Religious Affiliation's Influence on How Veterinary Students and Scientist's View Bioethical Concerns

Rahul Choudhary [a++*] and Gautam [b#]

[a] Pashu Vigyan Kendra, Chittorgarh, PIN- 312001, India.
[b] Department of VAHEE, LUVAS, Hisar, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Animal welfare advocates and veterinarians are concerned with bioethical issues. The need for high animal production efficiency has been satisfied with the aid of biotechnological production systems. But it's believed that these are jeopardizing welfare and posing moral and ethical dilemmas, especially for vets. In light of the paucity of information on this topic, a survey was conducted to ascertain scientists' and students' opinions regarding animal ethics at the Lala Lajpat Rai University of Veterinary and Animal Sciences in Hisar, Haryana. Random selection was used to select the scientists and students in the sample. The perception—which was defined as a positive or negative tendency toward acceptance of cloning, xenotransplantation, animal rights, stem cell research, and factory farming—was measured using a questionnaire. It was clear from the average response score that respondents' opinions on scientific advancements were unbiased. Researchers found that respondents' average response score indicated a neutral opinion regarding scientific advancements, with scientists being much more accepting than students. Religion does not seem

___

++ *Teaching Associate;*
# *Professor cum Head;*
Corresponding author: E-mail: Drrahulmahla@gmail.com, dr.rahulmahla@gmail.com;

to have a significant influence on perception about bioethical matters. It is further supported by the fact that there is little variation in the respondents' opinions that cultural and traditional values, as well as veterinary education, play a role. It is stated that further research into the factors related to perception is necessary.

Keywords: Students; bio-ethics; scientists; religiousness.

1. INTRODUCTION

Integrated ethical principles that govern animal welfare practices and help to minimize suffering are known as animal bioethics. Bio-ethics is based on four main principles: 1) responsible animal management, including proper overall husbandry; 2) providing for the physical comfort, basic behavioral function, and animal health; 3) preventing or relieving needless pain or suffering; and 4) using sentient animal life for fully justified purposes. According to Fraser [1], there is no doubt about the veterinarian's traditional and evident role in these matters, and there should be continued strong veterinary involvement. Research on animals (including vivisection) and animal transportation, livestock farming, xenotransplantation, human-animal hybrids, meat consumption versus vegetarianism and veganism, the validity of zoos and circuses, religious freedom versus animal protection, hunting for pleasure, and the increasing tension between environmental preservation and animal welfare are among the issues facing this field today [2].

Animal rights movements in the eighteenth and nineteenth centuries in Europe and the United States, as well as contemporary moral philosophy, particularly utilitarianism, are the sources of the belief that animals have a moral status and ought to be protected [3]. In the nineteenth century, utilitarianism's ethics—led most famously by Jeremy Bentham, who famously argued that it matters more morally whether animals can suffer than whether they can reason—were the main environment in which the idea that animals should be part of the moral community evolved [4]. Furthermore, a growing sense of compassion for the suffering of animals in general and a growing awareness of the sensitivity towards animal cruelty (such as vivisection) led to the founding of animal rights organizations in the USA and Europe. Darwin's evolutionary theory provided scientific evidence for this new paradigm shift in morality. The results challenged the traditional natural rights stance that only rational humans belong in the moral community, which draws a clear (empirical) line between humans and animals [5].

The purpose of the current study was to determine how veterinary scientists and students view bio-ethical issues and how religiousness affects this view.

2. MATERIALS AND METHODS

The research was done in Hisar, at the Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS). Every one of Hisar's animal scientists, or LUVAS, was gathered as a sample. A simple lottery system was used to randomly select 50 members from that group. Similar to this, 20 students were selected at random using the previous method, and a sample of 120 students (100 undergraduates and 20 postgraduates) was obtained from the list of undergraduate students in each class (I to V professional year). In a similar vein, a sample of post-graduate students was selected for the research, yielding 170 respondents in all. Animal rights, xenotransplantation, animal cloning, stem cell research, and factory farming were all viewed as having a positive or negative inclination in this study. One of the independent variables was religiousness. There should be a close relationship between religion and how people view bioethical issues. According to Solomon [6], religion is a way of being in the world that offers a pathway to transcendent meaning and concepts for making sense of significant life events. A person's religion can also play a significant role in defining who they are. For many people, their religious beliefs are essential to their daily lives [7]. Decisions about the use and exposure to genetic technology are among the many areas where spiritual and religious identities can serve as a guide [8,9]. It was measured in the current study using a Hernandez [10] scale. Based on their score, the respondents were divided into three categories: low (≤ 37), medium (38–74), and high (75–111). To find out how respondents felt about bioethical issues, a schedule was made. The respondent was asked to rate their agreement, neutrality, and disagreement on a three-point continuum. Positive and negative statements received scores of 2, 1, and 3, respectively.

Table 1. Classification of dependent variable scores of respondents of different religiousness group

Variable	Category (No. of respondent)	Attitude toward animal right				F value
		Less favorable (28-65) Mean ± SD (No. of respondent)	Favorable (66-102) Mean ± SD (No. of respondent)	Strongly favorable (103-140) Mean±SD (No. of respondent)	Mean±SD	
Religiousness	Low (0-37) 45	60.40±4.04(5)	84.12±9.45(32)	109.12±6.75(8)	85.93±15.68	1.63
	Medium (38-74) 109	60.83±4.67(6)	85.36±8.94(91)	108±3.79(12)	86.50±12.57	
	High (75-111) 16	-	88.38±9.79(13)	111.33±5.13(3)	92.69±12.87	
Variable	Category (No. of respondent)	Perception about xenotransplantation				F value
		Less favorable (29-48) Mean ± SD (No. of respondent)	Favorable (49-67) Mean ± SD (No. of respondent)	Strongly favorable (68-87) Mean±SD (No. of respondent)	Mean±SD	
Religiousness	Low (0-37) 45	38.25±6.70(4)	58.78±59.49(18)	71.87±3.02(23)	63.64±11.07	1.94
	Medium (38-74) 109	39.27±4.73(11)	59.49±4.51(69)	71.86±3.20(29)	60.74±9.94	
	High (75-111) 16	35.67±3.06(3)	56.57±3.21(7)	71.33±3.08(6)	58.19±13.43	
Variable	Category (No. of respondent)	Perception about stem cell research				F value
		Less favorable (27-45) Mean ± SD (No. of respondent)	Favorable(46-63) Mean ± SD (No. of respondent)	Strongly favorable (64-81) Mean ± SD (No. of respondent	Mean ± SD	
Religiousness	Low (0-37) 45	-	57.05±4.25(22)	69.17±3.21(23)	63.24±7.17	0.42
	Medium (38-74) 109	-	57.62±4.04(65)	68.82±3.29(44)	62.14±6.67	
	High (75-111) 16	-	57.44±3.68(9)	69.14±4.41(7)	62.56±7.14	
Variable	Category (No. of respondent)	Perception about Factory farming				F value
		Less favorable (28-46) Mean ± SD (No. of respondent)	Favorable(47-64) Mean ± SD (No. of respondent)	Strongly favorable (65-84) Mean ± SD (No. of respondent	Mean ± SD	
Religiousness	Low (0-37) 45	46±0(1)	57.62±4.49(37)	66.57±1.72(7)	58.76±5.60	1.04
	Medium (38-74) 109	43.25±1.89(4)	58.38±3.57(77)	68±2.21(28)	60.29±6.25	
	High (75-111) 16	44±0(1)	57.55±3.39(11)	68.25±2.06(4)	59.38±6.91	
Variable	Category (No. of respondent)	Perception about animal cloning				F value
		Less favorable (29-48) Mean ± SD (No. of respondent)	Favorable (49-67) Mean ± SD (No. of respondent)	Strongly favorable (68-87) Mean ± SD (No. of respondent	Mean ± SD	
Religiousness	Low (0-37) 45	44.20±5.17(5)	61.25±4.59(34)	77.67±4.55(6)	61.84±9.49	0.37
	Medium (38-74) 109	44.64±3.56(11)	60.13±5.34(82)	74.94±3.68(16)	60.74±9	
	High (75-111) 16	43±4.24(2)	63.67±4.25(12)	73.50±2.12(2)	62.31±9.09	

3. RESULTS AND DISCUSSION

Hernandez's [10] scale was utilized to gauge religiousness. Three groups of respondents were identified: low (≤37), medium (38–74), and high (75–111) in terms of religiousness. The respondents' attitudes toward animal rights and their perceptions of animal cloning were positively and non-significantly correlated with their level of religiosity (Table 1). In comparison to the other two categories, respondents who reported being less religious scored marginally higher when asked about their opinions of stem cell research and xenotransplantation (Table 1). Though not statistically significant, there was a positive correlation between respondents' perceptions of animal rights and their degree of religiosity and their scores regarding animal cloning (Table 1). Although not statistically significant, there was a negative correlation between respondents' perceptions of stem cell research and xenotransplantation and their level of religiosity. In a previous study, Meyer and Nielsen [11] investigated some of the factors linked to opinions about stem cell research and discovered that moral objection to stem cell research was positively correlated with intrinsic religious orientation and religious literalism. In a similar vein, Liu and Priest [12] found a negative correlation between the public's perception of the benefits of stem cell research and the intensity of religious worship. The public's support will be stronger the less intense religious worship is practiced, and vice versa. Similar conclusions were reached by Shirley et al. [13], who found that there were strong negative correlations between religiosity and support for embryonic stem cell research. Anekwe et al. [14], on the other hand, discovered that religious opposition to stem cell research was not a significant factor. Hagelin [15] also noted that religious influence on public opinion regarding xenotransplantation was not as clear-cut.

The study's participants were Hindus, so it is important to consider the findings in this light as well. The religion holds that all living things have souls, and that human souls and animal souls are equal and progress to higher forms of conscious expression in each life. Humans are not more significant than any other living thing. It's possible that a sizable portion of Hindus follow the belief that every soul is given life for a specific purpose and that killing an animal or embryo halts the soul's advancement and results in immense suffering. As anticipated, individuals who identified as more religious had generally positive attitudes toward animal rights and a diminished propensity to support stem cell research and xenotransplantation, albeit not to the same extent.

4. CONCLUSION

The results imply that religiosity does not appear to have a significant influence on how people perceive bioethical issues. The assertion that cultural, traditional values, and veterinary education have an impact is further supported by the fact that the respondents' opinions don't differ all that much. It is suggested that additional research be done on the factors related to perception.

ACKNOWLEDGEMENTS

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Fraser A. Comparative Animal Behaviour and Bioethics. ENCONTRO ANUAL DE; 1991.
2. Purdy LM. Reproducing persons: Issues in feminist bioethics. Cornell University Press Book; 1996.
3. Jonsen AR. A short history of medical ethics. Oxford University Press; 2000.
4. Singer P. Animal Liberation. A New Ethics for Our Treatment of Animals. New York: New York Review Book; 1975.
5. Schopenhauer A. The two fundamental problems of ethics. Cambridge University Press Book; 2009.
6. Solomon RC. Spirituality for the skeptic: The thoughtful love of life. Oxford University Press Book; 2002.
7. Harris TM, Kelley B, Barrientos S, Gronnvoll M, Landau J, Groscurth CR, Shen L, Cheng Y, Cisneros JD. A religious framework as a lens for understanding the intersection of genetics, health, and disease. American Journal of Medical Genetics Part C (Seminars in Medical Genetics). 2009;151:22-30.

8. Gertz I. The relation of moral reasoning and religion: A review of the literature Counseling and Values. 1984;28:94-116.
9. Clark JW, Dawson LE. Personal religiousness and ethnical judgments: An empirical analysis. Journal of Business Ethics. 1996;15:359-370.
10. Hernandez, Brittany C. The religiosity and spirituality scale for youth: Development and initial validation." PhD diss., Louisiana State University; 2006. Accessed on June 3, 2016.
11. Meyer MJ, Nelson LJ. Respecting what we destroy: reflections on human embryo research. Hastings Center Report. 2001;31(1):16-23. Press, New York, NY.
12. Liu H, Priest S. Understanding public support for stem cell research: media communication, interpersonal communication and trust in key actors. Public Understanding of Science. 2009;18(6):704-718.
13. Shirley, Brossard D, Scheufele DA. Effects of value predispositions, mass media use, and knowledge on public attitudes toward embryonic stem cell research. Inter. national Journal of Public Opinion Research. 2008;20(2):171-192.
14. Anekwe EC. Survey Attitudes Toward Stem Cell Research. Columbus State University; 2002.
15. Hagelin J. Public opinion surveys about xenotransplantation. Xenotransplantation. 2004;11(6):551-558.

_____