



CULTURAL PERCEPTIONS OF WILD ANIMALS CONSUMPTION AND IMPLICATIONS FOR COMMUNITY NURSING: A SYSTEMATIC REVIEW

Fadila Lam*, Joni Haryanto, Sylvia Dwi Wahyuni

Faculty of Nursing, Universitas Airlangga, Mulyorejo, Surabaya, Jawa Timur 60115, Indonesia

*fadila22lam@gmail.com

ABSTRACT

Many communities have long relied on wild animal consumption as part of cultural tradition and food stability. While culturally significant, this practice presents serious public health risks, particularly the transmission of zoonotic diseases through frequent human wildlife interaction in markets lacking proper food safety. These risks demand urgent public health responses that integrate cultural awareness. Community nurses, as key agents in primary health care, play a vital role in addressing these risks through culturally sensitive education and engagement. This study aims to review cultural perceptions of wild animal consumption and analyze their implications for community nursing, especially in strengthening culturally sensitive education and zoonotic risk. This systematic review followed PRISMA guidelines, using five databases (WoS, Scopus, PubMed, ProQuest, ScienceDirect). Study selection was based on PICO criteria, risk of bias assessed with the JBI checklist, and data analyzed thematically. A total of 4,139 records were identified, and 3,940 duplicates were removed before screening. After title, abstract, and full text screening based on the PICO framework, 15 studies met the inclusion criteria. Fifteen studies were included, spanning regions in Asia, Africa, and Latin America. Thematic analysis identified five key themes: (1) cultural beliefs, taboos, and symbolic meanings; (2) traditional uses and medicinal practices; (3) taste preference, nutritional value, and cultural identity; (4) nurse roles in community zoonotic literacy; and (5) socioeconomic drivers and market dynamics. The findings show that cultural beliefs and economic needs often outweigh health concerns in wildlife consumption. Strengthening the role of community nurses in culturally sensitive education and risk communication is essential to reduce zoonotic threats and improve public health responses.

Keywords: community nursing; public perception; wild animal consumption; zoonotic diseases

How to cite (in APA style)

Lam, F., Haryanto, J., & Wahyuni, S. D. (2026). Cultural Perceptions of Wild Animals Consumption and Implications for Community Nursing: A Systematic Review. *Indonesian Journal of Global Health Research*, 8(2), 501–512. <https://doi.org/10.37287/ijghr.v8i2.706>.

INTRODUCTION

For many communities, consuming wild animals represents a vital aspect of both nutrition and cultural tradition. This practice has endured for thousands of years in certain regions (Ingram et al., 2022). Wildlife consumption and trade are major contributors to the emergence of zoonotic infections (Jake Young, 2024). Many wild species act as reservoirs for zoonotic viruses, bacteria, and parasites, facilitating human infection through consumption.

Tumelty et al., (2023) identified 43 zoonotic pathogens, comprising 17 bacterial, 15 viral, and 11 parasitic agents that threaten human health. Notably, around 75% of emerging infectious diseases are zoonotic in origin, with more than 70% linked to wildlife (Milbank & Vira, 2022). The wildlife trade, especially within wet market settings, facilitates conditions that promote the transmission of zoonotic pathogens from animals to humans (Petrovan et al., 2021). Community nurses play a key role in raising awareness about zoonotic risks, promoting culturally sensitive behavior change, and delivering locally tailored health education. Positioned at the frontline of primary care, they are well placed to bridge health messages with local beliefs and practices (Suwannarong, Ponlap et al, 2024).

Bushmeat consumption remains significant, with local communities in tropical areas consuming nearly 5 million tons annually. This consumption serves not only as a food source but also as a

critical component of local food security, especially during periods of agricultural shortage (Nurulawati et al., 2023). In North Sulawesi, bat consumption is particularly intense, with locals consuming them more frequently during the Christmas holidays. Approximately 500 metric tons of bats are imported each year from other provinces, indicating a high level of demand (Latinne et al., 2020). The Tomohon Extreme Market in North Sulawesi is notable for trading diverse wildlife species, including wild boars, forest rats, bats, snakes, monkeys, cats, and dogs. The Tomohon market is referred to as an "extreme market" because it openly displays the slaughtering of animals on-site, in full view of the public (Binambuni et al., 2023). Mesra et al (2022) reported that for the Minahasan ethnic group in North Sulawesi, consuming 'extreme' foods is regarded as a traditional practice rooted in generational heritage. The majority religion in the Minahasan community permits the consumption of such wild animals. Consuming wild animals is also recognized as a symbol of strengthening kinship ties.

Trading and consuming wild animals significantly heighten the risk of zoonotic diseases such as Ebola and COVID-19 (Jake Young, 2024). Wild animals can serve as reservoirs for various pathogens, including viruses, bacteria, and parasites. For example, the Suidae family (pigs) is known to carry numerous zoonotic pathogens. Regular interaction with wild animals through activities like hunting, processing, and consuming bushmeat elevates the risk of zoonotic disease transmission (Saylor et al., 2021). The objective of this review is to examine societal perceptions and practices concerning the consumption of wildlife. Improper handling and processing of wild animal meat can pose serious threats to public health, while a lack of awareness and inadequate food safety practices among market participants further exacerbate these risks. Therefore, this review is essential in helping policymakers and health professionals recognize the public health implications of wildlife consumption and in shaping effective preventive interventions.

The novelty of this review lies in its cross cultural exploration of how community beliefs and cultural values influence the consumption of wild animals, particularly within the framework of community nursing. Previous studies have predominantly focused on ecological, economic, or zoonotic dimensions, yet have rarely examined the sociocultural meanings and behavioral drivers underlying these practices. By integrating cultural perspectives with public health and nursing approaches, this review provides new insights for developing culturally sensitive health education and community based interventions aimed at mitigating zoonotic risks and promoting sustainable health behaviors.

METHOD

This study followed the guidelines outlined in the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement (Page et al., 2021).

Search methods

To ensure comprehensive coverage, a systematic literature search was conducted across five databases: Web of Science, Scopus, PubMed, ProQuest, and ScienceDirect for studies published between 2020 and 2025. The search utilized Medical Subject Headings (MeSH) and relevant keywords such as "wild animals" OR "wildlife" AND "consumption" OR "eating" AND "community" OR "society" OR "population" AND "experience" OR "perception" OR "cultural beliefs" OR "cultural practices" OR "interaction" AND "qualitative research" OR related methodologies including "phenomenology", "narrative study", "grounded theory", "case study", "ethnography", and "descriptive qualitative" (e.g Table 1).

Inclusion and exclusion criteria

The PICo framework (Population, Interest, Context) was utilized to determine study eligibility (Hosseini et al., 2024). Inclusion criteria comprised: (a) studies involving human engagement in hunting, trading, preparing, or consuming wild animals; (b) research exploring public perceptions,

cultural beliefs, motivations, or social norms surrounding wild animal consumption; (c) qualitative study designs; and (d) publications in English. Exclusion criteria included: (a) studies falling outside the defined PICO scope; and (b) articles lacking full-text access.

Table 1.

Database search strategies

Database	Search strategy
Scopus	(TITLE-ABS-KEY ("wild animals" OR wildlife)) AND (TITLE-ABS-KEY (consumption OR eating)) AND (TITLE-ABS-KEY (community OR society OR population)) AND (TITLE-ABS-KEY (experience OR perception OR "cultural beliefs" OR "cultural practices" OR interaction)) AND (TITLE-ABS-KEY ("qualitative research" OR "qualitative study" OR phenomenology OR "narrative study" OR "grounded theory" OR "case study" OR ethnography OR "descriptive qualitative"))
Proquest	(TX("wild animals" OR wildlife)) AND (TX(consumption OR eating)) AND (TX(community OR society OR population)) AND (TX(experience OR perception OR "cultural beliefs" OR "cultural practices" OR interaction)) AND (TX("qualitative research" OR "qualitative study" OR phenomenology OR "narrative study" OR "grounded theory" OR "case study" OR ethnography OR "descriptive qualitative"))
PubMed	((("wild animals" [MeSH Terms] OR "wild animals" [Title/Abstract] OR wildlife [Title/Abstract])) AND ((("food habits" [MeSH Terms] OR consumption [Title/Abstract] OR eating [Title/Abstract])) AND ((community [MeSH Terms] OR community [Title/Abstract] OR society [Title/Abstract] OR population [Title/Abstract])) AND ((experience [Title/Abstract] OR perception [Title/Abstract] OR "cultural beliefs" [MeSH Terms] OR "cultural beliefs" [Title/Abstract] OR "cultural practices" [MeSH Terms] OR "cultural practices" [Title/Abstract] OR interaction [Title/Abstract])) AND ((("qualitative research" [MeSH Terms] OR "qualitative research" [Title/Abstract] OR "qualitative study" [Title/Abstract] OR phenomenology [Title/Abstract] OR "narrative study" [Title/Abstract] OR "grounded theory" [Title/Abstract] OR "case study" [Title/Abstract] OR ethnography [Title/Abstract] OR "descriptive qualitative" [Title/Abstract]))
ScienceDirect	(TITLE-ABSTR-KEY ("wild animals")) AND (TITLE-ABSTR-KEY ("consumption")) AND (TITLE-ABSTR-KEY ("community")) AND (TITLE-ABSTR-KEY("experience" OR "cultural beliefs" OR "cultural practices")) AND (TITLE-ABSTR-KEY("qualitative research" OR "qualitative study"))
Web of Science	TS=("wild animals" OR wildlife) AND TS=(consumption OR eating) AND TS=(community OR society OR population) AND TS=(experience OR perception OR "cultural beliefs" OR "cultural practices" OR interaction) AND TS = ("qualitative research" OR "qualitative study" OR "phenomenology" OR "narrative study" OR "grounded theory" OR "case study" OR ethnography OR "descriptive qualitative")

Data extraction

A comprehensive literature search was conducted using five databases, with all retrieved references imported into Mendeley for reference management. Duplicate entries were removed prior to screening. The author independently conducted the screening process, beginning with title and abstract review, followed by full-text evaluation of eligible studies. Key data were then independently extracted by the author, including author names, publication year, country of origin, participant characteristics, research aims, study design (methods and analysis), and identified themes.

Quality appraisal

Each study was independently appraised by the author using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research (Lockwood et al., 2015). The checklist comprises ten domains assessing methodological congruence, researcher positioning, ethical considerations, participant representation, and the alignment between data interpretation and conclusions. Studies were considered at high risk of bias if most domains were rated 'no' or 'unclear' and only a few were rated 'yes' (e.g. Table 2).

Table 2.
Critical appraisal of studies

	Aims	Sample	Adequate reporting of data collection methods	Adequate reporting of data analysis methods	Research design	Recruitment strategy	Appropriate Data collection method	Appropriate data analysis method	Researcher–participant relationship considered	Ethical issues
Suwannarong, Ponlap, et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Suwannarong et al (2020)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Lucas et al (2022)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Nahar et al (2020)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Bello-Román et al (2023)	✓	✓	✓	✓	✓	✓	✓	✓	x	✓
Ahmed et al (2022)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Jenkins et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Suwannarong, Boonyakawee, et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Boonyakawee et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Kusumaningrum et al (2022)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
King et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Solís Soto et al (2024)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Duonamou et al (2020)	✓	✓	✓	✓	✓	✓	✓	✓	x	✓
Dell et al (2020)	✓	✓	✓	✓	✓	✓	✓	✓	Cannot tell	✓
Saylors et al (2021)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Data analysis

Thematic analysis was employed by the author to synthesize the qualitative findings (Thomas & Harden, 2008). Thematic qualitative data were coded from the study findings, including contributions from participants and the authors' interpretations. The issues were inductively

organized under reporting categories. Data extraction, coding, and synthesis were performed by two reviewers. NVivo was used for systematic data management and analysis.

RESULT

Selection Process

A total of 4,139 records were identified through database searches: ScienceDirect (n = 4,043), Web of Science (n = 39), Scopus (n = 34), ProQuest (n = 18), and PubMed (n = 5). After removing 3,940 duplicates, 199 records remained for initial screening, from which 54 were excluded as irrelevant. Of the 145 full-text articles sought for retrieval, 24 were inaccessible. The remaining 121 full-texts were assessed for eligibility, resulting in the exclusion of 57 articles due to unsuitable article types or methodologies and 49 due to irrelevant populations. Ultimately, 15 studies met the inclusion criteria and were included in the final review.

Study Characteristics

This systematic review included 15 studies published between 2020 and 2024, conducted across Asia, Africa, Latin America, and North America. Most studies (n = 10) used qualitative designs, either descriptive or ethnographic, to explore cultural beliefs, taboos, and practices related to wild animal consumption. Common methods included semi-structured interviews, FGDs, and participatory observation. Several studies, including those by Suwannarong et al (2024), Suwannarong et al (2020), and Nahar et al (2020), explored the influence of traditional beliefs, religious values, and ethnic identity on hunting and consumption behaviors, particularly related to bats and bushmeat. Meanwhile, research by Bello-Román et al (2023) and Ahmed et al (2022) emphasized the cultural, nutritional, and ritual significance of wildlife in local food practices. Five studies employed mixed methods, combining surveys and interviews to assess knowledge, attitudes, and zoonotic risk perceptions (Kusumaningrum et al 2022; Solís Soto et al 2024). Sample sizes ranged widely, from 4 to over 3,000 participants, covering both indigenous and rural populations. In general, all studies contributed insights into how cultural worldviews shape wildlife consumption, with several also noting limited awareness of zoonotic risks. The findings support the need for culturally informed health and conservation strategies.

Identified Themes

1. Cultural beliefs, taboos, and symbolic meanings

A recurrent theme across the studies is the influence of cultural beliefs and taboos in shaping practices related to wild animal consumption. Certain ethnic groups perceive specific animals as sacred or symbolic, which directly informs whether they are hunted or avoided. For example, Suwannarong et al (2024) reported that among 10 ethnic communities in Thailand, taboos and religious prohibitions played a critical role in either restricting or guiding the use of wild animals, often aligning with conservation values. Cultural beliefs in the Democratic Republic of Congo regard wild animals such as monkeys as 'pure' and low-risk for disease transmission (Lucas et al., 2022). Similar symbolic frameworks were documented in Mexico, where wildlife was not only consumed but also used for rituals and seasonal customs (Bello-Román et al., 2023).

2. Traditional uses and medicinal practices

Many communities maintain a long-standing tradition of using wild animals not only as food sources but also for medicinal and spiritual purposes. In Bangladesh, bats were hunted not only for consumption but were also sold to traditional healers who believed in their curative properties (Nahar et al., 2020). Among the Urak Lawoi ethnic group in southern Thailand, wildlife was incorporated into traditional healing rituals and perceived as possessing therapeutic power (Suwannarong et al., 2024). Likewise, the Mani ethnic group continued to use herbal treatments and wild animal products in daily health practices, despite limited access to modern healthcare (Boonyakawee et al., 2024).

3. Taste preference, nutritional value, and cultural identity

Taste and nutritional perception were also central to the continued consumption of wild animals. In rural Montana, 66% of households viewed wild meat gathering as integral to their cultural identity, with most respondents highlighting the nutritional benefits of wild meat (Ahmed et al., 2022). This was echoed in Mexico, where specific species like deer were highly valued not only for their taste and dietary value but also for their cultural relevance (Bello-Román et al., 2023). In Kinshasa, despite public health warnings, people continued to prefer bushmeat for its flavor and perceived purity, even avoiding soap when cleaning knives to preserve taste (Lucas et al., 2022).

4. Nurse Roles in Community Zoonotic Literacy

A significant number of studies revealed poor understanding of zoonotic diseases and low perceived risk among wild meat consumers and traders. In Kinshasa, people were skeptical of official health information and often relied on word-of-mouth, even associating Ebola with witchcraft (Lucas et al., 2022). In Cameroon, market workers reported frequent contact with animal blood and organs but did not consider it hazardous (Saylor et al., 2021). Similarly, in Indonesia, only 1% of survey respondents believed contact with wild animals could cause disease (Kusumaningrum et al., 2022). These beliefs remained unchanged amid health crises, as evidenced in Guinea, where wealthier households sustained wild meat consumption during the Ebola outbreak (Duonamou et al., 2020). Community nurses are key to improving zoonotic literacy by providing culturally appropriate education and building public trust.

5. Socioeconomic drivers and market dynamics

Economic necessity was a dominant driver of wildlife use across regions. In Uganda, bushmeat was a vital livelihood source for hunters and cooks, particularly women, who relied on it for household income and food security (Dell et al., 2020). In Jenkins et al (2024) documented how poor sanitation in bushmeat markets exposed traders and customers to zoonotic risk, yet the economic benefits outweighed health concerns. Saylor et al (2021) highlighted how trade in rodents, primates, and bats continued despite limited disease awareness. These studies underscore how poverty, lack of alternatives, and market dependence reinforce the bushmeat economy.

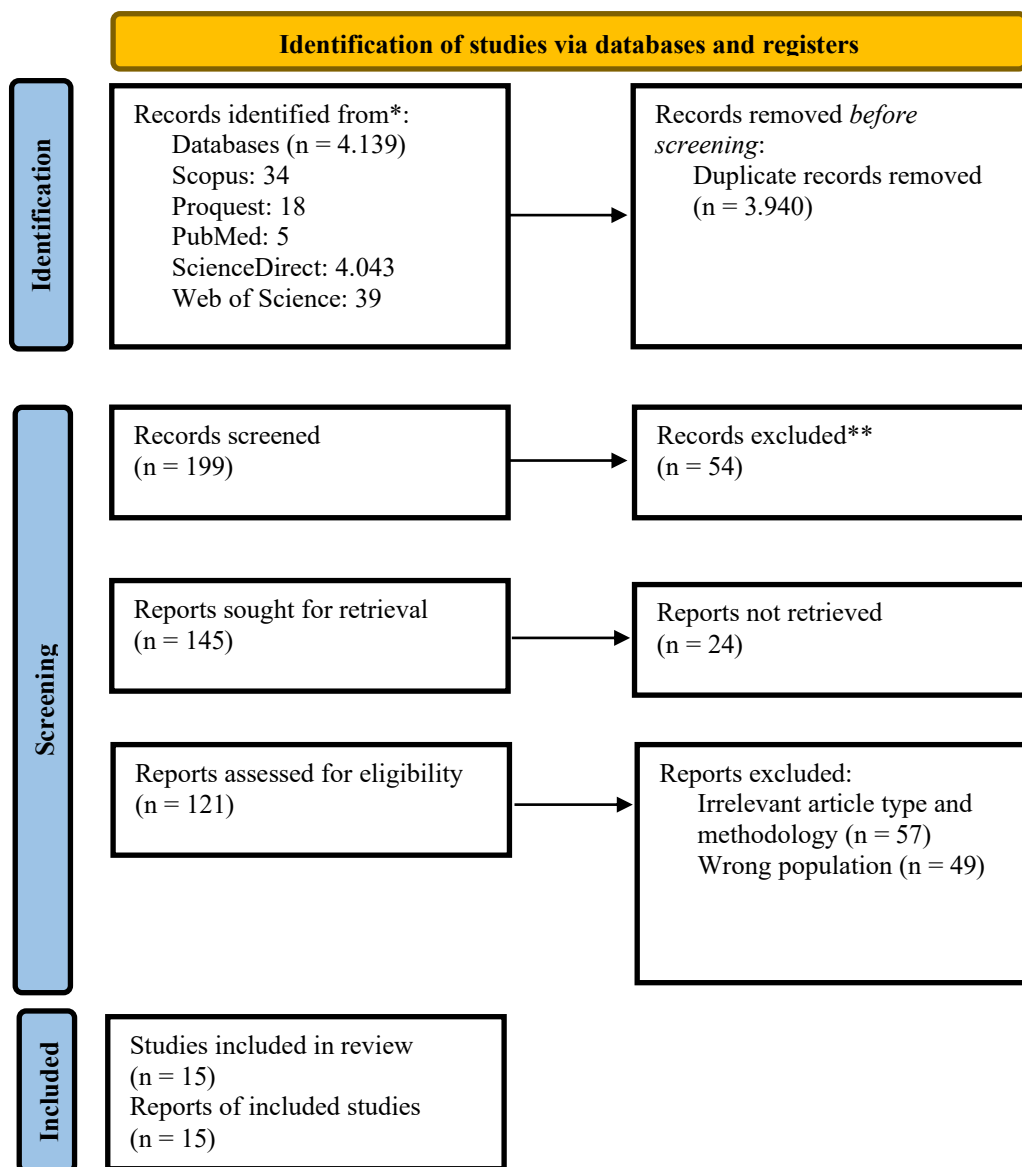


Figure 1. PRISMA flow chart

DISCUSSION

1. Cultural Beliefs, Taboos, and Symbolic Meanings

Cultural beliefs play a key role in decisions about wild animal consumption. In some communities, animals are seen as spiritual beings or ancestral symbols. For example, ethnic groups in Thailand avoid eating bats due to inherited taboos, not health concerns (Boonyakawee et al., 2024). This shows that belief systems can act as informal conservation, but interventions conflicting with local values may face social rejection.

Cultural taboos that prohibit or symbolically define wild animals contribute to informal conservation effects. In Africa and Asia, taboos against the consumption of bats or primates, for instance, are not only spiritual in nature but also serve to minimize zoonotic risk. Lee et al (2020) emphasized how wildlife is also utilized in traditional medicine practices across Southeast Asia, a practice that carries symbolic significance in public health contexts.

Rachmawati et al (2024) found that peer support significantly influences adolescents' eating behaviors in urban Indonesian settings, highlighting the impact of social norms and networks on dietary choices. In the context of wild animal consumption, similar dynamics may occur, where

pressure or support from one's social environment, including family and peers, can reinforce or alter long-standing culturally based eating practices.

2. Traditional Uses and Medicinal Practices

Hall et al (2024) reported that communities in Nyagatare district engage in 336 zoonotherapeutic practices involving up to 60 animal species, often utilizing animal body parts without proper hygienic measures, thus increasing the risk of zoonotic transmission. A mixed-methods study in Nigeria documented the use of 44 animal species, including bats and primates, across 292 medicinal and ritual practices. The widespread use of species classified as high-risk for zoonotic transmission highlights the dominant presence of zoonotic risk in these practices (Friant et al., 2022).

The findings of Asaaga et al (2024) further confirm that traditional medicine practices, including the use of both animal- and plant-based ingredients, are widely practiced across the Indian subcontinent as a response to zoonotic diseases. The study identified 106 peer-reviewed publications documenting the use of traditional remedies for 29 zoonotic diseases, with the most frequently addressed conditions being dengue, tuberculosis, *Escherichia coli* infections, lymphatic filariasis, and rabies.

3. Taste Preference, Nutritional Value, and Cultural Identity

Food is a fundamental part of collective identity. In the Montana community, wild meat consumption is strongly associated with local identity and values of self-reliance. In Kinshasa, taste is prioritized over safety, with consumers even avoiding the use of soap in order to preserve the original flavor of bushmeat (Lucas et al., 2022).

This illustrates how risk perception is often compromised in favor of sensory enjoyment and cultural nostalgia. Social status and cultural taste preferences are powerful drivers of bushmeat consumption. In urban areas across Africa, bushmeat is considered a luxury food, despite its high cost. Nutritional value and the perception of wild meat as "natural" have also been discussed in the context of food security and its impact on childhood anemia. (Chausson et al., 2019).

Perceived nutritional value is often shaped by cultural symbolism, with wild meat viewed as more "natural," cleaner, and healthier, despite the lack of scientific support. Efforts to promote alternative protein sources must address these symbolic values, rather than merely substituting one protein for another.

4. Nurse Roles in Community Zoonotic Literacy

One of the most critical findings in this review is the gap between perceived risk and actual risk. In many regions, the belief that wild animals are "pure" or harmless is deeply ingrained and often trusted more than official health information. For instance, narratives linking Ebola to witchcraft in the Democratic Republic of Congo illustrate how distrust in formal institutions poses a major barrier to effective risk mitigation (Lucas et al., 2022).

Awareness of zoonotic disease risks remains low, despite high levels of exposure to wild animals. Studies from Nigeria and Cameroon reveal that the majority of traders and hunters are unaware of the potential dangers posed by zoonotic pathogens (Saylor et al., 2021). Low health literacy and limited medical access reinforce community myths. To address this, community-based education, culturally sensitive communication, and participatory approaches are crucial. Zoonotic prevention should focus on human-animal contact points, like wildlife markets and slaughter sites, for effective interventions.

The role of nurses in addressing misconceptions about zoonotic risks is crucial but often overlooked. Agyepong et al (2023) emphasized that nurse managers, who bridge the gap between frontline staff and policymakers, have significant influence in shaping health policy. However, barriers like limited policy training and professional hierarchies hinder their involvement. Empowering community-based nurses with culturally tailored health education and policy advocacy can bridge the divide between biomedical knowledge and traditional practices, improving zoonotic disease prevention efforts.

5. Socioeconomic Drivers and Market Dynamics

Hunting and trade of wildlife in many regions are driven not only by consumption needs but also by economic livelihood. In Bangladesh, for example, Nahar et al (2020) found that bat hunting was conducted both to meet household needs and as an economic commodity, with the catch being sold to traditional healers. Lucas et al (2022) reported a similar case in the Democratic Republic of the Congo, where the bushmeat trade continued despite previous Ebola outbreaks, driven by urgent economic needs.

The structure and dynamics of the bushmeat market reveal a complex interplay between economic needs, market access, and weak regulatory enforcement. A study in North Sulawesi Kusumaningrum et al (2022) highlighted how wildlife trade continues despite low public awareness of zoonotic risks. This indicates that public health interventions will not be effective without accompanying economically relevant solutions for market actors. On the other hand, social factors such as income stratification also influence bushmeat consumption patterns. Duonamou et al (2020) found that during the Ebola outbreak in Guinea, low income households reduced their wild meat consumption more significantly than high income groups. These findings suggest that the decision to stop consuming wildlife is not solely related to awareness of health risks, but is also strongly determined by the economic capacity of each social group.

CONCLUSION

The findings reveal how cultural and economic factors shape wildlife consumption more than health knowledge. Community nurses, alongside local leaders and healers, are key in delivering culturally appropriate education to close knowledge gaps and prevent zoonotic risks.

REFERENCES

- Agyepong, E. B., Ofei, A. M. A., Okyere, E. D., & Ocloo, V. (2023). Nurses' Involvement in Health Policy Development and Analysis: Examining the Perspectives of Nurse Managers. *Fundamental and Management Nursing Journal*, 6(1 SE-Articles), 30–38. <https://doi.org/10.20473/fmnj.v6i1.47912>
- Ahmed, S., Warne, T., Stewart, A., Byker Shanks, C., & Dupuis, V. (2022). Role of Wild Food Environments for Cultural Identity, Food Security, and Dietary Quality in a Rural American State. *Frontiers in Sustainable Food Systems*, 6(April), 1–21. <https://doi.org/10.3389/fsufs.2022.774701>
- Asaaga, F. A., Tomude, E. S., Rahman, M., Shakeer, I., Ghotge, N. S., Burthe, S. J., Schäfer, S. M., Vanak, A. T., Purse, B. V., & Hoti, S. L. (2024). What is the state of the art on traditional medicine interventions for zoonotic diseases in the Indian subcontinent? A scoping review of the peer-reviewed evidence base. *BMC Complementary Medicine and Therapies*, 24(1). <https://doi.org/10.1186/s12906-024-04553-8>
- Bello-Román, M., García-Flores, A., & Moreno, J. M. P. (2023). Knowledge, use and traditional management of wildlife in the community of Zoquital, Morelos, Mexico. *Ethnobiology and Conservation*, 12(March). <https://doi.org/10.15451/ec2023-03-12.08-1-18>
- Binambuni, F. J., Matheosz, J. N., & Pratiknjo, M. H. (2023). Pasar Ekstrim Sebagai Destinasi Wisata Di Kota Tomohon. *Jurnal Holistik*, 16(2).

- <https://ejournal.unsrat.ac.id/v3/index.php/holistik/article/view/48277%0Ahttps://ejournal.unsrat.ac.id/v3/index.php/holistik/article/download/48277/42694>
- Boonyakawee, P., Suwannarong, K., Ponlap, T., Thammasutti, K., Kanthawee, P., Bubpa, N., Boonyakawee, C., Pradana, B., & Sokamol, S. (2024). A qualitative study on wildlife contact and healthcare-seeking behaviors among a cluster of Mani ethnic group in Manang district, Satun province of Thailand. *One Health*, 18(October 2023), 100689. <https://doi.org/10.1016/j.onehlt.2024.100689>
- Chausson, A. M., Rowcliffe, J. M., Escoufflaire, L., Wieland, M., & Wright, J. H. (2019). Understanding the Sociocultural Drivers of Urban Bushmeat Consumption for Behavior Change Interventions in Pointe Noire, Republic of Congo. *Human Ecology*, 47(2), 179–191. <https://doi.org/10.1007/s10745-019-0061-z>
- Dell, B. A. M., Souza, M. J., & Willcox, A. S. (2020). Attitudes, practices, and zoonoses awareness of community members involved in the bushmeat trade near Murchison Falls National Park, northern Uganda. *PLoS ONE*, 15(9 September), 1–18. <https://doi.org/10.1371/journal.pone.0239599>
- Duonamou, L., Konate, A., Djossou, S. D., Mensah, G. A., Xu, J., & Humle, T. (2020). Consumer perceptions and reported wild and domestic meat and fish consumption behavior during the Ebola epidemic in Guinea, West Africa. *PeerJ*, 2020(6). <https://doi.org/10.7717/peerj.9229>
- Friant, S., Bonwitt, J., Ayambem, W. A., Ifebueme, N. M., Alobi, A. O., Otukpa, O. M., Bennett, A. J., Shea, C., Rothman, J. M., Goldberg, T. L., & Jacka, J. K. (2022). Zoonotherapy as a potential pathway for zoonotic spillover: a mixed-methods study of the use of animal products in medicinal and cultural practices in Nigeria. *One Health Outlook*, 4(1). <https://doi.org/10.1186/s42522-022-00060-3>
- Hall, H., Majyambere, D., Sibomana, E., Uwase, S., Mahoro, J., & Amuguni, H. J. (2024). A mixed methods study of zoonotherapy practices and associated risks for zoonotic disease spillover in Rwanda. *Discover Animals*. <https://doi.org/10.1007/s44338-024-00027-w>
- Hosseini, M.-S., Jahanshahlou, F., Akbarzadeh, M. A., Zarei, M., & Vaez-Gharamaleki, Y. (2024). Formulating research questions for evidence-based studies. *Journal of Medicine, Surgery, and Public Health*, 2(December 2023), 100046. <https://doi.org/10.1016/j.glmedi.2023.100046>
- Ingram, D. J., Prideaux, M., Hodgins, N. K., Frisch-Nwakanma, H., Avila, I. C., Collins, T., Cosentino, M., Keith-Diagne, L. W., Marsh, H., Shirley, M. H., Van Waerebeek, K., Djondo, M. K., Fukuda, Y., Glaus, K. B. J., Jabado, R. W., Lang, J. W., Lüber, S., Manolis, C., Webb, G. J. W., & Porter, L. (2022). Widespread Use of Migratory Megafauna for Aquatic Wild Meat in the Tropics and Subtropics. *Frontiers in Marine Science*, 9(March). <https://doi.org/10.3389/fmars.2022.837447>
- Jake Young. (2024). How Should Wet Market Practices Be Regulated to Curb Zoonotic Disease Transmission? *AMA Journal of Ethics*, 26(2), E116-121. <https://doi.org/10.1001/amajethics.2024.116>
- Jenkins, J., Lawundeh, W., Hanson, T., & Brown, H. (2024). Human-animal entanglements in bushmeat trading in Sierra Leone: An ethnographic assessment of a potential zoonotic interface. *PLoS ONE*, 19(3 March), 1–22. <https://doi.org/10.1371/journal.pone.0298929>
- King, M. H., Nahabwe, H., Ssebide, B., Kwong, L. H., & Gilardi, K. (2024). Preventing zoonotic and zoonanthropotic disease transmission at wild great ape sites: Recommendations from qualitative research at Bwindi Impenetrable National Park. *PLoS ONE*, 19(3 MARCH), 1–22. <https://doi.org/10.1371/journal.pone.0299220>
- Kusumaningrum, T., Latinne, A., Martinez, S., Kalengkongan, J., Wiyatno, A., Dewantari, A. K., Kasenda, N., Bernadus, J. B. B., Jaya, U. A., Ma'roef, C. N., Francisco, L., Hagan, E., Miller, M., Myint, K. S. A., Daszak, P., Olival, K. J., Saputro, S., Pamungkas, J., & Safari, D. (2022). Knowledge, attitudes, and practices associated with zoonotic disease transmission risk in North Sulawesi, Indonesia. *One Health Outlook*, 4(1). <https://doi.org/10.1186/s42522-022-00067-w>

- Latinne, A., Saputro, S., Kalengkongan, J., Kowel, C. L., Gaghiwu, L., Ransaleleh, T. A., Nangoy, M. J., Wahyuni, I., Kusumaningrum, T., Safari, D., Feferholtz, Y., Li, H., Hagan, E., Miller, M., Francisco, L., Daszak, P., Olival, K. J., & Pamungkas, J. (2020). Characterizing and quantifying the wildlife trade network in Sulawesi, Indonesia. *Global Ecology and Conservation*, 21, e00887. <https://doi.org/10.1016/j.gecco.2019.e00887>
- Lee, T. M., Sigouin, A., Pinedo-Vasquez, M., & Nasi, R. (2020). The harvest of tropical wildlife for bushmeat and traditional medicine. *Annual Review of Environment and Resources*, 45, 145–170. <https://doi.org/10.1146/annurev-environ-102016-060827>
- Lockwood, C., Munn, Z., & Porritt, K. (2015). Qualitative research synthesis: Methodological guidance for systematic reviewers utilizing meta-aggregation. *International Journal of Evidence-Based Healthcare*, 13(3), 179–187. <https://doi.org/10.1097/XEB.0000000000000062>
- Lucas, A., Kumakamba, C., Saylor, K., Obel, E., Kamenga, R., Makuwa, M., Clary, C., Miningue, G., McIver, D. J., Lange, C. E., Kingebeni, P. M., & Muyembe-Tamfum, J. J. (2022). Risk perceptions and behaviors of actors in the wild animal value chain in Kinshasa, Democratic Republic of Congo. *PLoS ONE*, 17(2 February), 1–19. <https://doi.org/10.1371/journal.pone.0261601>
- Mesra, R., Hidayat, M. F., & Korlefura, C. (2022). Persepsi Masyarakat Minahasa Tentang Pasar “Extreme” Tomohon. *JISIP (Jurnal Ilmu ...)*, 6(4), 2323–2331. <https://doi.org/10.36312/jisip.v6i4.3676/http>
- Milbank, C., & Vira, B. (2022). Wildmeat consumption and zoonotic spillover: contextualising disease emergence and policy responses. *The Lancet Planetary Health*, 6(5), e439–e448. [https://doi.org/10.1016/S2542-5196\(22\)00064-X](https://doi.org/10.1016/S2542-5196(22)00064-X)
- Nahar, N., Asaduzzaman, M., Mandal, U. K., Rimi, N. A., Gurley, E. S., Rahman, M., Garcia, F., Zimicki, S., Sultana, R., & Luby, S. P. (2020). Hunting Bats for Human Consumption in Bangladesh. *EcoHealth*, 17(1), 139–151. <https://doi.org/10.1007/s10393-020-01468-x>
- Nuruliawati, Mardhiah, U., Muktamarianti, A. I., Muttaqin, E., Sheherazade, Surya, S., Nugroho, A., Rahmadi, C., Widiyanto, D., Leggett, M., Mardiah, S., & Verissimo, D. (2023). Using SMS surveys to understand songbird ownership and shark product consumption in Indonesia. *Oryx*, 58(4), 437–447. <https://doi.org/10.1017/S0030605323000741>
- Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Mckenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. *The BMJ*, 372. <https://doi.org/10.1136/bmj.n160>
- Petrovan, S. O., Aldridge, D. C., Bartlett, H., Bladon, A. J., Booth, H., Broad, S., Broom, D. M., Burgess, N. D., Cleaveland, S., Cunningham, A. A., Ferri, M., Hinsley, A., Hua, F., Hughes, A. C., Jones, K., Kelly, M., Mayes, G., Radakovic, M., Ugwu, C. A., ... Sutherland, W. J. (2021). Post COVID-19: a solution scan of options for preventing future zoonotic epidemics. *Biological Reviews*, 96(6), 2694–2715. <https://doi.org/10.1111/brv.12774>
- Rachmawati, P. D., Krisnana, I., Kurnia, I. D., Quraniati, N., Arief, Y. S., Danasari, T. M., & Rithpo, P. (2024). Peer support and healthy lifestyle among adolescents in urban areas in Indonesia. *International Journal of Public Health Science (IJPHS)*, 13(4), 1930. <https://doi.org/10.11591/ijphs.v13i4.23890>
- Saylor, K. E., Mouiche, M. M., Lucas, A., McIver, D. J., Matsida, A., Clary, C., Maptue, V. T., Euren, J. D., LeBreton, M., & Tamoufe, U. (2021). Market characteristics and zoonotic disease risk perception in Cameroon bushmeat markets. *Social Science and Medicine*, 268, 113358. <https://doi.org/10.1016/j.socscimed.2020.113358>
- Solís Soto, M. T., Kuhn, C., Carvalho, D., Burrone, M. S., Masilla, P., Vásquez Almazán, C., Pinto, C., Adler, M., Méndez, D., Pérez, F., Encina, V., Garrido, M. A., & Radon, K. (2024). Knowledge, attitudes, and practices towards the risk of zoonotic diseases, wildlife trade and

- wildlife consumption in Latin America. *ISEE Conference Abstracts*, 2024(1), 1–14. <https://doi.org/10.1289/isee.2024.1504>
- Suwannarong, K., Balthip, K., Kanthawee, P., Suwannarong, K., Khiewkhern, S., Lantican, C., Ponlap, T., Bupha, N., & Amonsin, A. (2020). Bats and belief: A sequential qualitative study in Thailand. *Heliyon*, 6(6), e04208. <https://doi.org/10.1016/j.heliyon.2020.e04208>
- Suwannarong, K., Boonyakawee, P., Ponlap, T., Thammasutti, K., Kanthawee, P., Bubpa, N., Boonyakawee, C., Pulkird, V., & Changnum, J. (2024). Histories, Cultural Contexts, Health Status, Wildlife Contact Characteristics, and Perception Towards COVID-19 of the Urak Lawoi Ethnic Group in Koh Lanta District, Krabi Province of Thailand: A Qualitative Study. *Journal of Health Research*, 38(3), 262–275. <https://doi.org/10.56808/2586-940X.1081>
- Suwannarong, K., Ponlap, T., Thammasutti, K., Thongkan, W., Balthip, K., Bubpa, N., Kanthawee, P., Pummarak, S., Suwannarong, K., & Amonsin, A. (2024). Beliefs, taboos, usages, health perceptions, and practices toward wildlife among different ethnicities in Tak and Mae Hong Son Provinces, Thailand. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-19941-5>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8, 1–10. <https://doi.org/10.1186/1471-2288-8-45>
- Tumelty, L., Fa, J. E., Coad, L., Friant, S., Mbane, J., Kamogne, C. T., Tata, C. Y., & Ickowitz, A. (2023). A systematic mapping review of links between handling wild meat and zoonotic diseases. *One Health*, 17(July), 100637. <https://doi.org/10.1016/j.onehlt.2023.100637>