



ORIGINAL CONTRIBUTION

An Assessment of Knowledge and Attitude Regarding Animal Suffering and Rights among University Students in Punjab, Pakistan

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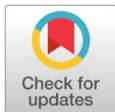
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Abstract— In the social sciences, assessment of societal attitudes toward animals' rights is very important to understand the relationship between science and the normative pattern of society. In the present study, a survey was carried out to determine the knowledge and attitude of Pakistani university students toward animal suffering and rights. By reviewing existing literature, limited studies were carried out in Pakistan. A random sampling technique was used in which an online cross-sectional study was conducted, and 200 respondent students participated in the survey from different public-sector universities in the province of Punjab, Pakistan. The data was collected through a web-based questionnaire. The questions were designed to explain the respondents' views toward animals' suffering and rights while keeping in view the cultural and religious perspectives. Study results demonstrated that a surprising majority of students, including ladies and men (55% p 0.05), were not well aware of animal rights. About 49.4% of respondents did not consider it an injustice, while 51.8% considered it right to kill the animals to achieve trophies. Furthermore, it has been observed that about 84% (p 0.05) were in favor of the adoption of pets. The level of attitudes toward animal care varies concerning age, education, and residency in rural or urban areas; however, the trend remains equal in each gender. In short, students do not know about animal rights. Considering how important animal rights are, this study showed that the Higher Education Commission of Pakistan needs to hold workshops and awareness campaigns in universities to teach students about animal rights and how to protect them.

Index Terms— Animals rights, Economic and social benefits, Pakistan, Suffering, University students,

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Introduction

Background of the study

Because of the influences of various religions, economic situations, behaviors, and degrees of knowledge on human beings everywhere in the international, there may be a wide range of responses and attitudes closer to animal suffering and rights. Moreover, cultural traditions related to animals for economic or emotional benefits also drive the difference in opinions among people about animals (Head, Klocker, & Aguirre-Bielschowsky, 2019). Cultural attitudes toward animals in distinctive areas may arise due to the diversity of the need to use animals for human desires.

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It can be located in the assessment of harsh climates and the other areas where animals are used for agricultural purposes, domestication for meals, clothing, and other personal enjoyments (Bergmann, 2019a, 2019b; Dunn, 2020; & Phillips, 2008). Numerous research has been published that looks into human attitudes toward animal rights, particularly in Western countries. (He, Evans, Liu, & Shao, 2020) But only a few studies display the mindset of non-western internationals, populations closer to animal suffering, rights, and welfare (Flynn, 2011; Gustafsson, Alawi, & Andersen, 2019). Developed countries have a high level of people's knowledge and awareness levels toward animal rights, and they have established acts and punishments rules regarding animals' suffering (Broom, 2014). A few south-Asian international locations, including Pakistan, lack the proper laws and rules guidelines regarding animals' protection and rights (Pervin, Ranchhod, & Wilman, 2014). The battle to injure an animal for the pleasure of eating meat creates a moral turmoil, affecting consumer reactions and selective, commercially pleasing animals (Lin-Schilstra & Fischer, 2020).

The welfare of farm animals is increasingly worrying meat producers as well as consumers and many more communities (Buddle, Bray, & Ankeny, 2021). The welfare of farm animals becomes a very important part of modern global livestock production. Animal welfare science and social policy-making are needed to find new ways to enter into global food security and sustainability discussions (Buller, Blokhuis, Jensen, & Keeling, 2018). In France, Belgium, and Great Britain, many people are against animal research compared to people in Japan and United States (Pifer, Shimizu, & Pifer, 1994). Male and females have different choices toward meat consumption as men prefer meat more than women. Women are highly motivated to follow a low vegetarian diet compared to men (Modlinska, Adamczyk, Maison, & Pisula, 2020).

Statement of the problem

In particular, to this study, the only law regarding animal rights used in Pakistan is the ban on Animal Abuse '1890 introduced during the British colonial era. According to those laws, animals can feel pain and acknowledge their suffering from being smashed or beaten. Such activities protect the animals from injury during the fight, physical abuse, and negligence such as hunger, thirst, congestion, and define punishment in the form of fines and imprisonment (Qazilbash, October 2021). The present study aimed to determine the knowledge and attitude of university students in the province of Punjab, Pakistan. The study focuses on students' behavior toward animals suffering from overuse, starvation, and unkindness from their owners for economic benefits and their attitudes toward companion-residence pets (dogs, cats, and birds). The present study aimed to explain the attitude of Pakistani universities-graduate students toward animal suffering and rights. The look has aimed to engage province-wide university students to reap quantitative information on their current understandings, recognition, and attitudes toward animal use and their rights closer to humans. Furthermore, through the inputted questionnaire-based interviews, the study has been concerned with knowing how these attitudes vary inside the country among different regions, societies, and other demographic levels. Going through these mentioned aims of the study will permit us to achieve the proposed targets.

Objectives of the study

- To assess the level of awareness and attitude regarding animal rights and suffering among university students;
- To draw a comparative analysis of the respondents' socio-demographic profile toward their level of awareness and rights regarding animal rights and suffering.

Literature Review

The battle to injure an animal for the pleasure of eating meat creates a moral turmoil, affecting consumer reactions and selective, commercially pleasing animals. When we combine the findings into a complete version, we recognize that modern research lacks how personal factors change and adapt to circumstances, limiting the expertise of real-life customer problems and their choices of animal-friendly products (Lin-Schilstra & Fischer, 2020).

A study examines whether people are more emotionally disturbed by using non-human animal reviews than human suffering or abuse. Two hundred and fifty-six students from a large northeastern university have been asked to show their diploma in sympathy for an older person or infant who has been brutally beaten, unlike an older dog or a domestic dog, as described in a false information document. We reasoned that the vulnerability of the victims determined by their age and not the type of animal could determine their levels of stress and individual circumstances. However, the major impact of age now not on species has become greater. We also saw increased empathy for human victims, dogs, and puppies that were more fully developed than humans with this problem. Age makes a difference in the sensitivity of those suffering from dogs; however, it is no longer present in those suffering from dogs. In addition, women donors were more sympathetic to all victims rather than their anti-male number (Wagner, Owen, & Burke, 2019).

The purpose of this multicultural research conduction is our development (Spain, $n = 1455$) and the rise. The USA (Mexico, $n = 833$) turned out to be a test of how meat consumers understood the welfare of farm animals and how these. Opinions and attitudes may

change or differ. Cultural examination identifies that animal welfare is a variable cost between the people of Mexico and Spain. But, the importance of animal welfare for Consumers varies according to social and gender variability, rural or urban origin, and education. Qualifications and age. Consumer motivation in each international area to build this integration around. The importance of the welfare of farm animals is different. To the Spanish people, animal welfare seems to be a vicious, administrative, and true crime that needs to benefit society. In contrast, to Mexican customers, the animal welfare is still the goal of aspiration. Whatever the case, such a split can grow into a major collision. It has been transformed into a solid currency that has been brought to the forefront of the meat market (Estévez-Moreno, María, Sepúlveda, Villarroel, & Miranda-de la Lama, 2021). The issue of animal violence has largely been ignored by family and other family experts. After looking at why animal abuse is ignored, it is said that those who study and work with families need to take care of animal abuse for seven reasons: (a) animal abuse is serious misconduct against children and adolescents; (b) it is a common childhood phenomenon; (c) there may be adverse effects on the development; (d) animal violence is related to human violence; (e) is connected and maybe a symbol of domestic violence; (f) the welfare of the accompanying animal is ignored; and (g) will assist in the benefit of the community with less violence. The effects of research, policy, counseling and human services, and family health education are discussed (Onyskiw, 2007).

Studies have shown that the success of wildlife conservation depends on local attitudes toward wildlife. Informal interviews were conducted with 240 respondents living in five villages outside the city southwest of Rungwa Game Reserve (RGR). Results revealed that 89% of respondents knew about wildlife conservation, and their understanding varied according to age, education, immigration distance, and protected area (PA). Factors influencing the attitude of local people about wildlife in the area include age, distance to PA, education rate, and sources of income. Plant damage and damage are bad influenced human attitudes toward problematic animals. To work on conservation, local attitudes toward wildlife should be the same consideration. This conservation will be achieved through timely compensation programs and the involvement of local people in conservation, planning, and the provision of sustainable education programs conservation (Hariohay, Fyumagwa, Kideghesho, & Røskraft, 2018).

As the welfare of farm animals becomes a very important part of modernity global livestock production, animal welfare science and social policy-making are needed to find new ways to enter into global discussions on food security and sustainability. In this paper, they explore how both animal welfare science and policy should address these emerging world controversies after establishing significant benefits in animal welfare policy and the maturity of animal welfare scientists. They identify and evaluate the potential impact of these current debates, and they claim to have the power to make great changes in our understanding, as well as our response to this animal welfare (Buller et al., 2018).

Over the past few decades, we have made great strides in recognizing ethical principles and providing animal care, but the main focus of mammals. This is due to bias in research and especially in non-scientists (in 'famous') animals, which leads to part of the discussions about animal exposure in textbooks directed to the public. This is somehow due to political pressure, and it can lead to unequal conservation efforts and bias towards those targets on social issues. As a result, there has been a great decline as well as anxiety sensitivity and well-being of fish, as well as the less focused but more complete abandonment of consideration for all invertebrates. That means that human efforts are focused on 0.2% of the world's species of animals, and education about non-mammals, especially those targeted at children, is needed to increase this focus and take full care of the planet's inhabitants (Mather, 2019). Most of our current understanding of animal attitudes toward animals is from studies performed in Western countries. China, however, is the world's largest producer of domestic animal use and has one of the most populous people in the world. We researched public opinion to better understand the Chinese people's knowledge about animal welfare and their attitudes about steps to use to improve. Most respondents were unaware of this definition of animal welfare, but awareness seems to have increased in recent years. The welfare of wildlife was considered extremely important. Good social effects on taste and food safety were highlighted, and respondents were willing to pay for additional animal feed raised in a good social environment (Carnovale et al., 2021).

The welfare of farm animals is increasingly worrying meat producers as well as consumers and many more communities; however, these groups consider animal welfare in different ways, which may present an obstacle to effective communication and conflict resolution between these groups, especially as livestock producers are facing increasing scrutiny by members of the public. As much research has been done on producers' understanding of animal welfare based in Europe and North America, we have used qualitative methods to check producers' understanding of animal welfare in the red meat (beef and sheep) sectors in Australia. Through interviews, we found that Australian producers link "good welfare" with production once profit and were willing to use new methods to improve the welfare of animals. The producers were concerned about the negative public perceptions of the industry and suggested that education is needed to correct the negative stereotypes about the industry. Australian producers emphasize the relationship between climate and animal welfare, often explaining their efforts to do their best from time to time bad weather, important findings as awareness of climate change, and its effects continue to increase. Ours The findings contribute to a broader effort to identify shared values between different stakeholder groups (i.e., producers, consumers, and the wider community) to highlight common areas between these groups and provide effective ways to promote dialogue on human and meat production and animal welfare practices can continue to evolve and improve (Buddle et al., 2021).

As community members and animal workers become increasingly concerned about animal welfare, there has been an increased interest of experts in veterinary practice psychologists and students are referring to animals, as this may affect human behavior, which ultimately leads to failure in animal welfare. Here we have investigated the details and opinions of Italian veterinary students about the welfare issues of non-human animals that may predict their mental state. Surveys to obtain information about demographics, experience, and opinions about various animal categories, including the Animal Attitude Scale (AAS), were controlled for veterinary medicine graduates at three Italian universities. Data updated non-parameter tests are used, and a value of $p < 0.05$ was considered statistically significant. All in all, in 876 students who completed the questionnaire, women (75.1%) made up the majority of students in all years of study. Although veterinarians exhibit animal welfare attitudes (i.e., points = 64.20 ± 0.24 out of 100), findings elevated that year of study, gender, and location had a significant effect ($p < 0.05$). In this study, we found a collection of features that, individually or collectively, help predict the reader's attitude towards animal welfare issues, which will have been instrumental in developing a curriculum strategy for animal education in Italy (Pirrone et al., 2019).

Material Methods

Respondents inclusion

A quantitative questionnaire survey was conducted across all public sector universities of Punjab, Pakistan. Punjab is a very populated province of Pakistan with 30.7 million people. The reason for selecting the Punjab province is its better educational system. It is the leading province in the country with a high literacy rate. There are 12 public sector universities approved by the Higher Education Commission (HEC) of Pakistan. A web-based quantitative questionnaire technique was adopted to evaluate the knowledge and attitude of Pakistani university students toward animals' rights and animal pain. Electronic social media tools (e-mails, WhatsApp, Facebook, and Instagram) have been used to approach the students throughout the province. We collected the responses of 200 students. Furthermore, the study included students, both genders male and female, from rural and urban areas and with different levels of education, bachelors, and masters. The reason for collecting online responses and a low number of respondents is COVID-19 restrictions. These restrictions led to the closing of public sector institutes and a lack of social gathering opportunities between students and interactions. The newly designed questionnaire was divided into three different sections to collect data, and each section further consisted of questions. There were six questions in Section 1 regarding bio and demographic information from each participant. Section two, with 09 questions, represents animal suffering. Section three, with 21 questions, represents the respondents' knowledge, attitude, and practices regarding animal rights and experience and their views on animal suffering in society. The software SPSS 20.0 was used for initial descriptive (Frequency) and inferential analysis to measure respondent knowledge, attitude, and subject-related processes. In this regard, correlation and regression tests were applied to obtain the results according to the study's objective. The researcher had categorized respondents based on their level of education, i-e, Bachelor's, Master's, and Ph.D. degrees, to assess and compare the basic knowledge of each respondent with their awareness of animal rights and attitudes towards their social suffering.

Table I
Demographphics (n = 200)

Variables		Frequency	Percentage
Gender	Male	90	45.0
	Female	110	55.0
Age	Less than 20	12	6.0
	20 to 30	177	88.5
	Above to 30	11	5.5
Religion	Islam	198	99.0
	Christianity	1	0.5
	Hinduism	1	0.5
Education	BS/BSc	138	69.0
	MA/Phil	49	24.5
	PhD	12	6.0
Provincial resident	Punjab	194	97.0
	Sindh	2	0.1
	Balochistan	1	0,5
	KPK	3	1.5
Do you have any pet	Yes	70	35.0
	No	125	62.0

Table I shows the frequency and percentage of the Knowledge and Attitude toward Animal Suffering and Rights related to Socio-

demographic characteristics of the respondents. The above table shows that most of the respondents were females (55%), 88.5% of the respondents were aged 20 to 30, and 99.0% of the respondents belonged to Islam. The majority of the respondents were bachelor's degrees (69%) and master's degrees (24.5%). Moreover, most of the respondents (97%) were from Punjab province, and (35%) of the respondents had a pet.

Table II
Model summary ($n = 200$)

Model	R	R Square	Adjusted R Square	Std. An Error in the Estimate
1	.500a	.250	.246	6.18098

a. Predictors: (Constant), akr (attitudes, knowledge, and rights)

The value R denotes correlation in the above-given Table II. The value R square given in the Table II shows that unit change in one of the independent variables would affect the same independent variable by the same unit.

Table III
ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2518.393	1	2518.393	65.919	.000b
	Residual	7564.482	198	38.204		
	Total	10082.875	199			

a. Dependent Variable: animal suffering
b. Predictors: (Constant), akr

The regression ANOVA test of dependent variable suffering and independent variables attitudes, knowledge, and rights indicates the response of university students.

An ANOVA table is used to check whether or not the model fits the given data well. If the value of F is greater than five while the significant threshold is less than 0.05 then the model is considered to be well fitted. The above model is less fitted and has a weaker relationship between the two variables.

Table IV
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.093	3.004		3.027	.003
	Akron	.412	.051	.500	8.119	.000

a. Dependent Variable: animal suffering

The regression coefficients table shows dependent and independent variables. Table IV given above is used to calculate the influences of independent variables on the dependent variables. The independent variables such as attitude, knowledge, and rights showed a positive and significant effect on the dependent variable, animal suffering.

Table V
Correlation among dependent variables and independent variables ($n = 200$)

	Animal	Suffering	Akr
Suffering	Pearson Correlation	1	.500**
	Sig. (2-tailed)		.000
	N	200	200
Akr	Pearson Correlation	.500**	1
	Sig. (2-tailed)	.000	
	N	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

Table V given above is used to draw inferences regarding correlations among independent and dependent variables. The data indicates that the independent variables (attitude, knowledge, and rights) had a positive and significant correlation with the dependent variable (animal suffering).

Results

Demographic characterization of participants

Findings from the first section of the study reveal that, in total, 200 respondents, collected data has 45% male and 55% female respondents, of which 68% are from rural areas of the Punjab province. Furthermore, 69% of respondents are bachelor's students, and only 35% respond yes to whether they have pets at home.

Respondent's views and attitude

In section two, 63% of respondents strongly disagree, 1.5% strongly agree, 5.5% agree, 4.5% are neutral, while 25.5% disagree with the over-use of animals for economic benefits and their killing for sport and fun. Similarly, 18.8% of respondents strongly agree, 30.2% agree, 28.8% are neutral, and 22.2% disagree with the over-use of animals.

In particular, in this study, the results of section three show that most respondents have no concern or objection to animal abuse and its use for both economic and scientific benefits. Outcomes display that forty-eight% of respondents agree with the use of nets to kill the fish within the rivers for business fishing, and 3.5% take into account it is right to kill the elephant to attain trophies and tusk at the same time as forty nine% of people strongly disagree with this exercise. Furthermore, findings from other questions related to the respondent's views and attitudes are also alarming and highlight the critical need and importance of awareness about animal use and rights in the educational institutes of Pakistan.

Respondent's knowledge and opinion

Going through the reaction to questions related to students' know-how about animal rights and the significance of their presence, it's been found that the university students lacked proper awareness about animal rights. The study shows that around 82% of respondents lacked the particular laws against animal abuse and hurting.

However, 46.5% of respondents think that proper rights should be given to animals and strict action against the one who committed animal injustice and abused them.

Intra age-education and prospective towards animal care and rights

Regardless of the questions from any section of the study, our findings reveal that students' knowledge and attitude toward animal suffering and rights the awareness level increased with the increase in education and age. As aforementioned, 69% of respondents belong to the bachelor training with age more often than not beneath 22 years so have a low level of consciousness about the difficulty. However, we saw a significantly raised awareness about knowledge and their attitude toward animal suffering and rights.

Discussion

Thinking about the current era of education and the relationship between social science and societies, in comparison to other developed countries, the present study's findings showed that the Pakistani students have negative attitudes toward pets and their rights. Our research data on responses from Pakistani students deviate from what has been found in other studies on human-animal relationships in Europe, where the response rate reflects the highest rate of pets (Boissy et al., 2007). Our findings do not support significant statistical differences between men and women among all university students across the Punjab province.

Retrieved data shows that Pakistani university students show no concerns and raised objects toward animal overuse and abuse for sport and fun. Similarly, they didn't show a significant response against using chemicals to kill the fish for commercial fishing and killing an animal to obtain their head trophy. There could be many possible explanations for this low level of education about animal rights and the concern of university students in Pakistan. However, some are given as Firstly, a possible explanation is that higher education often provides a better understanding of animal-related behaviors and positive attitudes toward pets. (George, Slagle, Wilson, Moeller, & Bruskotter, 2016; Pinheiro, Rodrigues, & Borges-Nojosa, 2016). Secondly, perhaps the Pakistani respondents' generally lacked subject information related to animal rights and care in their education curriculum. Thirdly, a more close reason for this low awareness and negative attitude in youth might be due to our societies' prevailing economic, cultural, and social values. For example, the country's current economic crises and situation birthed the thought that to meet the economic needs, extensive animal killing and abusing them is the right option (Daly, 2017). Fourthly, in another way, some of our cultural values, like a sign of bravery is to hunt and kill the animals (forestry animals like a lion) (Linch & Holland, 2017), use the animal as a sign of tribe rank to win the competition of lifting heavyweight (camels), running a race (horse, dog) and kill the opposite animal (a hen) in fights (Archer & Huntingford, 2013; Belkhir, 2019). In the

same sense, many of our social values encourage us to hint at the animals in the surroundings or abuse them in many ways. For example, hinting at a dog or cat for nothing (Driscoll, Clutton-Brock, Kitchener, & O'Brien, 2009).

Accordance to the published literature (Johnson, Bowker, & Cordell, 2004; Olli, Grendstad, & Wollebaek, 2001), our study found significant animal concern among those with post-secondary education and developed a strong correlation between the level of education and a positive attitude towards animals and environmental concerns [Figure 6B]. In addition, in Muslims, Quran education and the Hadiths also beef up this relation and without doubt explains the importance of animals and the human duty to take care of them and act properly in all animals, such as their fellow dogs (Berghlund, 2014; Gül; Gustafsson et al., 2019).

Published literature also reveals that the attitude towards animals is shaped by education and human upbringing, which is part of the very religion in the case of Pakistan, the danger posed by lost animals exceeds human adherence to animal compassion. There is a religious law that allows for the execution of dangerous substances (Ngo, Hosaka, & Numata, 2019). According to Islamic teaching, if a cat invades a person's property, he has the right to expel the creature. If chasing a cat can only be done by killing the cat, then man has the right to kill the creature. One explanation for this variation is the well-known problem of self-report research (Esposito, 2002).

To narrate the findings of the present-day examination, it's been determined that human attitudes toward animal care and right expand with time and interplay. They also report that humans catch senseless animals in the same way they care about human children (Levin, Arluke, & Irvine, 2017).

Touching on those attitudes towards education and behavioral improvement, in cognitive ethnology, there's a common difficulty amongst humans about pets based totally on the long history of humans and animals, including dogs, cats, and horses (Shipman, 2010) and the proximity of animals to humans (Serpell, 2004). Regardless of culture, age, education, and socio-economic status, developing positive social vibes and behavioral evaluation toward animal care and rights in the youth of the present time is a need of the hour. There ought to be the companionship of younger kids toward animals so one can instill in them empathy for the need to care for them and wonderful attitudes inclusive of love and compassion.

Limitation of this Study

A limited number of studies have been conducted in Pakistan on how people view animals in general and, most importantly, how they view their pets. This lack of research makes it difficult to respond with conviction. The population in this study does not represent the population of Pakistan. The population is age-restricted and represents educated people. If possible, the study should include statistical data on the level of religious observance.

Future Recommendations

First, there is the need for further research regarding animal behavior and treatment. The arbitrators should not be allowed to kill animals painfully as no religion allows such cruelty. Now there have not been enough studies on the ethical standards of veterinary medicine. Al-Hafiz, in early 1989, discussed ethical issues related to meat production and ways to provide halal meat, but little research has been done on this topic. In Pakistan, a bill to Parliament for an increase in animal rights violations must be passed and approved. It would be in favor of activists and organizations working for animal rights.

There should be stricter penalties for those who abandon pets. Authorities need to stir up debates and discussions about anxiety and come up with effective programs to prevent animal abuse. Adequate funding must be provided for the necessary inspections required to implement the Animal Welfare Act. Before using animals in experimental techniques, researchers should recall potential strategies. Law enforcement is needed in Pakistan. Most important is the implementation of various animal safety laws and ensuring that prohibited activities do not enter the country and, in the event of a breach of the rules, take strong action against the offenders.

Animals are not gadgets or objects. This emphasizes the need to value the internal value of each animal and the fact that every animal deserves to be appreciated and cared for and worthy of living a meaningful life without unnecessary exploitation or interference. The point is to expose the realization that animal rights are a problem, an extremist issue that the public should address. It was hoped that the rights of harmless animals could soon gain widespread popularity. The complementary existence of strong legal provisions and a sensitive approach toward all living beings emerge among future generations.

Conclusion

In conclusion, we stated that a very smaller number of Pakistani university students from Punjab province show a positive attitude toward animal suffering and right. The level of student attitudes toward animal care varies concerning age, education, and residency in rural or urban areas; however, the trend remains the same in both genders. Taking all collectively, this observation represents the low stage of difficulty in the direction of animal abuse and killing for fun and the awareness degree closer to the animal proper within the country.

Considering the importance of animal rights, we anticipate that the present study has highlighted the need to exert and hold awareness campaigns- workshops on animal care and right in the universities by the higher education commission Pakistan

Availability of supplementary materials

Supplementary information accompanying this manuscript is attached with the following two files. Additional file1. Questionnaire. The questionnaire was used in this study. Additional file2. Datasheet. The excel datasheet was used in this study.

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Consent for publication

Not Applicable. Competing interests The authors declare that they have no competing interests.

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