IV/V	62 (42.8)	83 (57.2)	1.1 (0.7–1.7)	0.52
	I/II/III	122 (46.2)	142 (53.8)		
Type of family	Joint	67 (42.9)	89 (57.1)	1.1 (0.7–1.6)	0.65
	Nuclear/three-gen.	117 (46.2)	136 (53.8)		
Occupation	Least/No travel	100 (44.4)	125 (55.6)	1.0 (0.6–1.5)	0.88
	Some/Extensive travel	84 (45.7)	100 (54.3)		
First aid measures	Applied	156 (41.9)	216 (58.1)	6.9 (2.9–16.4)	<0.001*
	Not applied	28 (75.7)	9 (24.3)		
Administered ARV	Within 24 hrs	70 (38.9)	110 (61.1)	1.5 (1.0–2.3)	0.03*
	After 24 hrs	114 (49.8)	115 (50.2)		

[Table 5] shows that the absence of first aid measures is the most critical factor linked to cultural practices, highlighting a gap in healthcare access or awareness. Late ARV administration (>24 hrs) correlates with cultural practice adherence, suggesting delays may

stem from initial use of traditional methods. While no demographic variable was significant, education and gender showed borderline trends, warranting further study with larger samples.

Table 6: Logistic regression analysis of the factors associated with Myths

Variable		Myths		Adjusted OR (CI)	P value
		Present n (%)	Absent n (%)		
Age group	<20	196 (67.6)	94 (32.4)	1.6 (0.9–2.8)	0.09
	≥21	72(60.5)	47 (39.5)		
Gender	Female	123 (66.5)	62 (33.5)	0.8(0.5–1.5)	0.69

	Male	145 (64.7)	79 (35.3)		
Residence	Rural	169 (69.8)	73 (30.2)	1.7 (1.1-2.6)	0.01*
	Urban	99 (59.3)	68 (40.7)		
Education	Literate	227 (67.6)	32 (43.8)	1.5 (0.9-2.6)	0.09
	Illiterate	41 (56.2)	109 (32.4)		
SES	IV/V	98 (67.6)	47 (32.4)	1.2 (0.7-1.9)	0.37
	I/II/III	170 (64.4)	94 (35.6)		
Type of family	Joint	110 (70.5)	46 (29.5)	1.4 (0.9-2.2)	0.08
	Nuclear/three-generation	158 (62.5)	95 (37.5)		
Occupation	Least/No travel	156 (69.3)	69 (30.7)	1.5 (0.9-2.3)	0.058
	Some/Extensive travel	112 (60.9)	72 (39.1)		
First aid measures	Applied	243 (65.3)	129 (34.7)	0.8(0.3-1.8)	0.64
	Not applied	25 (67.6)	12 (32.4)		
Administered ARV	Within 24 hrs	123 (68.3)	57 (31.7)	1.2 (0.8-1.9)	0.25
	After 24 hrs	145 (63.3)	84 (36.7)		

[Table 6] shows that rural residents were 1.7 times more likely to believe in myths than urban residents (OR = 1.7, 95% CI: 1.1–2.6, $p = 0.01$). Illiteracy and younger age showed trends toward myth belief. Unlike cultural practices (from Table 5), myths were not tied to first aid or ARV delays, meaning myth-belief may persist even among those seeking medical help. While gender, socioeconomic status, ARV initiation, and first-measure adoption have no effect.

DISCUSSION

This hospital-based cross-sectional study was conducted at a secondary-level healthcare facility in the Srikalahasti region to explore the myths and cultural practices adopted by patients following animal bites. The study population predominantly comprised young adults, with 38.6% of participants falling within the 20–29-year age group, and the mean age was 23.86. This age distribution is consistent with the findings of Singh et al. (2023),^[10] who reported a higher prevalence of animal bites among younger individuals, possibly due to their increased outdoor exposure and frequent interactions with animals. A slight male predominance (54.8%) was observed, which may be attributed to occupational exposure, as males in the region are more commonly engaged in high-risk activities such as farming, daily wage labor, and street vending. This finding was similar to Kumar et al. (2022),^[11] whose study reported higher exposure to animal bites among males engaged in similar occupations.

Regarding educational background, 54% of participants had either secondary (27.1%) or professional education (26.9%), while 38.3% had only primary education or were illiterate. This distribution suggests that individuals with lower levels of education tend to have less health-seeking behaviours following animal bites (Mehta et al., 2023).^[12] The significant proportion of participants with limited education (38.3%) may perpetuate myths about animal bites, leading to delays in seeking proper medical care. This was similar to a study conducted in Maharashtra by Joshi et al. (2022),^[13] which noted that lower education levels are associated with delays in obtaining appropriate treatment.

The rural predominance (59.2%) observed in our study aligns with the well-established urban-rural disparity in animal bite epidemiology. Similar findings have been reported in a study from Uttar Pradesh (Verma et al., 2023),^[14] which also documented a higher incidence of animal bites in rural areas.

The predominance of nuclear families (55.7%) among animal bite victims reflects India's ongoing demographic transition, as highlighted by Sharma et al.,^[15] (2023) in their study across five Indian states. This trend is particularly significant, as nuclear families may not have access to the traditional knowledge about animal bite management that is often passed down in joint family structures, which could influence the first-aid practices adopted by victims.

The predominance of lower limb injuries (82.9%) supports the "ankle-height hypothesis" proposed by Kumar et al (2022),^[11] which suggests that most animal bites occur during encounters while walking or standing, as these bites are typically at ankle height.

In this study, the majority of participants were bitten by dogs (82.1%), followed by monkeys (8.6%), with bites from cats and rats being rare. This reveals that dogs are a more primary source of rabies transmission than other animals. Similar results were reported in the study conducted by Jain et al. (2014).^[16]

The high proportion of Category II bites (58.4%) was significant, as these wounds require both wound care and rabies vaccination. A study by Gupta et al.,^[17] (2023) from tertiary care centers in North India has similarly reported a range of 56-62% Category II bites; these findings were closely aligned with recent data from the National Rabies Control Program (2023).^[18] Category I cases (31.1%), though low-risk, still burden the healthcare system. Patil et al.,^[19] (2023) found that minor exposures often cause undue anxiety and unnecessary visits, which tells us the need for improved community education.

In this study, 45% of participants reported following traditional practices for treating animal bite wounds, with common methods including the application of chili/turmeric (34.8%) and sap leaves (29.9%). These findings are consistent with studies from rural India (Nair et al., 2023) and Mishra & Behera (2023),

where such practices persist due to cultural beliefs and the perceived antimicrobial properties of these substances. This practice not only delays proper wound care but also increases infection risk.

Our study reveals a concerning prevalence (66%) of myths related to post-animal bite practices, with dietary restrictions, particularly avoiding non-vegetarian food, being the most common. These findings are consistent with a study by Kamble et al. (2023)^[22] in rural Maharashtra, which reported that 58–72% of animal bite victims held such myths. These beliefs may stem from deeply rooted cultural and traditional practices, combined with limited awareness and low health literacy. Such myths can lead to unnecessary nutritional deprivation, potentially hampering the recovery process.

The logistic regression of factors associated with cultural practices shows that not taking first aid measures was the strongest predictor of following cultural practices (aOR=6.9, $P<0.001$), suggesting health awareness influences the tradition of cultural practices. In addition, delayed ARV administration was also significantly associated with cultural practices (aOR=1.5, $P=0.03$). Age, gender, and education showed marginal significance, while residence, SES, family type, and occupation had no significant impact. Studies Kumar et al.^[23] (2020) show that when people start medical treatment early (like ARV therapy), they rely less on traditional healing practices. This matches our findings that those who took ARVs within 24 hours were less likely to follow cultural remedies. This suggests that better access to quick medical care may reduce dependence on traditional treatments. A study from tribal Maharashtra (Gavhane et al., 2023),^[24] documented that 72% of patients first consult traditional healers, delaying hospital visits by an average of 2-3 days and states that "try-and-test" approach significantly postpones ARV initiation. In rural Tamil Nadu, a study by Karthikeyan et al.^[25] (2023) found that some traditional healers advise people to wait for rabies symptoms before seeking medical help. This belief is harmful because rabies needs quick treatment right after a bite.

The logistic regression of factors associated with myths revealed that rural residence was significantly associated with health-related myths (aOR=1.7, $P=0.01$), likely due to limited healthcare access or stronger cultural beliefs. Borderline associations were observed for younger age (<20 years), joint families, education, and limited occupational travel ($P\approx 0.05-0.09$), suggesting potential generational and social influences. Whereas gender, socioeconomic status, first aid practices, and ARV timing showed no significant associations with myths, these findings highlight the need for targeted health education in rural communities. Similarly, the study by Khandelwal (2021) found the rural-urban differences and sociodemographic patterns in health myth prevalence.

Recommendations

- Develop and implement targeted educational programs to dispel myths regarding animal bites, particularly focusing on rural communities with lower education levels and nuclear families where the prevalence of myths is higher.
- Incorporate culturally sensitive awareness campaigns to promote evidence-based wound management practices and discourage harmful cultural practices, like application of chili, turmeric, or sap leaves.
- Disseminate educational materials through multiple channels (e.g., social media, community centers, schools) to reach the community.
- Establish first aid training programs that are accessible to the public, focusing on appropriate and scientifically sound practices for animal bite management through peripheral health facilities.

Strength of the study

- This study was conducted in a secondary-level hospital in Srikalahasti, an area with a higher tribal population and low health literacy, which are often underrepresented in research.
- This study included an adequate sample size, and the use of appropriate statistical tests strengthens the validity of the findings.
- The study obtained ethical approval and informed consent, ensuring adherence to research ethics guidelines.

Limitation of the study: O The use of a non-random sampling method (convenience sampling) may introduce selection bias, as participants were selected based on accessibility rather than representativeness. O Since this was a cross-sectional study, causality between cultural practices and delays in medical care cannot be definitively established.

CONCLUSION

Almost half of the participants resorted to harmful cultural remedies such as applying chili, turmeric, or sap leaves, while a large proportion also believed in myths, particularly food restrictions and avoidance of bathing. The analysis showed that harmful cultural practices were linked to the lack of proper first aid and delay in receiving vaccination, while myths were more common among people from rural areas. These findings emphasize the urgent need for community-focused health education, especially in rural populations, to encourage correct first-aid practices, promote timely vaccination, and dispel misconceptions through awareness campaigns, school-based education, and active involvement of local leaders to ensure safer and evidence-based practices after animal bites.

REFERENCES

1. Panda M, Siddiqui A, Jain S, Kapoor A, Malhotra A. An epidemiological study of the clinico-social profile of animal bite patients attending the anti-rabies clinic of a tertiary care

- hospital in New Delhi. *Int J Community Med Public Health*. 2020 Nov;7(11):4312–7.
2. Ministry of Health and Family Welfare, Government of India. Rabies: General Aspects, Laboratory Diagnostic Services. New Delhi: National Centre for Disease Control, Directorate General of Health Services; 2022.
3. Kumar R, Sharma P. Epidemiological profile of animal bite cases in a tertiary care center in North India. *J Public Health Epidemiol*. 2023;15(2):112–8.
4. Patnaik SK. Epidemiology of animal bites—A study at Anti Rabies Center, District Head Quarter Hospital, Rajahmundry, Andhra Pradesh. *Indian J Public Health Res*. 2013; 4(2).
5. Priya GS, Kumar JK, Arun R. Misconceptions and myths regarding dog bites in urban areas of Kancheepuram district, Tamil Nadu. *Natl J Community Med*. 2021;12(9):262-266.
6. Chinnaian S, Sekaran G, Ramachandran U, Ravi R, Pandurangan MK. Taboos related to dog bites in an urban area of the Kancheepuram district of Tamil Nadu, India. *J Clin Diagn Res*. 2015 Jul;9(7):LC01–3.
7. Tiwari HK, Vanak AT, O'Dea M, Robertson ID. Knowledge, attitudes, and practices towards dog-bite-related rabies in para-medical staff at rural primary health centers in Baramati, western India. *PLoS One*. 2018 Nov 16;13(11).
8. Jakasania AH, Dixit GT, Patel AP, Mansuri FM, Makadia KD. Misconceptions and myths regarding animal bites and rabies: A community-based study in Ahmedabad. *Natl J Community Med*. 2024;9(2):87-90.
9. Hymavathi CH, Rao PN, Reddy KS, et al. A study on primary wound management of dog bite injuries presenting to a teaching hospital in Andhra Pradesh. *APCRI J*. 2022;23(2).
10. Singh R, et al. Knowledge, Attitudes, and Practices Regarding Rabies Prevention Among Rural Communities in Gujarat: A Cross-Sectional Study. *Journal of Family Medicine and Primary Care* 2023;12(4):678-685.
11. Kumar A, Reddy KS, Srinivas P, et al. Epidemiology of animal bites and rabies risk in rural South India. *J Fam Med Prim Care*. 2022;11(3):1120-1125.
12. Mehta R, Patel D, Desai M. Education level and health-seeking behavior following animal bites in rural Gujarat. *Indian J Public Health*. 2023;67(1):45-50.
13. Joshi A, Kulkarni R, Pawar S. Myths and misconceptions about rabies in Maharashtra. *J Fam Med Prim Care*. 2022;11(5):1985-1990.
14. Verma R, Singh P, Kumar N. Urban-rural differences in animal bite incidence in North India. *Trop Med Health*. 2023;51:12.
15. Sharma R, Kapoor M, Khanna P. Changing family structures and health outcomes in urban India. *J Family Med Prim Care*. 2023;12(2):300-305.
16. Jain P, Jain G. Study of general awareness, attitude, behavior, and practice study on dog bites and its management in the context of prevention of rabies among the victims of dog bites attending the OPD services of CHC Muradnagar. *J Family Med Prim Care*. 2014;3(4):355-358.
17. Gupta S, Malhotra S, Sharma A. Patterns of animal bite injuries and post-exposure prophylaxis at a tertiary care center in North India. *Indian J Community Med*. 2023;48(1):56-61.
18. National Rabies Control Program. Annual Report on Animal Bite Surveillance. New Delhi: Ministry of Health and Family Welfare, Government of India; 2023.
19. Patil R, Deshmukh S, Jadhav V. Healthcare utilization patterns for Category I animal exposures in Western India. *Indian J Public Health*. 2023;67(2):89-94.
20. Nair RR, Menon S, Kumar S. Traditional practices in animal bite management in Kerala. *Indian J Tradit Knowl*. 2023;22(1):120-125.
21. Mishra SK, Behera P. Community practices for dog bite wounds in rural Odisha. *J Fam Med Prim Care*. 2023;12(3):450-455.
22. Kamble S, Patil S, Gaikwad A. Prevalence and patterns of myths in animal bite management in rural Maharashtra. *J Prev Med*. 2023;15(1):30-35.
23. Kumar S, Kumar R, Gupta O, Tripathi A. Delay in healthcare access and its association with traditional medicine use among tribal populations in Central India: A cross-sectional study. *J Ethnobiol Ethnomed* 2020; 16:12.
24. Gavhane S, Meshram P, Tiwari R. Traditional healer consultations and rabies prophylaxis delays in tribal areas. *Indian J Tribal Med*. 2023;12(1):60-65.
25. Karthikeyan R, Venkatesh S, Balaji S. Cultural perceptions of rabies in rural South India. *J Commun Dis*. 2023;55(1):22-28.
26. Khandelwal S, Sharma M, Gupta P. Health-related myths and misconceptions among rural communities in Rajasthan: A cross-sectional study. *Indian J Community Med* 2021;46(2):284-8.