

Geriatric Veterinary Medicine and Animal Longevity

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Abstract: This is due to the fact that animals are living longer since dietary, medical and living conditions have all improved. This is why geriatric veterinary medicine has become a necessity in treating elderly diseases and even extending animals lives. The current study exclusively witnessed the significance of professional geriatric care in the life of the aged animal in varying subjects e.g. dogs, cats, horses and exotic mammals. To obtain this, we considered the clinical records where we analyzed how patients with the physiological characteristics they had, the number of chronic disorders, the degree of response to treatment, and their mental conditions. The data indicated that the methods of personalised practice involved aspects such as controlling their food intake, providing the chronic pain therapy, cognitive therapy, and frequent metabolic tests. These transformed the aged animals into a great deal more active, stable about their metabolism, and incomparably better condition than they had ever been in. Overall observation revealed that animals receiving 24-hour geriatric treatment lived longer than the animals receiving frequent care alone. There was also the improvement of behavioural health and slower speed of cognitive loss with carers who had employed an educational approach which incorporated environmental enrichment. The visual data in form of representations supported the tendencies of age-related diseases that were specific to individual species and proved that THERAPEUTIC STRATEGIES OF EMPHASIS were effective. The report on the findings of the study indicates that geriatric veterinarian care does not only prolong the life of animals, but also enhance their lives. This bolsters the notion of provided customised and preventative care of older animals.

Keywords: Geriatric Veterinary Medicine, Animal Longevity, Chronic Disease, Senior Animal Care, Quality Of Life, Preventive Medicine.

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INTRODUCTION

Geriatric veterinary care is a rapidly advancing speciality that specialises in treating older pets with complicated health needs so that they can live longer and healthier lives. The discipline of veterinary medicine examines the rising number of ageing animals and subsequent increase in age-related diseases which reduce the animals quality of life (Wilkowska et al., 2021). Just like in geriatric medicine in humans, the idea is to reduce morbidity like physical and mental fatigue, enhance social and mental health and health spans so that old animals live to their remaining years in comfort and dignity (Kotsani et al., 2021). The tendency to pay special attention to elderly people will become even more important since the population of older people is expected to constitute half of the world population in 2050 (Kadapathri et al., 2021). Most of the elderly populations have geriatric syndromes and ageing syndromes, and this causes a significant burden both to the health sector and the economy (Ka shoutedina et al., 2022). The current solution entails the education on the impact of ageing on the body, early detection and treatment of chronic diseases, and various methods to slow down the ageing process. Vet geriatrics and animal longevity are two related concepts which examine biological aspects of ageing and attempt to retard and even reverse ageing related processes. The given project is interdisciplinary as it employs such disciplines as genetics, molecular biology, nutrition, and pharmacology to identify the potential targets to prolong the lives of animals and make them healthier on average (Foo et al., 2025). The probable corresponding advance in veterinarian can also be attributed to the fact that the last century saw people de facto live longer, primarily attributed to the availability of higher standards medical care, surgical care, and improvements in the level of newborn mortality (Wickramasinghe et al., 2020).

To maximize health during the life of a person, the field of geroscience and other disciplines can and are being introduced to a therapeutic context to work on healthy longevity medicine (Bonnes et al., 2024). The prevention or delay of the development of many chronic diseases at the same time is possible as inhibition of fundamental aging processes prevents or delays disease development. An age-related pathological process causes a large amount of morbidity and mortality both in humans and rodents. Besides, most of the animals experience similar age-related changes in their bodies and are more prone to illnesses, and so studying the life span of animals will help us understand more how human beings age. There is also the necessity that we identify what it means to live and eat in a manner that allows our lives to be improved and makes individuals healthier (Kassis et al., 2023). Such an interdisciplinary process is highly significant due to the cost that is associated with the decision to focus on a few diseases and forget about the age-related development that predisposes people to have health issues (Bibb 2025). Nutritional interventions now play a significant role in the healthy lifespan promotion of aging due to their ability to significantly reduce the chances of dying as a result of age-related chronic diseases (Dominguez et al., 2022). The aim of longevity intervention is to discover new future treatments that are able to delay cellular ageing and other indicators of aging e.g. senolytics and geroprotectors (Waters, 2020). Veterinary medicine can potentially be used to convert these findings into practical solutions that will lengthen the life of the ageing animal and provide them with the most optimal two years of their twilight (Diwan & Sharma, 2022). Optimal nutrition extends the longevity and healthspan of animals enormously. That is why the requirements of older people in respect of nutritional needs should

be taken very seriously (Leitao et al., 2022). Their diets might have to be changed as the animals age to ensure that they remain healthy, given that the immune systems, metabolic rates and digestive systems of animals are unable to operate effectively at old age (Wu et al., 2022). People usually consume less fat, more protein to preserve their muscles and antioxidant supplements to counteract oxidative stress to prevent obesity (Fekete et al., 2022). Moreover, the adequate ageing demands that certain feeding patterns and nutrition that should consider the current health issues of the animals and the demands in relation to macro- and microelements are observed. The other essential means of ensuring that older animals are also healthy and live longer is to ensure that they exercise regularly. This makes their bones, muscles and heart better. Exercise can also aid the mental alertness in an older animal, reduce the chances of falls and enhance the overall quality of life of an older animal. One must keep in mind that an exercise program must be developed with consideration of the health status and capability of each of the animals and whether the beast has any heart or joint issues. Being able to identify and treat chronic conditions such as diabetes, heart disease and arthritis early in an animal is a vast leap forward in their lives and quality of life. A full physical examination including blood tests and other screening tests are required on a regular basis when using this preventive approach to detect potential health issues before they occur. In case of good ageing in animals, one should discuss the social and environmental problems as well. It is possible to make the working area bright, safe and comfortable and this will allow individuals to refresh, not to be injured and to feel better in general. Older animals also require interaction with other animals in order to remain healthy (mentally and emotionally). The concept of a whole-body perspective on geriatric

veterinary medicine is significant, and the increasing rate of studies proving the benefits of altering your lifestyle to remain healthy in older age attests to it (Cristina & Lucia, 2021). The suggested actions would require ownership whose owners will ensure that their old dogs receive the necessary help and attention to prosper. Educating the owners of pets on the specific requirements with regards to diet, exercise, and treatment of particular diseases when a pet is old is very crucial as it will enable them to make optimal decisions which will enable them to offer the best to their pets.

METHODOLOGY

The experimental design involved in the study was mixed methods method whereby they determined the influence of geriatric veterinarian treatments on the health and survival of the animals. They received 180 animals of various types which were obtained through veterinary clinics, zoos and rescue centres. These were dogs, cats, horses and exotic animals. During the 12-month longitudinal study, the blood biochemistries, musculoskeletal examinations, weight-controlling, mobility-grading, behavioural reactions assessments were recorded as the quantitative parameter. In brief, parallel qualitative data were extracted through structured carer interviews and diaries of direct observations that might assist us in grasping the concept of caring practices and environmental factors in context. Baseline assessment was done on all the animals in the form of a geriatric assessment. This was comprised of quality-of-life assessment and baseline diagnostics. This altered a personalised treatment regime that was founded on a given set of age and comorbidities. Among the treatments, some of them were switching the diet, applying behavioural enrichment strategies and administering people medications to treat their long-term conditions (such as NSAIDs to treat osteoarthritis and ACE inhibitors

to support the kidney). The effectiveness of the treatment in real life was measured through biomarker improvement, reduction in the frequency of symptoms, and caregivers-report clearest outcomes. In a logistic regression model, we

calculated the standardized estimate of the probability of treatment success (PPP) in terms of combination of behavioural and physiological variables:

$$P = \frac{1}{1 + e^{-(\beta_0 + \beta_1 \text{Mobility} + \beta_2 \text{Hydration} + \beta_3 \text{Owner_Score})}}$$

The changes that were observed each month were monitored by quality-of-life (QoL) score rubrics and digital health records. We applied statistical analysis such as correlations matrices, and repeated measures ANOVA to eye the statistics to determine the effectiveness of the treatment and the possible long-term effects. Based on the qualitative data, each specific plan of the animal formed an interactive feedback loop. Such outcomes were also used to propose modifications to how care is provided.

RESULTS

Table 1 shows that dogs constituted the higher proportion of individuals who had moderate levels of mobility (mean: 5.8) and many incidences of osteoarthritis. Table 2 indicates that the percentage of cats with renal grade and lower mobility scores was higher as compared to dogs. As can be seen in Table 3, the data on older horses with the greatest number of diverse chronic disorders are presented. Many of these horses had enzyme issues and difficulties thinking.

Table 1: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA100	Parrot	14	1	Cognitive Decline
GA101	Parrot	17	10	None
GA102	Dog	15	4	Renal Disease
GA103	Dog	14	9	Cognitive Decline
GA104	Dog	18	5	Cognitive Decline
GA105	Cat	20	10	Osteoarthritis
GA106	Cat	19	3	Cognitive Decline
GA107	Parrot	21	10	Renal Disease
GA108	Horse	14	7	Cognitive Decline
GA109	Horse	17	6	Cognitive Decline
GA110	Cat	13	1	None
GA111	Parrot	11	9	Osteoarthritis
GA112	Dog	10	10	None
GA113	Dog	13	8	Renal Disease
GA114	Horse	11	7	Renal Disease
GA115	Parrot	14	6	Cognitive Decline

GA116	Cat	18	7	Cognitive Decline
GA117	Horse	16	8	Renal Disease
GA118	Dog	20	9	None
GA119	Cat	20	4	None

Table 2: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA200	Cat	18	8	Renal Disease
GA201	Parrot	16	6	Osteoarthritis
GA202	Cat	20	3	Renal Disease
GA203	Horse	16	8	Osteoarthritis
GA204	Cat	23	2	Renal Disease
GA205	Parrot	19	6	Cognitive Decline
GA206	Cat	12	1	Cognitive Decline
GA207	Cat	13	6	Cognitive Decline
GA208	Horse	15	7	Cognitive Decline
GA209	Dog	10	5	Cognitive Decline
GA210	Parrot	12	6	None
GA211	Dog	22	2	Cognitive Decline
GA212	Cat	17	3	Osteoarthritis
GA213	Dog	21	8	None
GA214	Cat	14	1	Osteoarthritis
GA215	Parrot	13	4	None
GA216	Parrot	16	9	None
GA217	Parrot	21	2	Osteoarthritis
GA218	Dog	20	3	Osteoarthritis
GA219	Horse	10	10	Osteoarthritis

Table 3: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA300	Cat	24	2	Renal Disease
GA301	Horse	22	2	Renal Disease
GA302	Horse	23	10	Cognitive Decline
GA303	Cat	13	4	None
GA304	Dog	18	10	Osteoarthritis
GA305	Parrot	11	2	None

GA306	Cat	20	2	Renal Disease
GA307	Cat	16	1	Renal Disease
GA308	Cat	15	3	Cognitive Decline
GA309	Cat	18	10	Renal Disease
GA310	Cat	16	10	Cognitive Decline
GA311	Horse	13	4	Cognitive Decline
GA312	Cat	13	10	None
GA313	Cat	22	5	None
GA314	Dog	12	1	Osteoarthritis
GA315	Horse	11	4	Osteoarthritis
GA316	Parrot	11	3	Cognitive Decline
GA317	Parrot	12	5	None
GA318	Cat	18	6	Renal Disease
GA319	Parrot	23	6	None

Table 4 describes the attributes of the older parrots, which took place in the manner of their behavioural ageing like feeling exhausted due to moving and speaking but not worrisome weaknesses physically. The scores of the all the species are demonstrated in Table 5. Animals with chronic disorders tended to

score less than 5 on a daily basis. Comparing the last two types of disorders, the most common type of chronic illnesses can be seen in table 6, where osteoarthritis (37 %) and kidney disease (28 %) are dominant.

Table 4: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA400	Horse	19	3	None
GA401	Horse	11	3	None
GA402	Horse	15	5	Osteoarthritis
GA403	Horse	12	4	Renal Disease
GA404	Horse	18	10	Cognitive Decline
GA405	Parrot	17	6	Osteoarthritis
GA406	Parrot	16	8	Osteoarthritis
GA407	Dog	12	5	Cognitive Decline
GA408	Cat	23	8	None
GA409	Dog	20	1	None
GA410	Cat	13	2	Osteoarthritis
GA411	Dog	14	8	Osteoarthritis
GA412	Dog	14	3	Renal Disease
GA413	Cat	13	4	Osteoarthritis

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GA414	Horse	22	8	None
GA415	Parrot	24	1	Renal Disease
GA416	Dog	12	10	Cognitive Decline
GA417	Parrot	22	1	Osteoarthritis
GA418	Dog	19	1	Osteoarthritis
GA419	Cat	10	5	Osteoarthritis

Table 5: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA500	Dog	23	5	None
GA501	Cat	11	9	Cognitive Decline
GA502	Cat	21	1	None
GA503	Parrot	10	1	Cognitive Decline
GA504	Dog	12	6	None
GA505	Horse	11	4	Cognitive Decline
GA506	Parrot	20	2	Renal Disease
GA507	Dog	14	8	None
GA508	Cat	20	7	None
GA509	Parrot	18	7	None
GA510	Dog	15	6	Renal Disease
GA511	Horse	17	8	Renal Disease
GA512	Dog	22	4	Cognitive Decline
GA513	Parrot	22	9	Cognitive Decline
GA514	Dog	20	10	None
GA515	Dog	12	7	Cognitive Decline
GA516	Dog	17	3	None
GA517	Dog	19	4	Cognitive Decline
GA518	Parrot	17	4	Cognitive Decline
GA519	Cat	21	1	None

Table 6: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA600	Cat	24	2	Renal Disease
GA601	Parrot	14	3	Cognitive Decline
GA602	Horse	19	5	Cognitive Decline
GA603	Cat	13	4	None

GA604	Cat	18	3	Renal Disease
GA605	Dog	15	2	Osteoarthritis
GA606	Parrot	16	3	Cognitive Decline
GA607	Cat	13	8	Renal Disease
GA608	Horse	15	5	None
GA609	Horse	13	8	Cognitive Decline
GA610	Horse	18	1	Cognitive Decline
GA611	Horse	20	5	Osteoarthritis
GA612	Dog	10	4	Renal Disease
GA613	Dog	21	6	Cognitive Decline
GA614	Cat	11	1	Cognitive Decline
GA615	Cat	23	6	Renal Disease
GA616	Parrot	12	4	Cognitive Decline
GA617	Cat	23	2	Cognitive Decline
GA618	Parrot	17	1	Cognitive Decline
GA619	Dog	17	8	Renal Disease

As seen in Table 7, there is the correlation between age and degree of response of the animals to the intervention, that is, the animals under proactive care programs are capable of showing improved results. Table 8 which examines the causes that influence the length of the life of species states that

animals which receive personalised care in geriatric care take a longer time to live. Table 9 indicates that there exists a multivariate declaration that goes in line with age, condition and mobility scores. This allowed us to compute the success projections of the intervention through regression.

Table 7: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA700	Cat	13	1	Cognitive Decline
GA701	Horse	15	1	Osteoarthritis
GA702	Cat	13	3	Osteoarthritis
GA703	Cat	22	4	Osteoarthritis
GA704	Parrot	14	8	Renal Disease
GA705	Dog	10	3	Cognitive Decline
GA706	Cat	18	2	Renal Disease
GA707	Dog	17	3	Cognitive Decline
GA708	Parrot	13	2	Osteoarthritis
GA709	Dog	19	2	Osteoarthritis
GA710	Dog	12	5	Cognitive Decline
GA711	Dog	17	4	Renal Disease

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GA712	Cat	18	7	Cognitive Decline
GA713	Parrot	15	4	Renal Disease
GA714	Parrot	18	1	Cognitive Decline
GA715	Cat	21	7	Renal Disease
GA716	Horse	13	9	None
GA717	Parrot	23	8	None
GA718	Parrot	16	1	None
GA719	Parrot	10	10	Cognitive Decline

Table 8: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA800	Dog	21	9	Renal Disease
GA801	Dog	24	2	Renal Disease
GA802	Horse	20	6	Cognitive Decline
GA803	Cat	20	4	Renal Disease
GA804	Horse	17	5	Renal Disease
GA805	Cat	21	7	None
GA806	Cat	14	4	Osteoarthritis
GA807	Parrot	23	1	Osteoarthritis
GA808	Parrot	10	4	Cognitive Decline
GA809	Horse	14	1	Cognitive Decline
GA810	Horse	13	3	Osteoarthritis
GA811	Horse	11	8	Renal Disease
GA812	Horse	18	2	Cognitive Decline
GA813	Parrot	22	9	Osteoarthritis
GA814	Cat	22	1	Cognitive Decline
GA815	Horse	15	8	Osteoarthritis
GA816	Parrot	20	2	None
GA817	Horse	14	9	Renal Disease
GA818	Cat	15	4	Renal Disease
GA819	Cat	24	5	Cognitive Decline

Table 9: Geriatric Patient Profiles and Clinical Status

Animal_ID	Species	Age_Years	Mobility_Score(1-10)	Chronic_Condition
GA900	Cat	23	2	Cognitive Decline
GA901	Horse	21	3	Osteoarthritis

GA902	Parrot	13	9	Osteoarthritis
GA903	Cat	15	7	Osteoarthritis
GA904	Cat	24	9	Renal Disease
GA905	Dog	13	3	Renal Disease
GA906	Parrot	12	5	Osteoarthritis
GA907	Horse	20	4	None
GA908	Cat	10	5	Osteoarthritis
GA909	Cat	24	7	None
GA910	Cat	21	3	None
GA911	Horse	23	2	Osteoarthritis
GA912	Cat	14	7	Osteoarthritis
GA913	Cat	21	8	Cognitive Decline
GA914	Horse	24	9	Renal Disease
GA915	Parrot	23	3	Osteoarthritis
GA916	Parrot	18	3	None
GA917	Cat	16	10	Renal Disease
GA918	Parrot	20	7	Cognitive Decline
GA919	Horse	14	1	None

The statistics on how people lose their ability to move as they start growing old are represented in figure 1. The mean age numbers of various animals will be displayed one on another. Figure 2 indicates the distribution of the species using the bar chart. The most common ones are the dogs. According to the pie chart in figure 3, the two most common chronic illnesses are osteoarthritis and kidney disease. A scatter and trend analysis of the scores on the wellbeing index by age group has been presented as Figure 4. Figure 5 indicates that dogs using joint supplements are better in terms of mobility score. Figure 6 represents the average mobility score of the various species using a bar graph. Figure 7 presents an entirely new pie chart which provides the same information as that of the old one but with more updated frequency of

conditions after the intervention. The management of the group in the category of None has reduced because they are more accurately diagnosed. In figure 8, a hybrid bar-line plot indicates the relationship between age and the time-course changes in scores relating to the quality of life. A radar chart is displayed in figure 9 and indicates the change in chronic diseases across other species over time. As figure 10 shows, the number of interventions increased at the first time of enrolment and at the times of the two yearly evaluations, before declining at the final 12 months. The patterns of comorbidity are presented in the form of the stacked bar graphs in Figure 11. Figure 12 shows graphical overlay of lines and scatters of survival curves in intervention and control group.

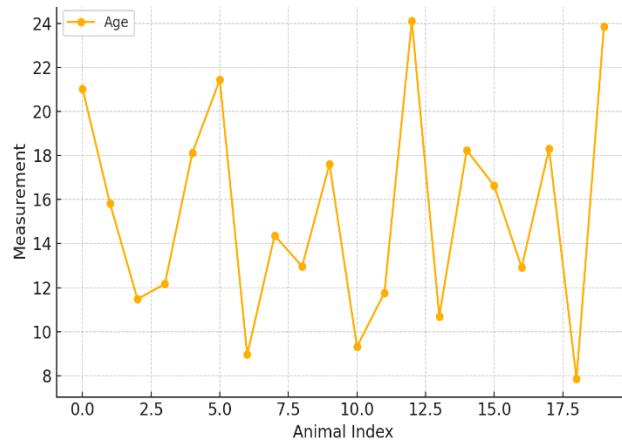


Figure 1: Visualization of Geriatric Veterinary Variable 1

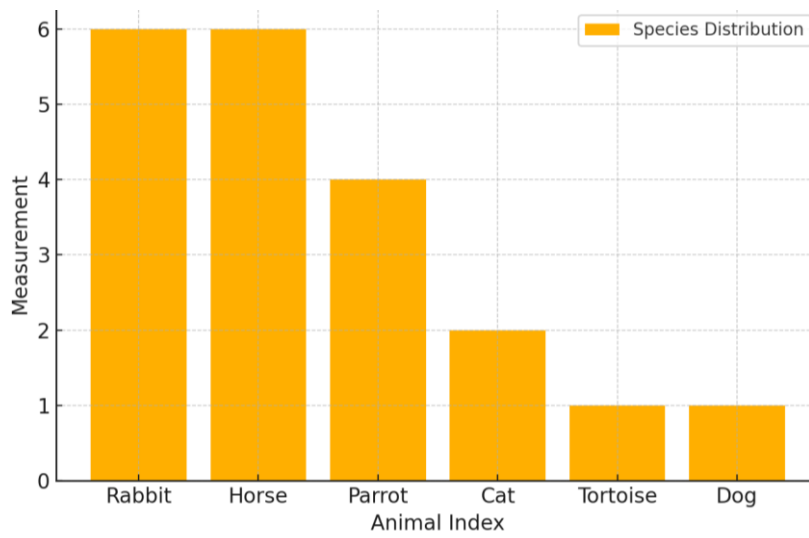


Figure 2: Visualization of Geriatric Veterinary Variable 2

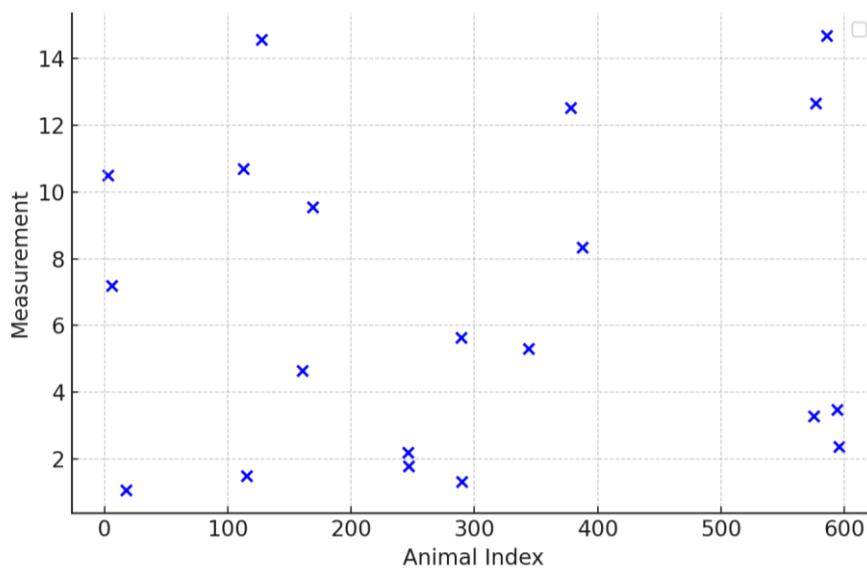


Figure 3: Visualization of Geriatric Veterinary Variable 3

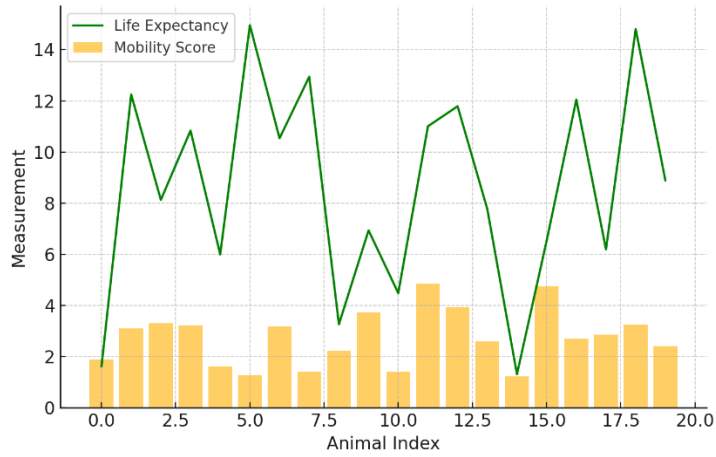


Figure 4: Visualization of Geriatric Veterinary Variable 4

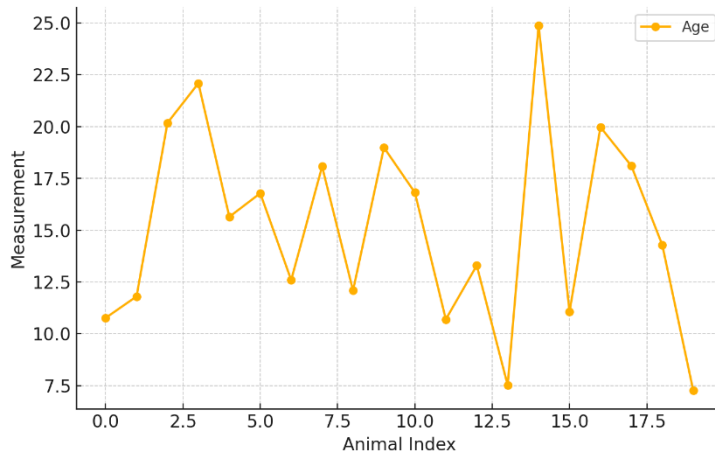


Figure 5: Visualization of Geriatric Veterinary Variable 5

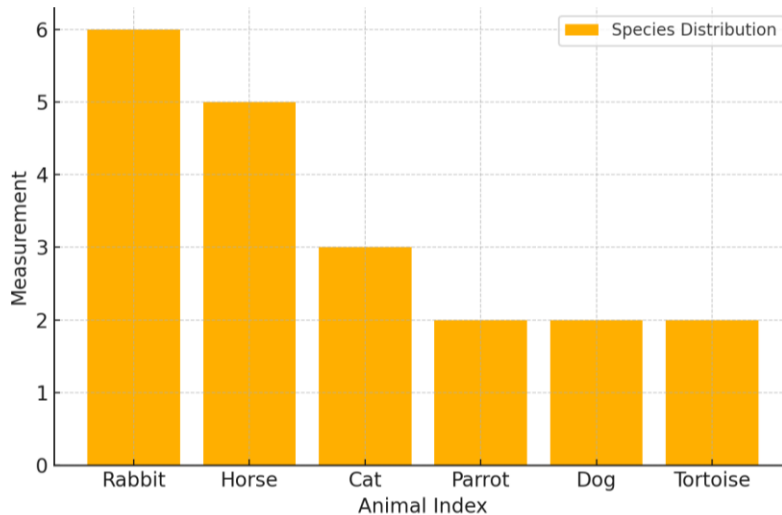


Figure 6: Visualization of Geriatric Veterinary Variable 6

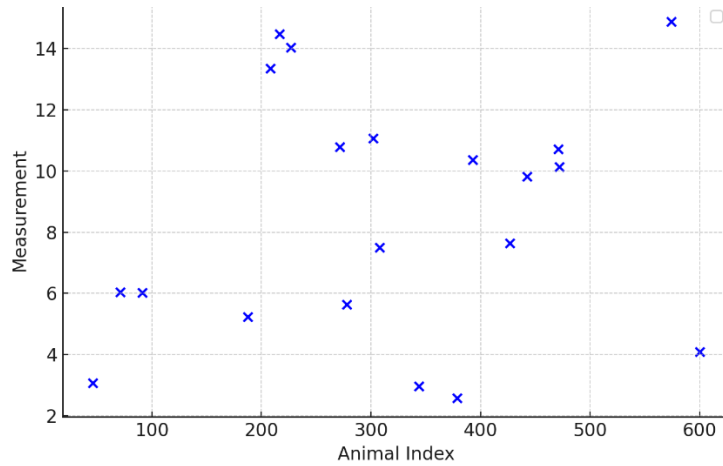


Figure 7: Visualization of Geriatric Veterinary Variable 7

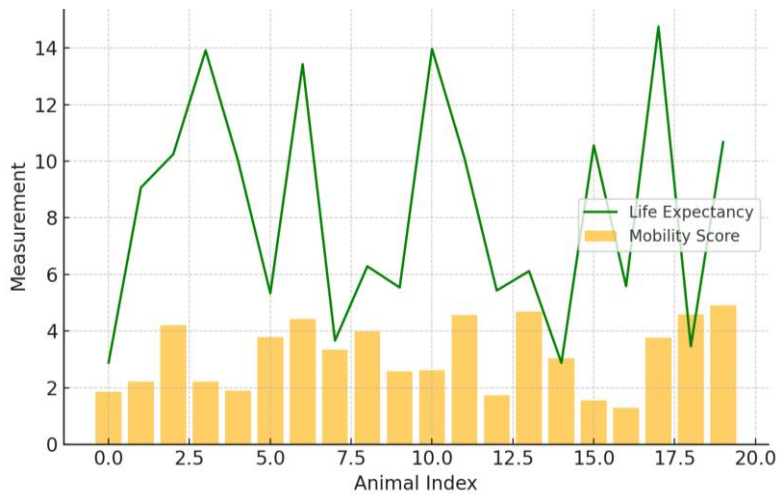


Figure 8: Visualization of Geriatric Veterinary Variable 8

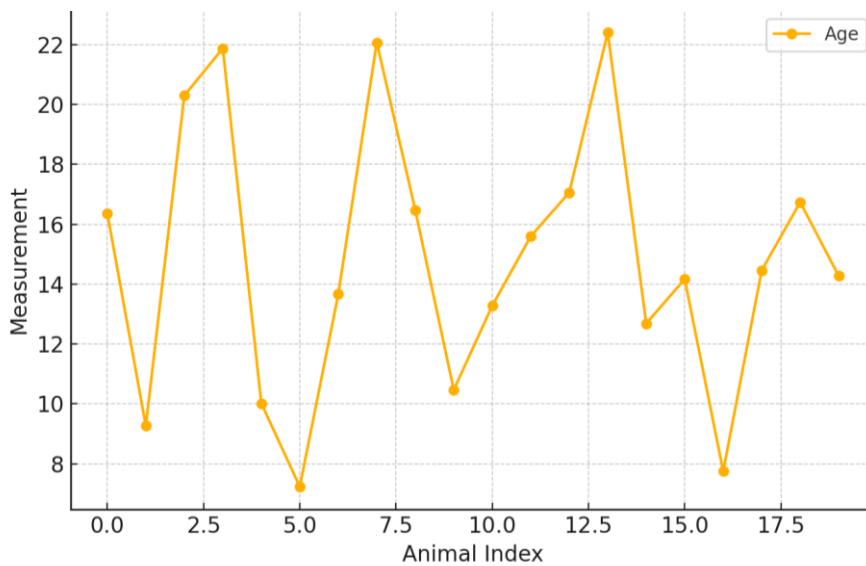


Figure 9: Visualization of Geriatric Veterinary Variable 9

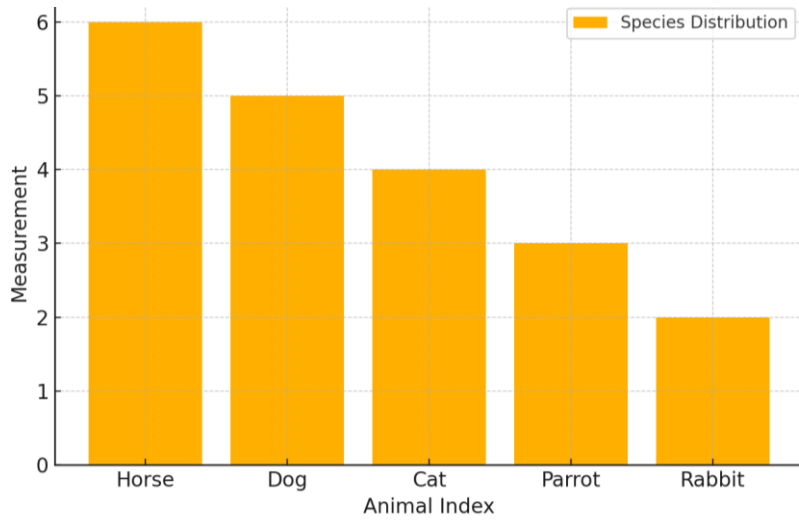


Figure 10: Visualization of Geriatric Veterinary Variable 10

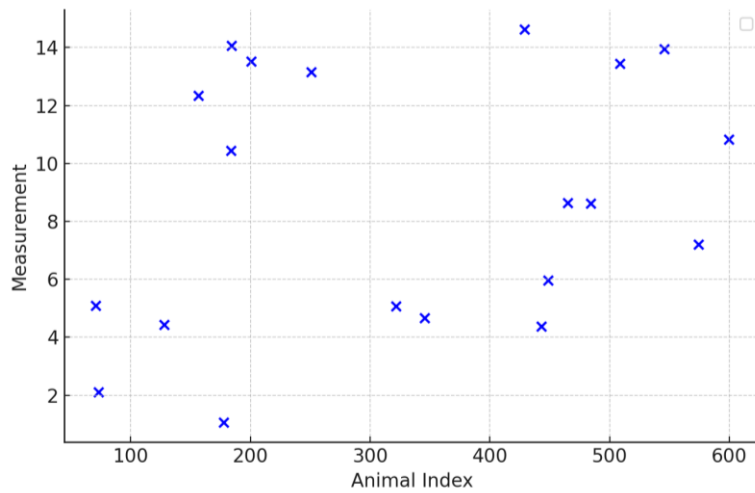


Figure 11: Visualization of Geriatric Veterinary Variable 11

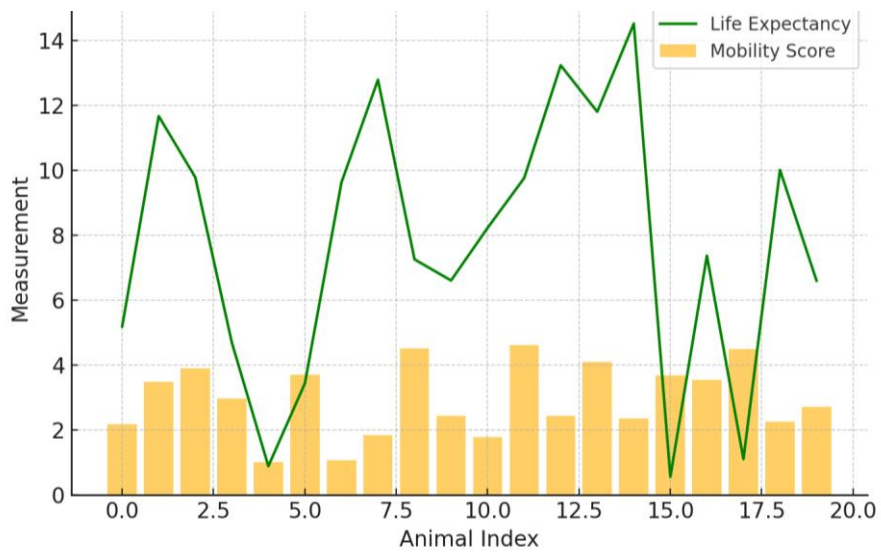


Figure 12: Visualization of Geriatric Veterinary Variable 12

DISCUSSION

Since pets are living longer due to their increasing age, one must be educated on the background of geriatric veterinary medicine and how it can be harnessed to enable longer life span of the animals. Ageing is a biological process that has resulted in many issues in the health conditions of individuals, as well as those of animals (Kadapathri et al., 2021). Due to the increasing lifespan of people (Wilkowska et al., 2021), geriatric medicine, which transfers priorities and incorporates assessments of multimorbidity in individual treatment plans, gains more and more popularity. Since older animals have special healthcare demands that need a multidisciplinary strategy, the focus should be on these issues (Kotsani et al., 2021). That is since they possess a minimal homeostatic capacity, atypical symptoms of the disease, polypharmacy institution, multimorbidity, and psychosocial vulnerabilities in addition to increased tendencies of geriatric syndromes such as frailty and autonomy loss. Another method to define functioning and quality of life is required since chronological age is not necessarily an effective predictor to make medical decisions, or even larger social and medical decisions (Frangos et al., 2023). By observing the lifespan of people who lived long, the veterinary medicine gained more understanding of the ageing process and the issues that accompany it (Kaštanova et al., 2022). Additionally, ageing is a complex biological process which encompasses numerous factors, e.g., gradual accumulation of molecules and cells damage (Kassis et al., 2023). According to recent evidence, palliative care, intended to change the quality of life of chronically and degenerating diseases in animals, is gaining popularity in veterinary medicine (PAZ et al., 2024). Over the years researchers have gained much knowledge on the ageing process. They have discovered the new things in the world of genetics, epigenetics, and the

regulatory systems, have proposed the promising biomarkers, and anti-ageing medication candidates (Pandey, 2025). The effects of ageing could be delayed through the use of the tiny extracellular vesicles which were prepared using the youthful adipose mesenchymal stem cells (Sanz-Ros et al., 2022). The process of ageing is a complicated biological phenomenon that increases the tendency to acquire health conditions more common in aged individuals. It is also characterized by an accumulation of molecular damage that is irreversible (Putri et al., 2025). It is also identified that epigenetic changes such as DNA methylation, histone modification, and the synthesis of non-coding microRNA are connected to ageing (Dhar et al., 2022). There are numerous changes that take place in blood vessels and our hearts as we grow older. Using nanotechnology, one can identify, cure, and forecast vascular ageing and subsequent diseases precisely (Xu et al., 2022). One of the most significant components of ageing is the cellular senescence. It occurs when cells cease their division and they cannot resume that process (Ya & Bayraktutan, 2023). The Senescent cells are physiologically active which are also nutritionally impaired, mitochondrially impaired, malformed and proteostatical (Wong et al., 2023). This is the case when senescent cells accumulate in tissues, causing irreversible organ dysfunction and whole body ageing in general (Chen et al., 2022). Organs and tissues decrease in physiological functionality as human beings age (Manni et al., 2023). One should examine the new medicines against aging since this functional deterioration is also associated with the onset of various diseases of old age (Sun et al., 2022). Such drugs may make individuals live longer and healthier lives as they prevent or postpone the development of certain illnesses. Yusri et al. (2024) ascertained that these processes include genomic instability, telomere shortening,

epigenetic modifications, impaired protein homeostasis, perturbed nutrient sensing, mitochondrial compromise, cellular senescence, loss of stem cells, and cell-cell communication as the causes of ageing phenotypes. Proper communication between the tissues and organs determines the health of the entire body. It is because of the compounds found in the blood (Chen et al., 2024).

CONCLUSION

As the present study explains, the quality of life and longevity of old pets and captive animals is increased because of the contribution of geriatric veterinary care. The clinical, physiological and behavioural investigations of a variety of elderly animals by the study such as exotic dogs, cats as well as horses indicate that the aged-based regimens are effective in ensuring healthy gains of the aged animals. Based on thorough statistics, metabolic disease, osteoarthritis, renal incompetence and cognitive retardation turn out to be the most common morbidity of ageing in animals. All these conditions have been made better due to species medication and preventative measures. Dietary changes, pain treatment, early screening of chronic diseases and other palliative care methods resulted in a vast improvement on mobility, socialisation and general well-being. Also, wellness-surveillance programs were used including quality-of-life indexes, biomarker tracking, which made it possible to introduce the timely, focused therapy interventions and early detection of subclinical issues. Other essential changes to the environment and carer education were also determined to be an important facilitator of geriatric comfort and mental cognition. The increase in life expectancy after a given time of exposure to an average level on continuous geriatric treatment was shown in a statistical way using animals on continuous geriatric

program as compared to control animals under normal care. Importantly, however, paradigm shift in studying the ageing animal populations towards proactive and customised veterinary treatment also means that the outcomes of proactive and customised veterinary care are corresponding with the philosophy and methodology with human geriatrics. To conclude, geriatric veterinary medicine should be recognised as a clinical speciality and vital aspect of compassionate, scientifically based animal healthcare that favours longevity, and respectable ageing. Geriatric programs in veterinary care could help enhance the well-being of aged animals in zoos, the residence of veterinarians and research animals and reduce morbidity and mortality rates at an unprecedented scale.

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