

Owner's Perception and Satisfaction about Spaying and Neutering in Cat



A Clinical report submitted on owner's perception and satisfaction about spaying and neutering in cat

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ABSTRACT

Owner's perception and feedback about elective surgery play important role to improve the service quality of veterinary profession. Pet owners sometimes experienced mixed type of feelings of fear and confidence about spaying and neutering in cat. So, this study was aimed to find out the perception and satisfaction after performing two common surgeries of their pet. Prior to this study, a questionnaire was designed and followed during the sampling time. Total 80 samples were collected with resourceful information and categorized based on sex, breed, and heat sign that were analyzed by STATA. Among the total population, there was found 5.41% male and 48.84% female for single time appearance of heat cycle after surgery. In this study, all the cats showed the positive results only for single time for the signs of aggression, urine spray or heat cycle. After two months of surgery, all cats became calm and quiet that was the main desirable objective of the owner to do surgery. So, the result of this study helped the veterinarians in understanding pet owners' attitudes and satisfaction toward neutering and spaying.

Keywords: Perception, satisfaction, cat owners, spaying, neutering

INTRODUCTION

During the last four decades, the rapid growth of the urban population has taken place in Bangladesh. Since 1971, the real per capita income of Bangladesh has increased more than 130 percent which helps to uplift the standard of living of people (Helal and Hossain, 2013). Nowadays, people are gradually becoming interested in the rearing of pet animals because urban society has mostly nuclear families where most of the family members are busy with their activities. To avoid loneliness, they frequently rear pet animals, especially cats (Bradshaw, 2017). People feel less lonely and possess psychologically better spending time with the companion animals (Antonacopoulos and Pychyl, 2010). It was reported that the pet owners have greater satisfaction and happiness in life than the non-owners (Bao and Schreer, 2016).

Through religious views; rearing a cat is not forbidden or haram in Islam. It is permissible to keep cats in the house as they are not harmful. That's why cats are allowed to roam around houses and mosques. Due to, how cherished and loved cat in Islam, the mistreatment of this animal is considered as lethal sin..In Hinduism, all of life is sacred. So, cats are somewhere sacred to them. Also in Buddhism, killing any animal is forbidden and a great sin.So, cat is really a popular pet to rear in home as family member in Bangladesh. But from puberty, due to their different behavioral signs during heat season, the owners sometimes feel annoyed on their loving pet. From this, view they always feel a permanent solution to decrease the heat signs that is called sterilization.

The surgical removal of female animals' reproductive organs is known as "spaying" and a male animal's testicles resection is referred to as "neutering." Both surgeries are performed under proper anesthesia. The veterinary surgeon may keep the pet under inspection for a couple hours to several days, relying on the animal's maturity level, size, nutrition, and response to the anaesthesia. Sterilisation has many benefits, including improving the health of pet animals, reducing undesirable behaviours, and preventing unwanted population. First and foremost, sterilising pets will help them live a longer and healthier life. Spaying and neutering reduce, or can even eliminate, a number of health problems that are difficult and/or expensive to treat. By

neutering male animals, testicular cancer and prostate problems can be prevented. Spaying helps to prevent uterine infections and breast tumours in female animals.

Sterilisation may also help to change unwanted behaviour from animals. For example, some aggression problems in male animals can be avoided by neutering. By spaying female animals, they will no longer go into heat. This will help stop a number of undesirable behaviours in both males and female animals. In females, it is common for them to urinate more frequently in an attempt to attract males. They often will get blood on furniture, exhibit nervous behaviour, and attract unwanted males to home.

The cost of a pet's sterilisation surgery is a lot less than having to care for a litter. It is advisable to sterilise the cats before they are five months old, but adult cats can also undergo the surgery, although they may be more at risk for postoperative complications in older cats (Perez, 2019). Each animal is different and will require a specific treatment plan. Owners' perspectives of their pets are also crucial. If a pet is seen as a companion rather than a working animal, owners are more inclined to neuter it (Faver, 2009). The decision to neuter was demonstrated to be positively impacted by increased knowledge of the advantages and disadvantages of sterilising female cats (Faver, 2009).

There are disparities in the rates of neutering between cats and dogs. The beliefs and attitudes of male and female owners differ as well (Blackshaw & Day, 1994). Male owners believe that neutering can alter a cat's nature because they view it as losing the maleness of the animal. If given the option again, 61% of male owners and 47% of female owners said they would not neuter their cat (Blackshaw & Day, 1994). Veterinarians can be crucial in addressing issues with spaying and neutering and overpopulation, as well as advising pet owners on the best course of action (Voith, 2009). According to Diesel, Brodbelt, and Laurence (2010), the advice given to the owners by veterinarians varies frequently. For instance, there was little consensus among veterinary clinics regarding the ideal time to neuter female cats, with 16.9% of clinics advising that a queen wait until her first heat before the procedure and 20.6% not at all (Diesel, Brodbelt & Laurence, 2010).

Moreover, after surgery few cat either male or female sometimes show heat sign like aggressiveness, or spraying of urine for single time on immediate next heat. Sometimes cat may show heat signs for more than single time yet they have been spayed or neutered. There are so many causes of showing heat for multiple times after being spayed or neutered. So, owner's satisfaction after surgery mainly depends on this behavioral change after surgery. And this satisfaction and review about surgery are very much important for future improvement of surgery and also to give better suggestions for the pet.

From this view the objectives of this study were-

- a) To know the perception of owners about spaying and neutering in cats
- b) To know the level of satisfaction after surgery

MATERIALS AND METHODS

Study Area and Duration of Study:

This study has been carried out thinking the parts of Dhaka and Chattogram city. The data was collected from mainly two teaching veterinary hospitals of Chattogram veterinary and animal sciences university named Shahidul Alam Quaderi teaching veterinary hospital and Teaching and training pet hospital and research center.

Study Population and Duration:

A total of 80 cat surgery cases records of Dhaka and Chattogram city area were collected during the 5 months of study period (17th Jan – 30th May, 2022).

Sampling Strategy:

The methodology of sampling has been applied by simple random method. Prior to this study, a questionnaire was designed and followed during the sampling time. Cat that had come to the upper mentioned teaching hospitals during the study period for treatment purposes were investigated for having any surgery like spay or neutering at least for six months before. Questions were close ended and covered issues regarding to the study. The cat owner responded to the questionnaire according to their experience they had faced before surgery and after surgery. At the time, 80 registered samples were conducted where 42 female and 37 male and their owner perception was collected after completion of sterilization their cat about six months ago.

Data Analysis:

All data were tabulated using commercial software (Microsoft Excel version 2016, Microsoft, USA), analyzed with a statistical program (STATA-14) and results expressed as frequencies, proportions and percentage.

RESULTS

Owner's perception about sterilization:

In this study, the data was collected from the owners who were very much interested to do their pet sterilized due to avoid the unaccepted behavior. All the owners were very annoyed about the behavior of heat period. In this study three types of cat breed were included-local (41.25%), cross (6.25%) and Persian (52.50%). Among the total population the collected data mainly of 37 (46.25%) male and 43(53.75%) female cats. [Table-1]

Table-01: Breed and sex

Breed /Sex	M	F
Persian	26 (61.90%)	16 (38.095%)
Cross	2 (40%)	3 (60%)
Local	9 (27.27%)	24 (72.72%)

Frequency of heat cycle after surgery:

All the owners of 80 cats were carefully asked about the onset of 1st heat after surgery both in male and female. Because the main concern of owner for deciding to do surgery was to stop heat cycle. Table no. 2 showed the heat cycle after surgery in each sex was varying. From this study it was found that total 5.41% male and 48.84% female cats showed single time of heat cycle after surgery (Table-2).

Table-02: Showing heat sign after surgery

Sex	NO	YES	Total
M	35(94.59%)	2(5.41%)	37(100%)
F	22(51.16%)	21(48.84%)	43(100%)

Change of aggressive behavior after surgery:

During the study it was found that aggressiveness of cat was another cause for which owners also wanted to do surgery. In this study, only in male (40.54%) there was found aggression behavior after the surgery. This aggression nature was mainly found in the next immediate heat cycle after the surgery. Among the 43 female cats, no one showed aggressiveness after surgery, though 21 number of female cats showed single time heat cycle after surgery (Table-3).

Table-03: Aggression behavior after surgery

Sex	NO	YES	Total
M	22(59.46%)	15(40.54%)	37(100%)
F	43(100%)	0	43(100%)

Urine spray and heat cycle:

Before surgery, during heat cycle, cats spray their urine everywhere where they want. So, the observation from this study how many cats showed urine spray nature after being spayed or neutered. From this study it was noticed that among the total male and total female 24.32% and 13.95% male and female cats sequentially showed urine spray behavior during their immediate heat cycle after surgery. But there was no significance difference between the two groups of male and female (Table-4).

Table-4: Urine spaying after surgery

Sex	Yes	No
M	9 (24.32%)	28 (75.68%)
F	6 (13.95%)	37 (86.05%)

Defecation after surgery:

Most of the cats of the total population first defecate after surgery mainly on second day after surgery. Defecation was found in 81.08% male and 70.73% female on 2nd day after surgery and 18.92% male and 29.26% female defecated on 3rd day after surgery (Chart-1).

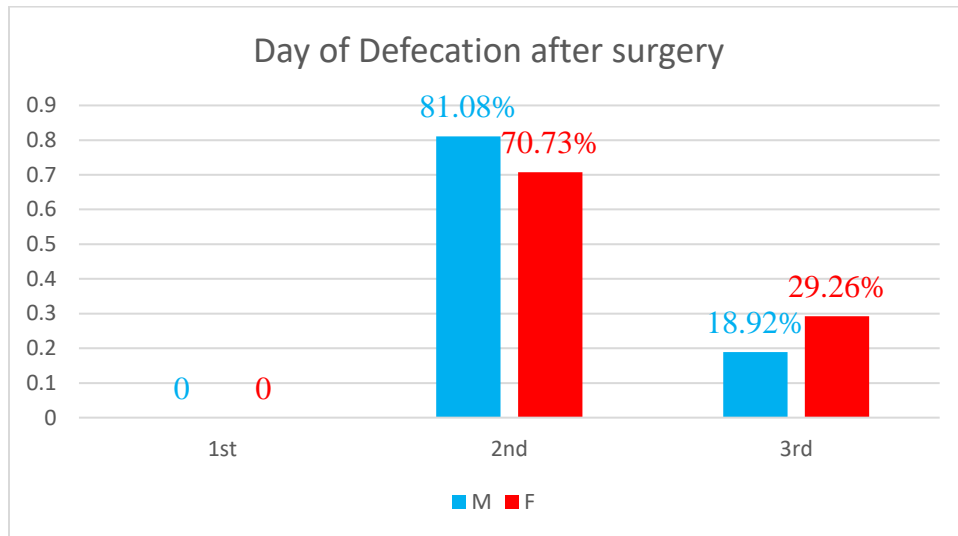


Chart-1: Days of defecation after surgery of male and female cats

DISCUSSION

Veterinary surgery is a type of service which may be important as an emergency service or as an elective purpose. Sterilization is a type elective surgery that do many changes in male and female behavior and physiology (Stacey A. McKay, 2009). Basically, after the surgery cat will not going to be more aggressive, urine spraying everywhere or showing heat cycle. When the heat cycle can be stopped at that time the objectives of pet owners of doing surgery will be fulfilled. Though, sometimes these behaviors may also be found after surgery. It should be noted that sterilizing cats does not guarantee to resolve all behavioral problems. In this study, it was found that among breeds having no significant changes in behaviors or physiology (Stacey A. McKay, 2009).

In this study it was noticed that single heat cycle after surgery in male and in females were 2(5.41%) and 21(48.84%) sequentially. It's very common to be in first time heat after surgery due to hormonal presence of previous production in the body. Hormones are taking time to be reduced for the certain period of time. Also, in male got 35(94.59%) and female 22(51.16%) in case of not showing heat sign after surgery. There was also another important finding that among the total 23 heat cycle positive population, no male or female showed more than single time heat cycle after surgery. This is a remarkable result of satisfaction of the owners. Because the main purpose to choose spaying or castration to stop heat cycle (Faver, 2009).

In case of other behavior, showing of aggression after surgery in both sex vary as in male 15(40.54%) in total and females are 0%. There is a correlation between testosterone levels and certain undesirable behaviors, such as aggression (David Yates, 2019). However, the surgery only reduces the amount of testosterone in cat's system; it does not eliminate the hormone completely. So, sometimes cats show their hormonal behavior as coming in heat just after month of surgery. Also showing aggression may occur due to this. During data collection, it was also found that the owners also told that aggression behavior became less after months of surgery (Voith, 2009).

Moreover, after surgery spraying of urine in male 9(24.32%) in total and females are 6(13.95%). Also, in male got 28(75.68%) and female 37(86.05%) in case of not spraying urine after surgery. Male cats are more likely to spray urine than female but both may do it just after the surgery in showing heat signs. It's all about changing hormones all of a sudden in body and spraying urine is also align to sign of heat (Esther Dias Costa, 2017).

There is a physiological change in cat body due to the process of surgery (Martin J. Downes, 2015). All the surgeries of this study were performed under xylazine sedation and ketamine injectable anesthesia. This anesthesia protocol might do side effects of delaying defecation which was normal for three to four days. But if the day of defecation was paused for long duration than it would be a matter of concern for the owners. Some defecate on the next day or second or third day of surgery. But it's not the same for all the animals as anesthetic dose vary to individual to individual. In this study, 30(81.08%) male and 29(70.73%) female defecated on the second day after surgery and on third day 7 (18.92%) male and 12 (29.26%) female of total population defecated after surgery. From this study it was clear that there was found smooth response to becoming all the functions to the normal. The cats don't need any purgative drugs to be administered post-operatively (Clare Palmer, 2012).

Spaying and neutering individual pet help community by preventing the birth of unwanted animals. Communities and animal shelters spend millions of dollars to control unwanted cats. Shelters are overburdened with animals, and some shelters euthanize their cats after a certain time period to allow for more. Stray cats can cause issues in neighborhood by getting into trash, spreading diseases, and displaying potentially aggressive behavior. Owners do sterilization of their cats to lessen their male aggressive behavior which causes injury through fight. It's known that intact cats having more odorous pungent smelling of urine which they spray to attract another sex which become less after surgery (Carmel Bradshaw, 2017). Finally, to lessen the reproductive behaviors which may lead to unwanted birth and further progressive life-threatening diseases (ige; mammary gland tumour, prostate cancer, feline pan leukopenia etc.) to

both male and female cats. Though, the animals in this study that were positive for single time heat cycle after surgery, didn't show the aggressive behavior, heat cycle and urine spraying more than single time. So, desirable satisfaction was found among the owners involved in this study. Moreover, the impact of the sterilisation largely depends on animal's individual personality, history and physiology (Howe, 2015).

CONCLUSION

Owner's satisfaction and feedback about surgery is very important to improve the quality and environment of any type of operations. Among the elective surgery spaying and neutering are very common all over the world. This study mainly showed the positive and negative results of aggression behavior, urine spraying and presence of heat cycle in both male and female. From this study, it was noticed only 5.41% male and 48.84% female showed heat cycle for only single time after surgery. After that single time no one showed any type of heat sign which was very important finding in this study. So, the owner of this study period was satisfied on the perception of spaying and neutering depending on which they decided to do surgery.

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BIOGRAPHY

The author, Fahria Amin was born and brought up in Chattogram, a beautiful city. She attended Bangladesh Mohila Samity Girls High School and College for her Secondary School Certificate exam. Then she completed her Higher Secondary Certificate from Chattogram College, dreamed of doing something about life science. For being an avid lover of animals, she from her childhood. So, she got herself admitted in Chattogram Veterinary and Animal Sciences University in Faculty of Veterinary Medicine. After completing her DVM degree, she wants to get involved in the field of research. Her research interest includes working on Medicinal field and also has an interest in management of animals and wildlife conservation.