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Ashleigh is a recently qualified registered veterinary nurse who continued studying at the Royal Veterinary College to gain her BSc (Hons) degree in 2017. She has wanted to be a veterinary nurse since she was 7 and after her first day of work experience, she never looked back. Her main interests are in critical care, emergency nursing and radiography. She has recently qualified as a clinical coach and is really enjoying teaching and guiding student veterinary nurses.

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Public perception of registered veterinary nurses

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ABSTRACT: Veterinary nursing has dramatically advanced as a profession in its own right over the past few years (O'Dwyer, 2013). This should cause registered veterinary nurses to be treated as professional personnel, not only by colleagues but also by veterinary clients due to their professional status. The study intends to acquire the client's perspective on what tasks a veterinary nurse can perform and what their personal opinion is of veterinary nurses. The subject chosen is designed to highlight the need for further client education and show "gaps" in current knowledge, provide more evidence for the need to protect the veterinary nurse title and in turn, increase job satisfaction among present and future veterinary nurses. The research completed is a prospective survey in the form of a questionnaire. Using SPSS as the statistical analysis tool, the association between the variables has been tested. The results showed there to be a statistical significance in the relationship between the participants' age and their knowledge of tasks an RVN can legally perform. This indicates that age has an effect on the level of knowledge participants had about RVNs.

Key words: Registered Veterinary Nurse; public perception; opinion; RVN

Introduction

The constant progression of the veterinary world has resulted in the professional duties and responsibilities of registered veterinary nurses to increase considerably over the past 10 years (Ackerman, 2015). Veterinary nursing has dramatically advanced as a profession in its own right (O'Dwyer, 2013). This should cause registered veterinary nurses to be treated as professional personnel, not only by colleagues but also by veterinary clients. The study intends to acquire client's perspective on what tasks a veterinary nurse can perform and what their personal opinion is of veterinary nurses. The subject chosen is designed to highlight the need for further client education and show "gaps" in current knowledge, provide more evidence for the need to protect the veterinary nurse title and in turn, increase job satisfaction among present and future veterinary nurses.

The British Veterinary Nursing Association is currently aiming to promote the veterinary nursing profession (BVNA, 2017). However, how can a profession be promoted to members of the general public if the general public are unaware of their role in that professional field? Many clients are unaware of the number of roles a registered veterinary nurse performs daily and can be unappreciative of the nursing staff's input into their pet's care. A study completed by the BVNA and reported by Kernot in 2016 indicated that 89% of the responding veterinary surgeons believed that no more than half of their clients understood the specific role of a registered veterinary nurse. Eighteen percent of the respondents believed that none or almost none of their clients were aware of the difference between registered veterinary nurses and others carrying out the nursing role (Kernot, 2016).

Aims

The purpose of this study is to gain insight into the general public's perception and knowledge of what a registered veterinary nurse's role is within the veterinary profession. The general aim of this research is to highlight key factors affecting the level of knowledge held by members of the general public about veterinary nurses. It also aims to gain insight into the overall perception people have of veterinary nurses. This study endeavours to underline the importance of protecting the veterinary nurse title and to place emphasis on the need for client education. By completing this, the level of client satisfaction and job satisfaction among veterinary nurses could improve dramatically.

Objectives

The study aims to acquire information as to whether having a close relationship with someone who works within the veterinary profession affects the level of knowledge, and/or changes the participant's overall perception of registered veterinary nurses. This study strives to obtain whether members of the public know the difference between registered veterinary nurses and non-registered veterinary nurses. Furthermore, the research project intends to demonstrate whether age of the participant has an effect on their perception of veterinary nurses and/or their level of knowledge on the tasks a registered veterinary nurse can legally perform.

Methods and materials

The general project plan was to release a survey in questionnaire form, collect the information from the respondents and compare and analyse the data presented. Any duplicate questionnaires were disposed of to prevent any inaccuracies in the data collected. Initially a pilot study was released to ensure that the questions gathered the correct data, before the final questionnaire was launched.

There was no specific location for this research as both printed and virtual copies of the questionnaire were available.

A printed version of the questionnaire was made available in a number of local veterinary practices, kennels and catteries, churches and dog training establishments. The target group that the study was directed towards were members of the general public that are over the age of 18. Virtual copies were presented on social media through a number of personal, veterinary business, animal boarding business and pro-animal group pages. A financial incentive was provided in the form of entering a raffle to win a £50 Amazon gift voucher. This promoted a good response rate and enabled more data to be gathered and analysed. An estimated time scale was provided to ensure that respondents freely gave up five minutes of their time to complete the questionnaire. If the participants wished to, a video link was also made available to enable further education of the roles registered veterinary nurses play within the veterinary profession.

All respondents remained anonymous and confidential. All the data collected were stored in a secure, password-protected document. The only personal data to be collected were the participant's email addresses if they wished to be entered into the raffle to win the gift voucher. All the personal data were destroyed once the research had been completed. All participants were made aware that they retained the right to withdraw at any time by simply not continuing with the completion of the questionnaire. It was assumed that by continuing the completion of the questionnaire, the respondents provided their consent to be involved in the research.

The research completed was a prospective survey in the form of a questionnaire. Once ethical approval was granted, a pilot study was released to ensure that the questions asked gathered the correct data, before the final questionnaire was launched. The virtual copies gathered the data on an internet survey website (surveymonkey.com) to allow ease of access. The hard and virtual responses were then collected and the information placed into

a Microsoft Excel document to allow it to be converted into numerical values. This information was then put onto a Statistical Package for the Social Sciences document to enable distributions, relationships and statistical significances to be discovered. A form of the Likert scale has been used to visually present the participant's responses to the number of tasks a registered veterinary nurse can or cannot legally perform (see Figure 1).

Using the SPSS programme, the summarising of the categorical variables has been completed using bar charts and frequency tables. This enables percentages to be used and provides a visual representation of the categorical variables. Histograms were used to summarise the continuous variables (such as age) and enable a distribution to be displayed. If the variables were normally distributed then the mean and standard deviation values were used for further analysis. If the data are not normally distributed then the median, minimum and maximum values were the information used to further analyse the information.

The statistical significance of the relationships between two continuous variables was then assessed using the Pearson or Spearman tests. If the distribution of the data was normal, then the parametric test was appropriate and Pearson's test was used. If the information was abnormally distributed then the non-parametric Spearman test was used. Both tests present a correlation coefficient which indicated whether a relationship was present. The statistical significance of this relationship was demonstrated with the *p*-values provided.

To test for an association between two categorical variables, the Chi-squared test was completed. This enabled the researcher to check for a relationship between the variables and the statistical significance of that association. To test for a relationship between a continuous and a binary categorical variable, the distribution was first assessed. If the data were

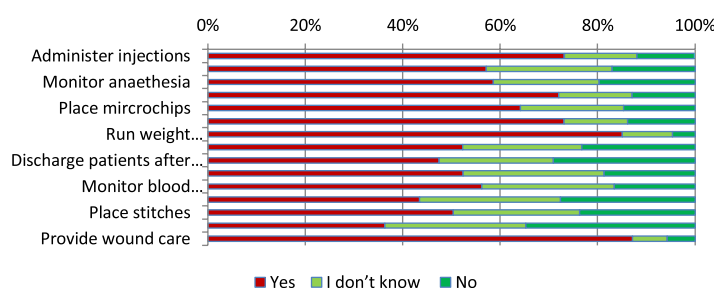


Figure 1. Likert scale showing the percentage of answers to the list of 14 legal tasks



Figure 2. Histogram of gender and total score

normally distributed then the parametric *t*-test was run. If the data were abnormally distributed then the non-parametric Mann–Whitney test was used. This enabled an association to be discovered and the statistical significance of that relationship revealed.

Error margins and confidence intervals were also assessed. The researcher aimed for a 5% error margin and a 95% confidence interval. This should enable the results to be easily replicated if the study was launched again. A population sample size calculation would theoretically also have been run. However, as the researcher distributed the survey on social media the location of the participants was unknown. A percentage estimate of responses was unable to be calculated as

the exact number of people viewing the survey was unknown. It can be assumed using the average number of responses to a questionnaire that the questionnaire response rate was approximately 24.8% (Team, 2014).

Findings

Overall, the majority of respondents were female (82.1%). The statistical analysis software indicates that female participants have a higher knowledge of RVNs when compared to male participants (see Figure 2). The results show that there is no relationship between owning a pet and the level of knowledge participants had about RVNs. The project also highlights that there is no association between participants having a close friend or family member working in the veterinary

profession and their level of knowledge about RVNs.

Of participants, 76.1% (764) thought that RVNs were professionals; the Mann–Whitney test indicated that this has no statistical significance with a *p*-value of 0.743. This *p*-value indicates that there was no relationship between thinking RVNs are professionals and participants overall knowledge of RVNs. The study also indicates that there is no statistical relationship between participant’s thinking RVNs have an external regulatory body and their knowledge of the tasks an RVN can legally perform.

The statistical analysis also indicates that there is no relationship between knowing there is a difference between

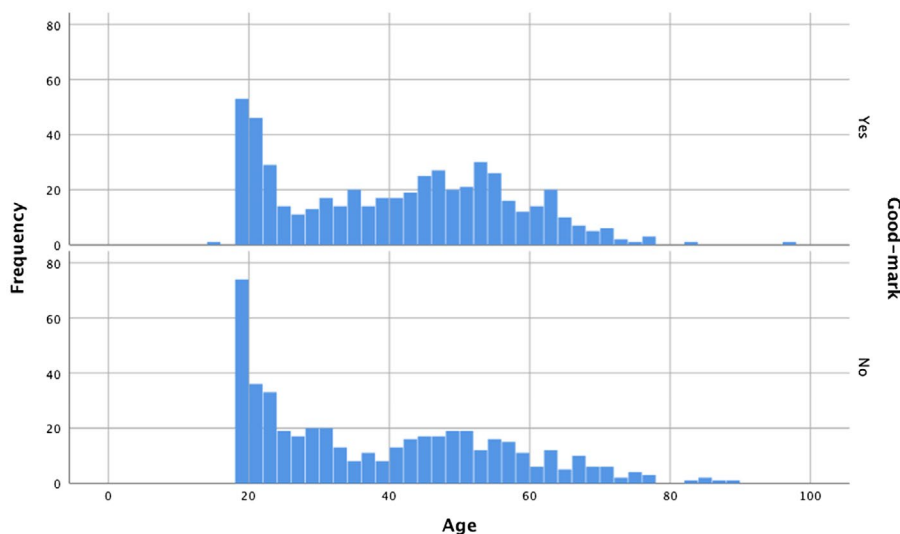


Figure 3. Histogram of age and whether or not the participants received a good mark

Table 1. Pearson Correlation Test on the Comparison of Age and Good Mark

Correlations		Age	Good-mark
Age	Pearson Correlation	1	-.071*
	Sig. (2-tailed)		.024
	Sum of Squares and Cross-products	274821.642	-591.313
	Covariance	273.727	-.589
	N	1005	1005
Good-mark	Pearson Correlation	-.071*	1
	Sig. (2-tailed)	.024	
	Sum of Squares and Cross-products	-591.313	250.384
	Covariance	-.589	.249
	N	1005	1005

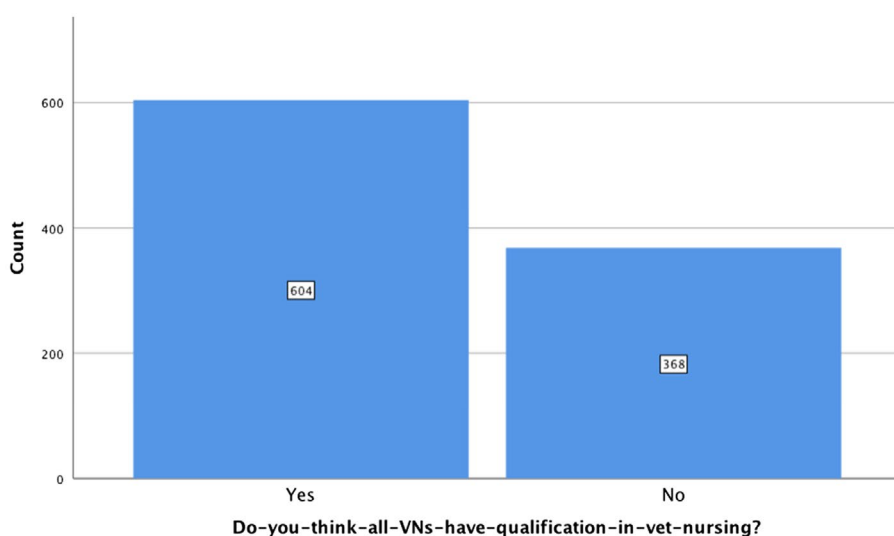


Figure 4. Frequency of participants thinking all VNs have a qualification in veterinary nursing

RVNs and VNs and the overall knowledge of VNs. The relationship between participants thinking all VNs have a qualification in veterinary nursing and their knowledge of skills an RVN can perform is statistically insignificant. The data do, however, highlight that the higher percentage of the participants thought that all veterinary nurses have a qualification in veterinary nursing.

Figure 3 shows histogram frequency of age when comparing to whether the participant scored a good mark or not. The histogram shows a slight negative correlation: as age increases, total score decreases. The Pearson correlation test indicates that this relationship is of statistical significance, with a *p*-value of 0.024. This indicates the younger generation has a more advanced knowledge of the tasks RVNs can perform (see Table 1).

Conclusion

The data show that females have a higher knowledge of the tasks an RVN can legally perform. It also shows that younger participants have a higher knowledge of veterinary nursing than do older participants. However, in addition to this, the data highlight that the majority of participants believe that all VNs have a qualification in veterinary nursing (see Figure 4). This should highlight the need to legally protect the title “Veterinary Nurse”, as members of the general public feel everyone that has that title has a qualification in veterinary nursing. This therefore indicates that members of the general public need a higher level of understanding of the role of a registered veterinary nurse through promotion and education of our profession.

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