



Mental Health of Veterinary Professionals in Ireland

Clíodhna O'Brien,
Doireann Ní Dhálaigh,
Paul Corcoran, Philip Dodd



National Suicide Research Foundation



Connecting for Life



Table of Contents

List of Figures	iii
Acknowledgements	iv
Executive Summary	iv
Introduction	1
Study Background	1
Methods	2
<i>Study Design</i>	2
<i>Recruitment and Data Collection</i>	2
<i>Description of the Survey</i>	2
<i>Ethical Approval</i>	3
<i>Data Protection and Confidentiality</i>	3
<i>Statistical Analyses</i>	3
<i>Characteristics of the Sample</i>	3
Findings	7
<i>Problems in the Past Year</i>	7
<i>Stress Level felt in Last Month</i>	7
<i>Stress Factors</i>	7
<i>Burnout</i>	9
<i>Anxiety</i>	9
<i>Depression</i>	10
<i>Non-Suicidal Self-Injury</i>	11
<i>Suicide Attempt</i>	11
<i>Professional Help</i>	11
<i>Mental Health Literacy</i>	11
<i>Self-Stigma</i>	11
<i>Resilience</i>	11
<i>Someone for Support in Time of Need</i>	12
<i>Seeking Help</i>	12
<i>Seeking Guidance</i>	12
<i>Preference for Receiving Support</i>	13
<i>What helps you to look after your mental health?</i>	13
Implications	14
References	16

List of Figures

Figure 1:	Age Categories of Veterinarian Employees, Veterinarian Managers and Veterinary Nurses	3
Figure 2:	Age Categories of Veterinarians in this Sample and Registered with VCI	4
Figure 3:	Age Categories of Veterinary Nurses in this Sample and Registered with VCI	4
Figure 4:	Age Categories for Males in the Sample and Registered Males in VCI	4
Figure 5:	Age Categories for Females in the Sample and Registered Females in VCI	5
Figure 6:	Practice Type for Veterinarian Employees, Veterinarian Managers and Veterinary Nurses	5
Figure 7:	Organisation Size for Veterinarians and Veterinary Nurses	6
Figure 8:	Problems Experienced in the Past Year by Occupational Group	7
Figure 9:	Stress Factors for Veterinarians and Veterinary Nurses	8
Figure 10:	Anxiety by Occupational Group	10
Figure 11:	Depression by Occupational Group	10
Figure 12:	Someone Around in Time of Need by the Three Occupational Groups	12
Figure 13:	What Helps Veterinary Professionals Look After their Mental Health	13

Acknowledgements

Firstly, we would like to extend our gratitude to all veterinary professionals, the many vets and veterinary nurses, who took time to complete the survey and shared with us their insight and experiences. Thank you.

We are most grateful to a group of veterinary professionals and to Dr Margaret O'Rourke (UCC) for providing insightful feedback on the survey design before disseminating the survey.

This research has been funded by the HSE National Office for Suicide Prevention (NOSP) in alignment with *Connecting for Life*, Ireland's National Strategy to Reduce Suicide. We would like to thank HSE NOSP for their support of the study.

Executive Summary

The working environment for veterinarians and veterinary nurses is associated with stressors unique to the profession. The Veterinary Council of Ireland (VCI), the independent statutory regulator, commissioned this research report to expand the evidence base on the wellbeing and mental health needs to veterinary professionals working in Ireland.

There were 747 complete or almost complete responses to the online survey carried out in April 2021, which covered topics of depression, anxiety, stress, burnout, deliberate self-harm, suicide, mental health knowledge, stigma, help-seeking and sources of support.

Key findings included:

- ▶ Anxiety levels were high amongst all occupational groups. Overall, 34.7% of participants were in the normal range for anxiety, 22.9% in the borderline abnormal range and 42.5% in the abnormal range. There was a significant association between occupational group and anxiety category whereby veterinarian managers were more likely and veterinary nurses were less likely to be in the normal range.
- ▶ Work-life balance was reported as a significant stressor for all occupational groups. Long working hours, COVID-19 restrictions, salary, and recruitment were other stressors commonly reported by the respondents.
- ▶ Veterinary nurses indicated higher levels of psychological distress, self-harm, and suicidal behaviour than other veterinary professionals. This is likely associated with the age and gender profile of veterinary nurses given that being young and identifying as female were observed to be risk factors for poor mental wellbeing.
- ▶ Respondents who indicated that they work as veterinarians in a managerial position indicated significantly better mental wellbeing than their colleagues on several indicators. However, it was observed that veterinarian managers displayed significantly lower mental health knowledge than other veterinary professionals.
- ▶ Engaging with activities and having strong social support were the main methods reported by veterinary professionals for looking after their mental health.

Suggestions made by the participants and recommendations in the literature to support the mental wellbeing of veterinary professionals include increased access to managerial, peer and professional support from therapists or counsellors), decreased on-call hours, increased time off when needed, mental health awareness promotion, psychoeducation and suicide prevention training.

Introduction

This report presents findings from an online survey completed by veterinary professionals, being vets and vet nurses registered to practise in Ireland in April 2021. The Veterinary Council of Ireland (VCI) commissioned this research report to expand the evidence base on the wellbeing and mental health needs of veterinarian professionals working in Ireland. The survey was co-designed and developed by a small collaborative working group of members and associates of the VCI, HSE National Office for Suicide Prevention (NOSP) and the National Suicide Research Foundation (NSRF): Dr. Paul Corcoran (NSRF), Prof. Philip Dodd (NOSP), Ms. Niamh Muldoon (VCI), Ms. Doireann Ní Dhálaigh (NSRF) and Dr. Clíodhna O'Brien (NSRF). The VCI were involved in the dissemination and communication of the survey to its registrants and veterinary professionals in Ireland. The VCI had no influence on analysis or reporting of findings. The assessment of the anonymous survey results, analysis and write up of the report were carried out independently by NSRF researchers.

Study Background

The working environment for veterinarians and veterinary nurses is associated with stressors unique to the profession. Occupational stress associated with veterinary work may include excessive workload, long working hours, high demand low control working environments, little or no support^{[1]-[4]} and these stressors can lead to work-related stress, burnout, anxiety and depression^{[1], [5]-[7]}. Occupational stressors associated with veterinary practice, such as euthanasia, signify a distinct source of stress in comparison to other healthcare professions which may also lead to compassion fatigue and burnout^{[1], [8]}.

Few studies of veterinarian mental health have been conducted and reported. The limited evidence base on mental health in the veterinary sector has indicated that veterinarians and veterinary nurses may be at increased risk of burnout^{[1], [9], [10]} and job stress^{[11], [12]} and that their average level of burnout exceeds that of normative samples in human healthcare professions^[13]. Furthermore, international research indicates that higher rates of suicide have been observed among veterinarians than other professionals^{[14]-[18]}. The veterinary profession has been associated with four times the risk of death by suicide than the general population^{[16], [17], [19], [20]}, however, there are no data available on this in Ireland.

Within the veterinary profession, some research suggests that female veterinarians and younger veterinarians may be at increased risk for poor mental wellbeing^{[12], [18]}. The mental health of veterinary nurses is under-researched^[21] but a recent study on the mental wellbeing of equine veterinary surgeons and equine veterinary nurses indicates that equine veterinary nurses may be experiencing significantly lower levels of mental wellbeing than veterinary surgeons^[22]. Burnout can be common amongst veterinary nurses due to work demands and psychosocial issues^{[13], [23]}.

Although the occupational stressors facing veterinary professionals are widely acknowledged, there has been a dearth of research into the wellbeing of veterinary professionals in Ireland prior to this survey. The purpose of the current study is to gain an insight into the mental health profile of veterinary professionals in Ireland and to understand the specific stressors, help-seeking behaviours and support that veterinary professionals experience that are particularly relevant for this cohort through an anonymous, online survey with veterinary professionals.

Methods

Study Design

This is a cross-sectional study of mental health and wellbeing and their associations in veterinary professionals in Ireland conducted through an anonymous, online survey. The study was reviewed and approved by UCC Social Research Ethics Committee (Log 2021-012).

Recruitment and Data Collection

Three emails in total were disseminated to registrants of the Veterinary Council of Ireland (VCI) over a four-week period by the VCI in April 2021. The emails provided an overview of the study and attached an information leaflet for potential participants. The information leaflet presented the purpose of the study, what completing the survey involved, information on data protection, contact details for the research team and the survey link. When participants clicked on the link, they were presented with a consent form. When they clicked that they agreed to participate, they were presented with the online survey. Responses were collected anonymously.

Response Rate

There were 747 complete or almost complete responses to the online survey. Responses were excluded if most questions remained unanswered or if participants did not consent to participation. This sample represents 18% of the 4183 veterinary professionals registered with the Veterinary Council of Ireland in 2021.

Description of the Survey

Standardised measures

The following scales and items were used in this study:

- ▶ Oldenburg Burnout Inventory (OLBI)^[24] which evaluates burnout severity based on exhaustion and disengagement statements,
- ▶ Hospital Anxiety and Depression Scale^[25] which screens for and measures severity of clinically significant depression and anxiety in hospital, community settings and various occupational groups,
- ▶ Self-stigma of Seeking Help Scale^[26] which examines worries about the loss in self-esteem felt by an individual who decided to seek help from a mental health professional,
- ▶ Mental Health Knowledge Schedule (six items)^[27] which comprises of mental health knowledge areas related to stigma such as recognition, support, help seeking, employment, treatment, and recovery (the other set of six items on knowledge of mental illness conditions were omitted from this survey).
- ▶ Level of Contact Report^[28] which consists of 12 situations to assess familiarity with individuals with a mental illness,
- ▶ Brief Resilience Scale^[29] which assess an individual's ability to the ability to recover or bounce back from stress.

Single Question Items

- ▶ Suicidality: Four single items were used to assess suicide and self-harm and when these most recently occurred. These items were used in a recent longitudinal, nationally representative study of the Irish population^[30].
- ▶ Help-seeking
- ▶ Social Support
- ▶ Several open-ended questions were presented in the survey, where participants could reply using text boxes. This allowed participants to elaborate on some responses and to answer certain questions without being given a selection of answers to choose from.

Ethical Approval

Ethical approval for this study was obtained from UCC Social Research Ethics Committee. Participants were provided with contact details of supports available to them at the beginning and at the end of the survey.

Data Protection and Confidentiality

This study was in full compliance with General Data Protection Regulation. Confidentiality is strictly maintained and only anonymised data in aggregate form are released in reports. Data were collected anonymously and securely stored at all times.

Statistical Analyses

Frequencies were calculated for all data items. Associations and differences between variables were examined using Chi-square tests and regression analyses. Differences were considered to be statistically significant if their associated p-value was <0.05 . Throughout this report, statistically significant differences are noted in text, but specific p-values are not reported. In accordance with confidentiality guidance for reporting health statistics, groups with less than 5 cases are not reported. The researchers carried out thematic analysis on responses to open-ended questions.

For the purpose of analysis and to uncover any potential differences between occupational groups, three distinct groups were created:

- ▶ Veterinarian Employee (selected 'Veterinarian' and 'Employee'): 39.6% of the sample
- ▶ Veterinarian Manager (selected 'Veterinarian' and 'Managerial Role'): 34% of the sample
- ▶ Veterinary Nurse (selected 'Veterinary Nurse' and 'Employee/Managerial Role'): 26.4% of the sample

These specific groups were created due to the differences in work roles. There were no significant differences observed between veterinary nurse employees and veterinary nurse managers in relation to key mental health indicators and there were very few veterinary nurse managers ($n=17$, 2% of sample) in the sample. Therefore, veterinary nurse employees and veterinary nurse managers were classed as one occupational group.

Characteristics of the Sample

Age

The sample consisted of 23.4% 20-29 year olds, 30.4% 30-39 year olds, 20.4% 40-49 year olds, 13.6% 50-59 year olds and 12.2% 60+ year olds. See Figure 1 for the age categories for veterinarian employees, veterinarian managers and veterinary nurses, Figure 2 for age categories of veterinarians in this sample versus veterinarians registered with the VCI and Figure 3 for age categories of veterinarians in this sample versus veterinary nurses registered with the VCI.

Figure 1: Age Categories of Veterinarian Employees, Veterinarian Managers and Veterinary Nurses

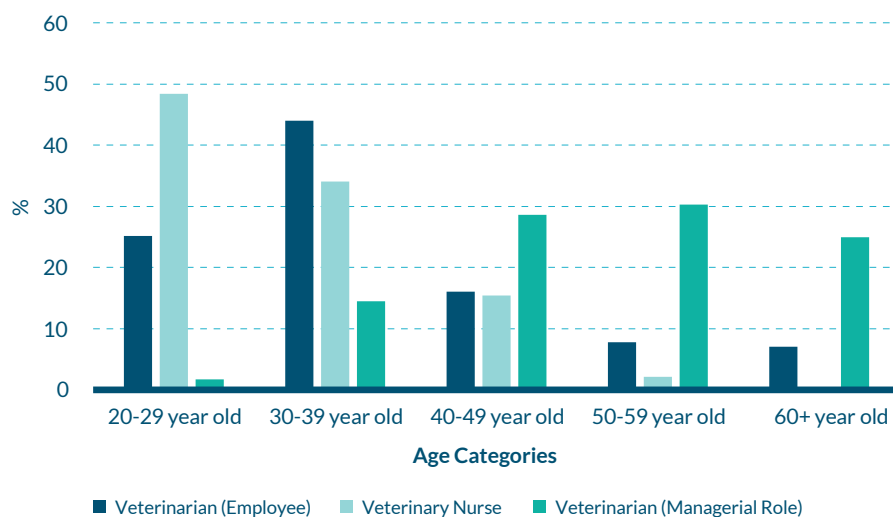


Figure 2: Age Categories of Veterinarians in this Sample and Registered with VCI

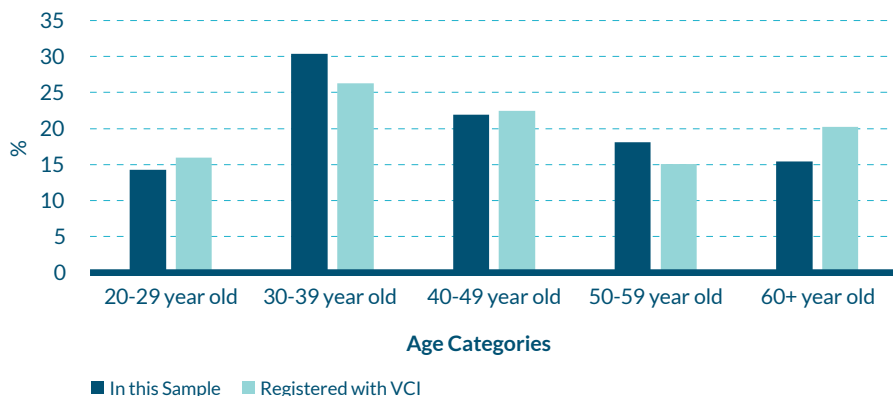
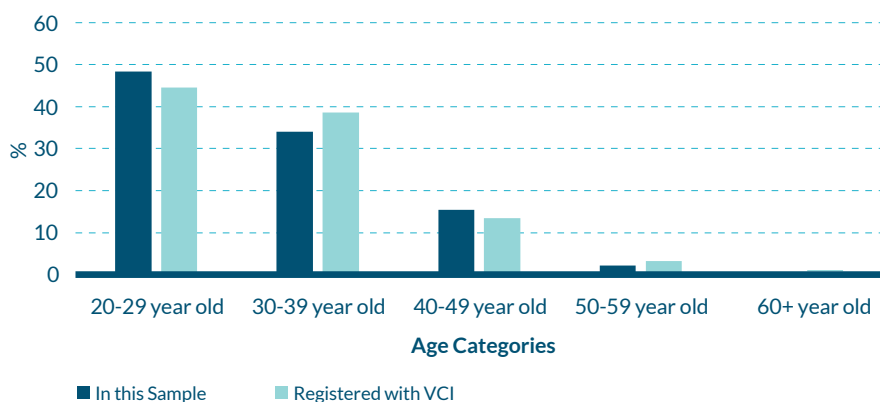


Figure 3: Age Categories of Veterinary Nurses in this Sample and Registered with VCI



Gender

In the sample, 66.6% of respondents reported they were female, 32.9% reported they were male and 0.5% reported that they would prefer not to say. In the veterinarian sample, 56.5% reported they were female and 43.2% reported they were male. In the veterinary nurse sample, 96.3% reported they were female and 2.7% reported they were male. As seen in Figure 4, there were fewer males in the 20-29 year old category in this sample than registered with the VCI and there were more males in the 50-59 year old category in this sample than registered with the VCI. As seen in Figure 5, females were well represented in all age categories in this sample in comparison with registered females with the VCI.

Figure 4: Age Categories for Males in the Sample and Registered Males in VCI

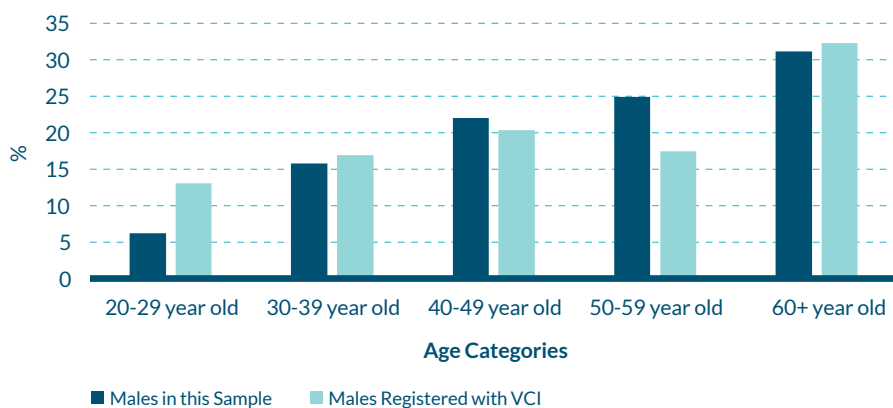
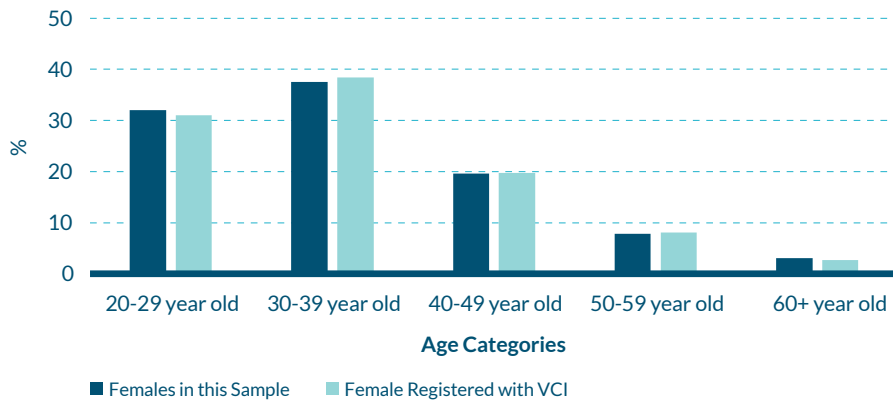


Figure 5: Age Categories for Females in the Sample and Registered Females in VCI

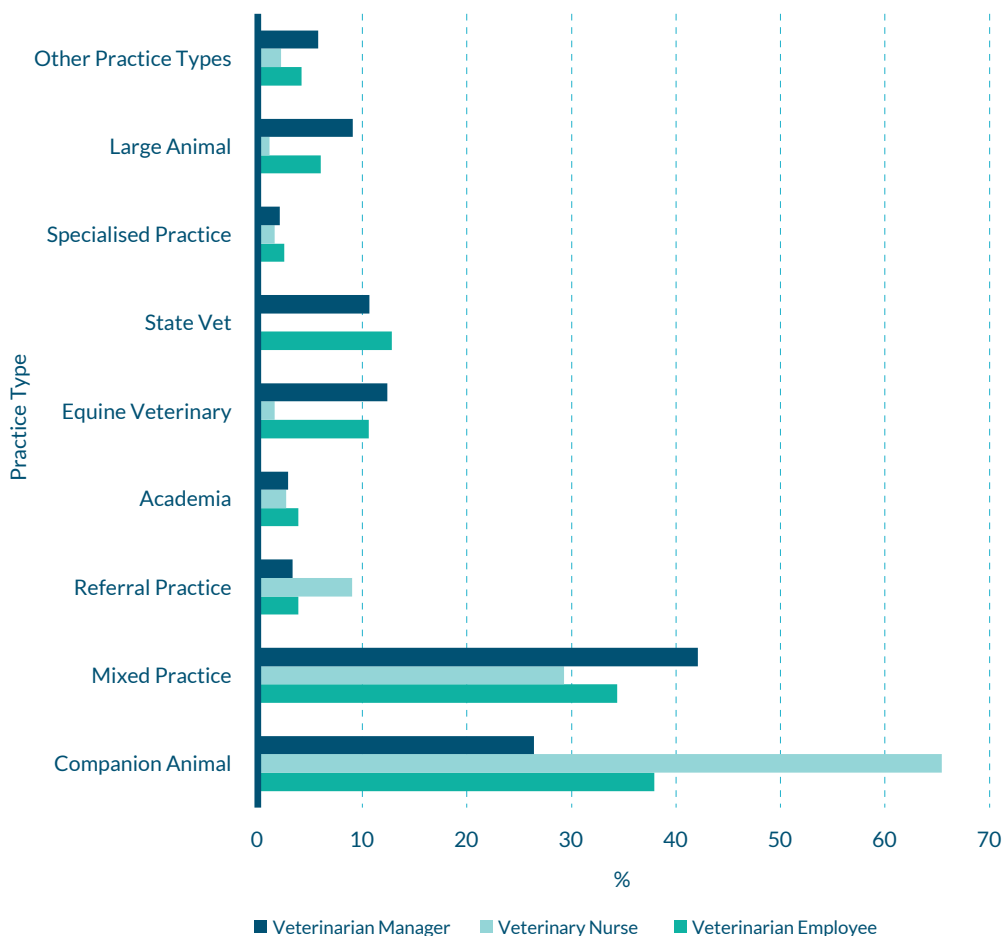


Work Practice Type

Veterinary professionals were asked to select the work practice type that best reflects their work, and they were able to select more than one option if that was appropriate for them. The majority of respondents (85.5%) reported that they work in one practice type, 9% reported two practice types, 3% reported working in three or more practice types and 2.2% did not respond to this specific question.

Amongst the veterinary professionals, 40.6% reported that they worked in a companion animal practice, 35% in a mixed practice, 8.8% in state veterinary, 8.7% in equine veterinary, 5.8% in a large animal practice, 5% in a referral practice, 3.5% in academia, 2% in Specialised Practice, 1.6% in Local Authority, 1.5% in industry, 1.1% in research, <1% in a charitable practice and <1% in Teagasc. See Figure 6 for a breakdown of the veterinarians and veterinary nurses.

Figure 6: Practice Type for Veterinarian Employees, Veterinarian Managers and Veterinary Nurses

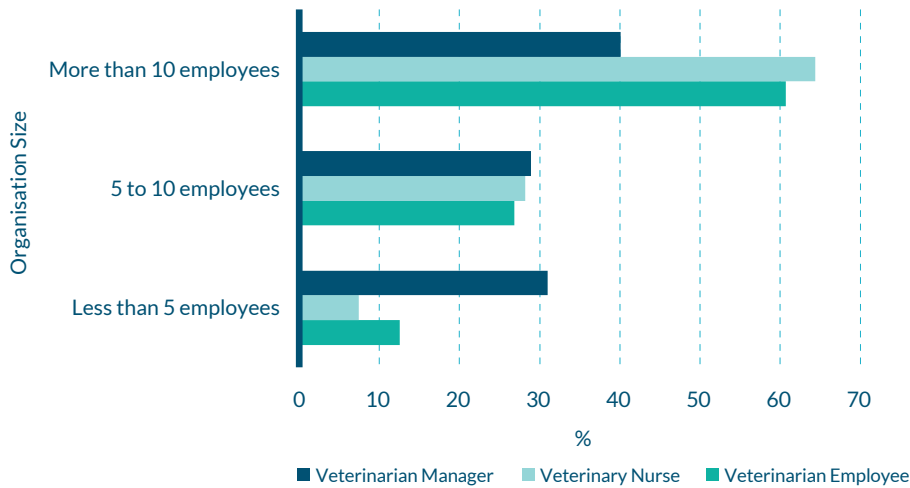


Note: Other Practice Types include Industry, Charitable, Research, Animal Health, Teagasc and Local Authority which all had less than 2.5% for any group.

Organisation Size

When asked about the size of the organisation, 55.1% reported working in veterinary practice with 10 or more employees, 27.5% reported working in practices with 5 to 10 employees and 17.5% work in practices with less than 5 employees. The veterinarians who responded to the survey were more likely to be working in a practice with less than employees and the veterinary nurses were more likely to be working in a practice with more than 10 employees (see Figure 7).

Figure 7: Organisation Size for Veterinarians and Veterinary Nurses



Practice Incorporated

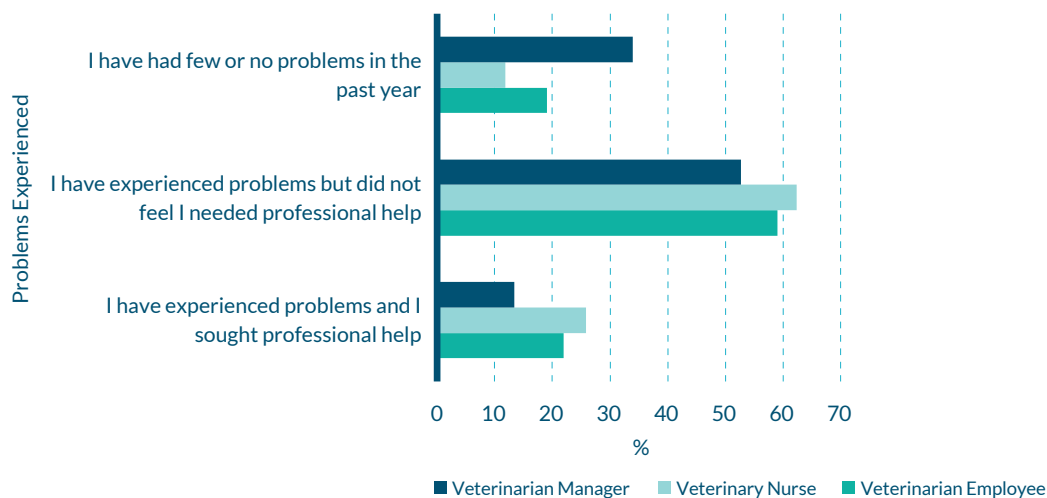
When asked whether the practice they work in is incorporated, 63.3% reported that it is incorporated, 22.9% reported that it is not incorporated and 13.8% reported that they did not know.

Findings

Problems in the Past Year

When asked about problems experienced over the past year, 56.9% reported that they had experienced problems but didn't feel they needed professional help, 20.1% reported that they had experienced problems and that they had received professional help and 23% reported that they had few or no problems in the past year. There were significant associations between occupational group and problems experienced in the past year with veterinarian managers more likely to report that they have had few or no problems in the past year and veterinary nurses more likely to report that they had experienced problems and sought professional help (see Figure 8 for more information).

Figure 8: Problems Experienced in the Past Year by Occupational Group



Stress Level felt in Last Month

Participants were asked over the past month, how would you rate the level of stress you are feeling on a scale of 1-10. In this sample, 20.6% indicated that they felt minimal stress (scale 1-5) and the remainder indicated a level of 6 or more. The mean level of stress felt was 7.08 (SD=2.05). Veterinarians reported an average stress level of 6.99 and veterinary nurses reported an average stress level of 7.37. When controlling for age and gender, there was no significant difference between veterinarians and veterinary nurses in relation to level of stress felt in the last month.

Stress Factors

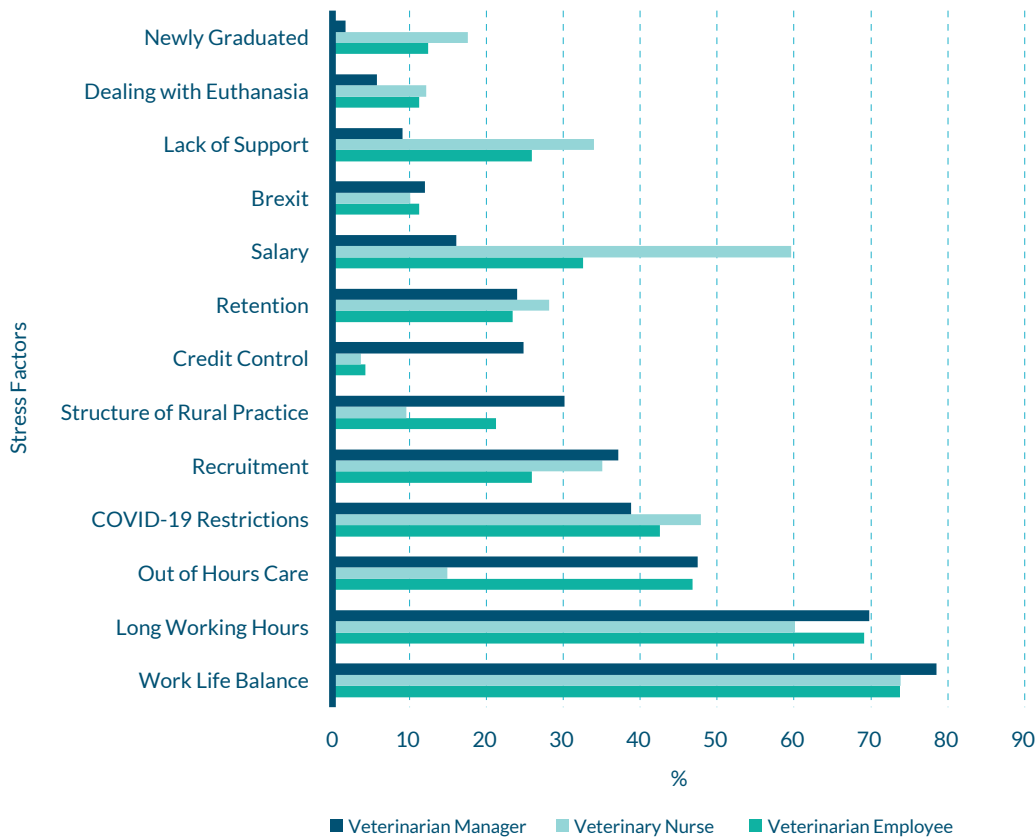
Participants were presented with a list of stress factors and asked to indicate which they are exposed to. The most commonly selected stress factors were struggling with work-life balance (74.5%), long working hours (66.4%), COVID-19 restrictions (42.6%), and out of hours care (38.1%). Salary (33.8%), recruitment (31.8%) and retention (24.6%) were also common stress factors. Other stress factors included lack of support (22.3%), Brexit (11.4%), credit control (11%), pressure associated with being newly graduated (10%) and having to deal with euthanasia. See Figure 9 for a breakdown for veterinarian employees, veterinarian managers and veterinary nurses.

Top three stressors for veterinarian employees included work life balance (73.8%), long working hours (69.1%) and out of hours care (46.8%).

Work life balance (78.5%), long working hours (69.8%) and out of hours care were also the top three stressors for veterinarian managers.

Work life balance (73.9%), long working hours (60.1%) and salary (59.6%) were the top three stressors for veterinary nurses.

Figure 9: Stress Factors for Veterinarians and Veterinary Nurses



Participants were invited to note any additional stressors in an open-ended question. The three main themes were workplace stressors, personal stressors, and macro issues.

Workplace Stressors

The most common workplace stressor related to working conditions, such as low pay, high workload, understaffing and the demands of too much out-of-hours work.

“Time pressure during small animal consulting, not enough vets to cover the workload. Excessive workload for a new graduate. Making clinical decisions under time pressure, not enough mentorship/time to research”

The second most frequently mentioned workplace-based stressor was dealing with clients, such as high client expectations, dealing with stressed and frustrated clients and/or verbal abuse.

The next most mentioned workplace stressor was working with colleagues, including working with underperforming people or conflict.

“Very unhappy colleagues, who are clearly in a very bad place mentally, who ‘lash’ out at colleagues in stressful situations.”

Management or being a manager was another stressor, such as having an unapproachable employer or the stress of running a business. Negative culture was an additional stressor in the workplace with mentions of bullying in the workplace, misogyny, xenophobia, and discrimination or a generally hostile, toxic, environment, and low morale were reported. The difficulties of veterinary work and/or duties were reported by some respondents. This included administrative work, complicated cases, commuting to or during work, and lack of time to perform to one’s best abilities. The stress or fear of being the subject of a complaint was discussed by several participants. One participant described how anonymous complaints resulted in suicidal thoughts.

Average Working Hours

Approximately half of the respondents (48.7%) reported spending more than 50 hours at work. Veterinarian managers (71.7%) were more likely to report this and veterinary nurses (12.8%) were less likely to report this.

Concern relating to Terms of Engagement

Participants were asked an open-ended question in relation to how they would address a concern relating to their terms of engagement. Over two-thirds (68%) of participants responded to this question.

The vast majority commented that they would choose to deal with a concern in the workplace, and most would speak to their manager, owner, or senior staff about a concern. Others, mostly veterinary managers, reported they would speak to colleagues, such as business partners. A minority reported they would speak to Human Resources, address the concern during workplace meetings and deal with it through industrial relation processes.

Some respondents (mostly veterinary managers) indicated that this question was not applicable to them. Some respondents stated they would not address a concern and a portion did not know how they would. A minority stated they would resolve the issue by talking but did not specify to whom. There were a small portion of comments that suggested the issue would be resolved using resources outside the workplace such as contacting a trade union, Veterinary Officers Association, the VCI or employment officer. Very few responses mentioned that past attempts at resolving issues were unsuccessful.

Personal Stressors

The second theme related to personal stressors and the most common of these mentioned was related to family stressors. Financial stressors and health problems (including the impact of workplace injuries) were mentioned to a lesser degree. Others felt that getting older was a source of stress or had high expectations of themselves, being self-critical, or a perfectionist. Some participants described other commitments, such as farming or studying, that they found stressful.

Stressors in the Wider Context

The third theme which was apparent in the responses related to stressors beyond the individual and workplace stressors and involved wider, prevalent issues. These stressors included COVID-19 related issues and other stressors such as stressors associated with regulatory bodies, policy changes, bureaucracy, VCI investigations, insurance, Brexit, and lack of employment laws.

Burnout

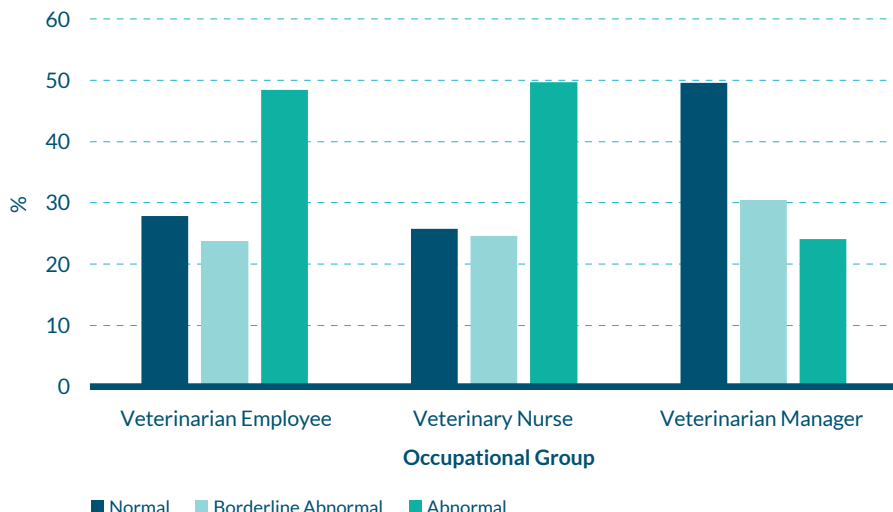
In general, participants scored slightly above the midpoint in relation to burnout ($M: 42.5$, $SD: 7.6$, score range 16-64) and in relation to the exhaustion subscale ($M: 22.5$, $SD: 4.2$, score range 8-32). Participants scored approximately on the midpoint for the disengagement subscale ($M: 20$, $SD: 4.1$, score range 8-32).

A significant difference was observed between occupational groups whereby veterinarian employees ($M: 43.4$, $SD: 7.3$) and veterinary nurses ($M: 44$, $SD: 7.1$) displayed significantly higher burnout than veterinary managers ($M: 40.3$, $SD: 7.9$). However, these significant differences subsided when controlling for age and gender indicating that the age and gender of these occupational groups impacts on the observation more than the position themselves. A similar pattern of findings was observed for both of the subscales.

Anxiety

Overall, 34.7% of participants were in the normal range for anxiety, 22.9% in the borderline abnormal range and 42.5% in the abnormal range. There was a significant association between occupational group and anxiety category whereby veterinarian managers were more likely and veterinary nurses were less likely to be in the normal range (see Figure 10).

Figure 10: Anxiety by Occupational Group

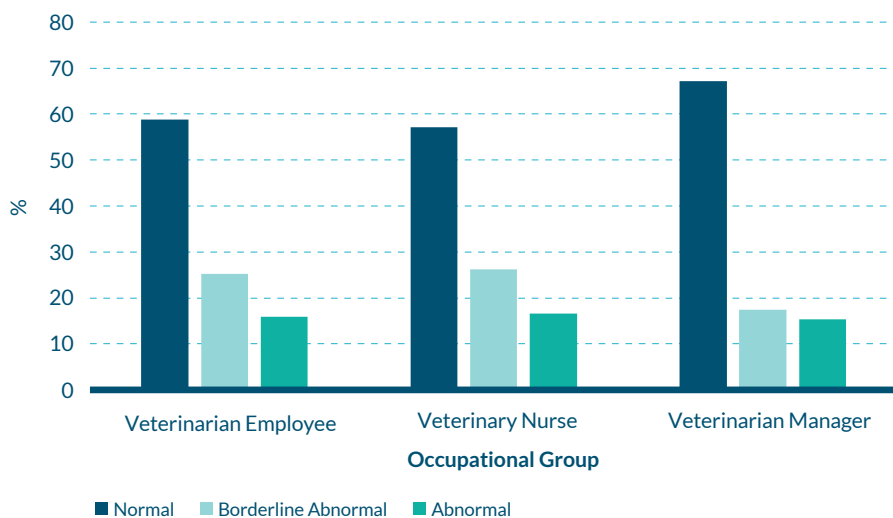


A significant difference was observed between occupational groups with veterinarian employees ($M: 10.3, SD: 4.4$) and veterinary nurses ($M: 10.8, SD: 4.6$) displaying significantly higher anxiety than veterinarian managers ($M: 8.1, SD: 4.4$). However, this finding was not observed when controlling for age and gender.

Depression

Across the entire sample, 61.3% of participants were observed in the normal range for depression, 22.8% in the borderline abnormal range and 15.9% in the abnormal range for depression. There was no significant association observed between occupational group and category of depression (Figure 11).

Figure 11: Depression by Occupational Group



A significant difference was observed between occupational groups with veterinarian employees ($M: 6.7, SD: 4.2$) and veterinary nurses ($M: 6.9, SD: 3.7$) displaying significantly higher depression than veterinarian managers ($M: 5.8, SD: 4.3$). However, this finding was not observed when controlling for age and gender.

Non-Suicidal Self-Injury

Overall, 12.4% of the sample reported having engaged in non-suicidal self-injury and 87.6% reported not having engaged in non-suicidal self-injury. In terms of the three occupational groups, 25.1% of veterinary nurses, 10% of veterinarian employees and 4.1% of veterinarian managers reported that they had engaged in non-suicidal self-injury.

Of the cohort who reported having engaged in non-suicidal self-injury, 62.6% reported that this was more than a year ago, 9.9% reported that this was within the past year, 16.5% reported that this was in the last six months and 11% in the last month.

Suicide Attempt

In this sample, 5.1% reported that they had ever attempted to take their own life and 94.9% reported that they had not. In terms of the three occupational groups, 10.2% of veterinary nurses, 4.3% of veterinarian employees and less than 1% of veterinarian managers reported having made a suicide attempt.

In relation to the respondents who reported a suicide attempt, 91.7% reported that it occurred over a year ago, 5.6% in the last year and 2.8% reported that this was in the past six months.

Professional Help

Almost half of the sample (43.2%) reported that they had ever sought professional help for their mental health. Veterinary nurses (54.3%) were more likely to report this (veterinarian employees: 44.3%, veterinarian managers: 33.9%).

Respondents who reported that they had sought professional help were asked where they sought help. Over three quarters (77.3%) reported that they sought professional help from a counsellor, 58% from a GP, 19.9% from a Psychiatrist, 4.1% from A&E and 3.5% from other therapists. In general, there were no significant associations between source of help and occupational group. However, veterinary nurses (28.7%) were more likely to have sought help from a Psychiatrist.

One third (35.5%) of participants reported taking time off work to cope with their problems. Of those, 61.8% of veterinary nurses and 60.5% of veterinarian employees reported that they told their employer why they were taking time off. This question was not applicable to veterinarian employers. Veterinary nurses (54.5%) were more likely to report this (veterinarian employees: 30.6%, veterinarian managers: 19.5%).

For the participants who reported not taking time off for their mental health, 44.9% stated that there was no need to take this time off, and 37.4% stated that it was not possible due to being unable to afford to, being understaffed and/or being too busy. Fewer reported (18.7%) that they did not want to take time off for more personal reasons such as pride, not wanting people to know, a fear that it would be held against them, feeling like it would let people down, or unsupportive management. Veterinarian managers reported that it was not possible to take time off more frequently than vet employees or veterinary nurses. Veterinary nurses reported that they did not want to take time off work more frequently than veterinarian employees and veterinarian managers.

Mental Health Literacy

In general, participants scored above the midpoint in relation to mental health knowledge ($M: 2.6, SD: 2.9$, score range 10-30). It was observed that veterinarian managers ($M: 22.2, SD: 2.8$) displayed significantly lower mental health knowledge than veterinary nurses ($M: 23, SD: 2.9$). There was no significant difference between veterinarian employees ($M: 22.6, SD: 2.9$) and the other two occupational groups.

Self-Stigma

Participants scored below the midpoint in relation to self-stigma ($M: 23.7, SD: 7.3$, score range: 5-50). No significant differences were observed between occupational groups in terms of self-stigma.

Resilience

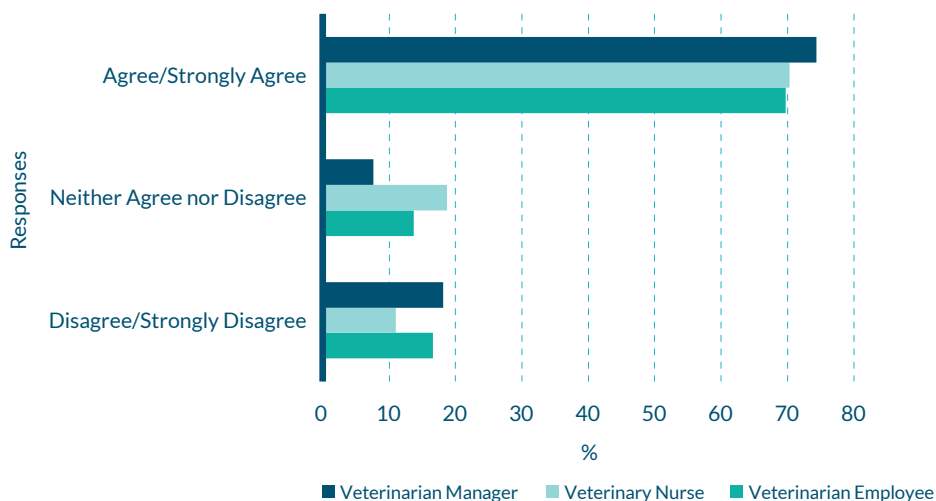
In general, participants scored around the midpoint in relation to burnout ($M: 18.7, SD: 4.9$, score range 6-30).

A significant difference was observed between occupational groups whereby veterinarian employees ($M: 18, SD: 4.5$) and veterinary nurses ($M: 17.4, SD: 4.7$) displayed significantly lower resilience than veterinarian managers ($M: 20.6, SD: 4.9$). These differences remained when controlling for age and gender.

Someone for Support in Time of Need

When asked about support, 71.6% of participants reported that they feel they have someone around when they are in need, 15.6% reported that they do not have someone around and 12.8% indicated that they neither agree nor disagree with the statement. Veterinary nurses were more likely to say they neither agree nor disagree with the statement (see Figure 12 for more information).

Figure 12: Someone Around in Time of Need by the Three Occupational Groups



In relation to informal sources of support, 62.1% reported that they received emotional support from family, 57.8% reported that they received emotional support from friends and 38.8% felt that they received emotional support from colleagues. There was no significant association between occupational group and informal sources of support.

Participants were also asked about talking through problems and 74.4% reported that they can talk about their problems with someone. There was no significant association between occupational group and informal sources of support.

Seeking Help

Advice and encouragement from family and friends was noted as having an influence on participants’ decision to seek help. The second most common theme was feeling the need for it. For example, if participants reported that if they felt very unwell or stressed then they would seek help. They felt their own situation, rather than outside influence would determine if help was needed. Information on sources of help and accessibility to these sources of help would encourage help-seeking according to some of the participants. Furthermore, some respondents mentioned more practical aspects of help-seeking such as being able to take time-off to avail of help and having financial support to seek professional help. Stigma was noted as a barrier to seeking with respondents noting how they felt positive attitudes towards help-seeking are an important influence such as less judgement for seeking help or courage to do so. Finally, some of the respondents reported that they felt they would seek help from a source that they felt could relate to them (i.e. ‘could relate to the way vets live and work and the specific pressures’).

Seeking Guidance

Most participants (92.4%) reported feeling comfortable seeking guidance from another member of the practice on a clinical matter and 7.6% reported that they did not. There was no significant association between veterinarian employees, veterinarian managers and veterinary nurses in relation to comfort seeking guidance from another member of the practice.

Preference for Receiving Support

Participants were asked an open-ended question on how they would like to receive support for their mental health. Different sources of help were most commonly suggested, and the majority mentioned professional sources of help such as therapists, counsellors, or the GP including the potential for free or cheaper service for veterinary professionals. Others felt that support should be provided in the workplace by management or peers whereas some felt family and friends were the preferred source of help for them.

Practical measures for supporting veterinarians and veterinary nurses were also suggested by respondents to this question. The most frequent response related to organisational level changes and referred to increased time off or decreased on-call hours to reduce stress, and to allow time to seek help. Other practical suggestions included financial support, better access to help, 'mental health days' (which would need to be de-stigmatised) and better working conditions.

Methods of receiving support were also discussed, the most common preferences referred to active support methods such as talking, education or classes, online, by phone, in person, via journal articles or podcasts. Increased awareness was mentioned by a minority of participants. This related to an increased awareness of mental health issues in veterinary profession and less stigma.

What helps you to look after your mental health?

When asked about what helps them look after their mental health, respondents most frequently reported activities such as sports, exercise, hobbies, past times, and spending time outdoors. Social support was the second most discussed way that respondents look after their mental health, such as the support of family, friends or just the opportunity to talk. Another prominent theme related to individual coping skills or behaviours, such as having a positive attitude, sleep, being aware of triggers, goal setting or routine and relaxation. Other coping skills included stress management and spending time alone. Spirituality was discussed by a minority of respondents which included religion, meditation and/or mindfulness. Other respondents felt that professional help was helpful such as therapy and/or medication. Pets are a source of wellbeing for some respondents (mainly veterinary nurses) and diet was important to others (mainly reported by veterinarian managers).

Some respondents mentioned work-related factors such as taking time off, being away or disconnecting from work, and having a good work-life balance, whereas a portion spoke about work as source of wellbeing.

Figure 13: What Helps Veterinary Professionals Look After their Mental Health



Implications

This study aimed to understand the wellbeing and mental health needs of veterinary professionals in Ireland. The findings observed in this study reflect research conducted internationally. Overall, veterinary professionals indicated a high level of anxiety with 43% in the abnormal range and 23% in the borderline abnormal range for anxiety. High levels of anxiety among veterinary professionals have also been observed internationally^[31].

This study indicates that veterinarian employees and veterinary nurses displayed significantly higher levels of burnout and anxiety than veterinarian managers, a finding which has previously been found on a study of equine veterinary professionals^[22]. This difference may be driven by age and gender differences between occupational groups given young and female respondents were observed to report experiencing higher psychological distress. International research also suggests that female veterinary professionals and younger veterinary professionals may be at increased risk for poor mental wellbeing^{[12], [18], [32]}.

In this study, 5.1% of veterinary professionals (10.2% of veterinary nurses, 4.3% of veterinarian employees and less than 1% of veterinarian managers) reported having made a suicide attempt. Comparing this to a nationally representative study of the Irish population, this figure is lower than 11.2% of that sample that reported attempted suicide (using the same question for reported suicide attempt)^[30]. This deviates from the literature which suggests that veterinarians may be at increased risk for suicide than the general population^[33]. Overall, 12.4% of veterinary professionals (25.1% of veterinary nurses, 10% of veterinarian employees and 4.1% of veterinarian managers) reported having engaged in non-suicidal self-injury. This compares to 12.9% of a nationally representative study of the Irish population^[30].

Previous research on veterinary professional mental health has shown that working conditions is linked to higher levels of psychological distress^{[6], [34]}. The present study observed that more than 50% of respondents reported working more than 50 hours per week and they felt that work-life balance was a significant stressor to them.

Veterinary professionals who participated in this study reported that they use activities and social support to look after their mental health. They felt that their practice/veterinary profession could support their mental wellbeing by increasing time off to access help when needed, and decreasing on-call hours, increasing better access to help, and promoting mental health awareness in the workplace. The international literature suggests a multifaceted approach to promoting mental wellbeing and improving mental health among veterinary professionals. Effective mental health promotion strategies need to be implemented to reduce the risk factors for psychological distress associated with the profession such as workplace stressors, overworking, high workload, exposure to physical risk, physical and psychological work demands, toxic team environment, stigma, and discrimination^{[2], [6], [10], [34]-[36]}.

Psychoeducation is an important aspect of promoting mental wellbeing. Organizations can provide resources such as lifelong learning and continuing professional development workshops to enhance the resilience and emotional competence needed to reduce the risk for compassion fatigue and burnout^[37]. Workshops based on problem-solving, including problem-focused strategizing that mitigate stress and emotion-focused strategizing to normalise feelings of stress, can be beneficial for veterinary professionals^[34]. Education for management may also contribute to mental health promotion to enable managers to identify and intervene in employee psychosocial difficulties^[38].

In relation to suicide prevention in the workplace, suicide prevention training for all employees and management, access to psychosocial support and controlling access to lethal means may contribute to reduce the risk for suicide in the veterinary workplace^{[21], [39]}.

The present findings should be interpreted in light of some limitations inherent to cross-sectional research. It is difficult to make causal inferences based on these findings. This is important to note given that there is some research to indicate that people who enter the veterinary profession tend to display traits such as perfectionism, high achievement orientation and a predisposition for anxiety^[14]. Although the sample frame extended to all registrants in VCI, self-selection bias may have occurred and may produce biased findings. This study resulted in a 18% response rate, however, we noted that there was a smaller representation of young males than those registered with the VCI. It is possible that the characteristics of the non-responders may differ from the characteristics of the respondents to this survey. Finally, this is a snapshot of veterinary mental health a year into the COVID-19 pandemic, and findings should be interpreted in this context. Going forward, it will be important to conduct further research to understand veterinary mental health as the pandemic progresses and dissipates. Nonetheless, the findings from this research will be useful for veterinary health planning.

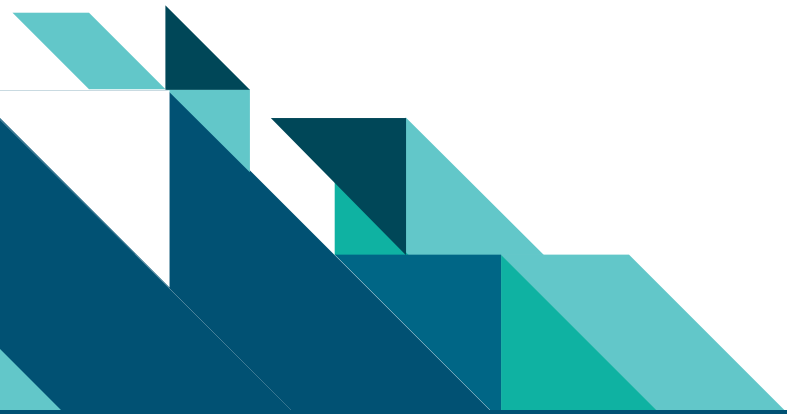
Overall, the findings from the present study and the literature indicate that veterinary professionals are experiencing heightened levels of psychological distress, specifically anxiety. Veterinary professionals reported several occupational stress factors which may be associated with this, including high workload, long working hours, and work life balance. Therefore, going forward, there is a need to better support veterinary professionals in the workplace in relation to their mental health. The findings from this report will be shared with the VCI and other stakeholders and will inform actions to support the health and wellbeing of veterinary professionals in Ireland.

To access a full list of supports for veterinary professionals, please visit: <https://vci.ie/Utility/News/2020/Supports-available-to-assist-veterinary-profession>

References

- [1] A. F. Black, H. R. Winefield, and A. Chur-Hansen, "Occupational Stress in Veterinary Nurses: Roles of the Work Environment and Own Companion Animal," *Anthrozoös*, vol. 24, no. 2, pp. 191–202, Jun. 2011, doi: 10.2752/175303711X12998632257503.
- [2] I. C. Moore, J. B. Coe, C. L. Adams, P. D. Conlon, and J. M. Sargeant, "The role of veterinary team effectiveness in job satisfaction and burnout in companion animal veterinary clinics," *J Am Vet Med Assoc*, vol. 245, no. 5, pp. 513–524, Sep. 2014, doi: 10.2460/javma.245.5.513.
- [3] E. M. Brannick *et al.*, "Taking stock and making strides toward wellness in the veterinary workplace," *J Am Vet Med Assoc*, vol. 247, no. 7, pp. 739–742, Oct. 2015, doi: 10.2460/javma.247.7.739.
- [4] J. A. Häusser, A. Mojzisch, M. Niesel, and S. Schulz-Hardt, "Ten years on: A review of recent research on the Job Demand–Control (-Support) model and psychological well-being," *Work & Stress*, vol. 24, no. 1, pp. 1–35, Jan. 2010, doi: 10.1080/02678371003683747.
- [5] S. M. Foster and E. H. Maples, "Occupational Stress in Veterinary Support Staff," *Journal of Veterinary Medical Education*, vol. 41, no. 1, pp. 102–110, Mar. 2014, doi: 10.3138/jvme.0713-103R.
- [6] C. Lloyd and D. P. Campion, "Occupational stress and the importance of self-care and resilience: focus on veterinary nursing," *Ir Vet J*, vol. 70, no. 1, p. 30, Dec. 2017, doi: 10.1186/s13620-017-0108-7.
- [7] D. J. Bartram, G. Yadegarfar, and D. S. Baldwin, "Psychosocial working conditions and work-related stressors among UK veterinary surgeons," *Occupational Medicine*, vol. 59, no. 5, pp. 334–341, Aug. 2009, doi: 10.1093/occmed/kqp072.
- [8] T. K. Witte, E. G. Spitzer, N. Edwards, K. A. Fowler, and R. J. Nett, "Suicides and deaths of undetermined intent among veterinary professionals from 2003 through 2014," *Journal of the American Veterinary Medical Association*, vol. 255, no. 5, pp. 595–608, Sep. 2019, doi: 10.2460/javma.255.5.595.
- [9] I. Hansez, F. Schins, and F. Rollin, "Occupational stress, work-home interference and burnout among Belgian veterinary practitioners," *Irish Veterinary Journal*, vol. 61, no. 4, p. 233, Apr. 2008, doi: 10.1186/2046-0481-61-4-233.
- [10] K. Reijula *et al.*, "Work environment and occupational health of Finnish veterinarians," *Am J Ind Med*, vol. 44, no. 1, pp. 46–57, Jul. 2003, doi: 10.1002/ajim.10228.
- [11] M. P. Meehan and L. Bradley, "Identifying and evaluating job stress within the Australian small animal veterinary profession," *37*, vol. 2, pp. 70–83, 2007.
- [12] L. Fritschi, D. Morrison, A. Shirangi, and L. Day, "Psychological well-being of Australian veterinarians," *Australian Veterinary Journal*, vol. 87, no. 3, pp. 76–81, 2009, doi: 10.1111/j.1751-0813.2009.00391.x.
- [13] R. Deacon and P. Brough, "Veterinary nurses' psychological well-being: The impact of patient suffering and death," *Australian Journal of Psychology*, vol. 69, p. n/a-n/a, Mar. 2016, doi: 10.1111/ajpy.12119.
- [14] D. J. Bartram and D. S. Baldwin, "Veterinary surgeons and suicide: a structured review of possible influences on increased risk," *Veterinary Record*, vol. 166, no. 13, pp. 388–397, Mar. 2010, doi: 10.1136/vr.b4794.
- [15] T. Faragher, "Letter to the editor," *Australian Veterinary Journal*, vol. 86, no. 7, pp. 249–249, 2008, doi: 10.1111/j.1751-0813.2008.00323.x.
- [16] H. Jones-Fairnie, P. Ferroni, S. Silburn, and D. Lawrence, "Suicide in Australian veterinarians," *Australian Veterinary Journal*, vol. 86, no. 4, pp. 114–116, 2008, doi: 10.1111/j.1751-0813.2008.00277.x.
- [17] R. Mellanby, "Incidence of suicide in the veterinary profession in England and Wales," *The Veterinary record*, vol. 157, pp. 415–7, Nov. 2005, doi: 10.1136/vr.157.14.415.
- [18] S. E. Tomasi, E. D. Fechter-Leggett, N. T. Edwards, A. D. Reddish, A. E. Crosby, and R. J. Nett, "Suicide among veterinarians in the United States from 1979 through 2015," *J Am Vet Med Assoc*, vol. 254, no. 1, pp. 104–112, Jan. 2019, doi: 10.2460/javma.254.1.104.
- [19] H. Meltzer, C. Griffiths, A. Brock, C. Rooney, and R. Jenkins, "Patterns of suicide by occupation in England and Wales: 2001–2005," *Br J Psychiatry*, vol. 193, no. 1, pp. 73–76, Jul. 2008, doi: 10.1192/bjp.bp.107.040550.
- [20] C. Stark, A. Belbin, P. Hopkins, D. Gibbs, A. Hay, and D. Gunnell, "Male suicide and occupation in Scotland," *Health Stat Q*, no. 29, pp. 26–29, Jan. 2006.

- [21] A. J. Milner, H. Niven, K. Page, and A. D. LaMontagne, "Suicide in veterinarians and veterinary nurses in Australia: 2001–2012," *Australian Veterinary Journal*, vol. 93, no. 9, pp. 308–310, 2015, doi: 10.1111/avj.12358.
- [22] T. S. Mair, D. R. Mountford, R. Radley, E. Lockett, and T. D. Parkin, "Mental wellbeing of equine veterinary surgeons, veterinary nurses and veterinary students during the COVID-19 pandemic," *Equine Veterinary Education*, vol. 33, no. 1, pp. 15–23, Jan. 2021, doi: 10.1111/eve.13399.
- [23] S. Bedford and E. Anscombe-Skirrow, "Bullying and disillusionment in veterinary nursing," *Veterinary Nursing Journal*, vol. 33, no. 9, pp. 250–256, Sep. 2018, doi: 10.1080/17415349.2018.1484264.
- [24] E. Demerouti, A. B. Bakker, I. Vardakou, and A. Kantas, "The convergent validity of two burnout instruments: A multitrait-multimethod analysis," *European Journal of Psychological Assessment*, vol. 19, no. 1, pp. 12–23, 2003, doi: 10.1027/1015-5759.19.1.12.
- [25] A. S. Zigmond and R. P. Snaith, "The Hospital Anxiety and Depression Scale," *Acta Psychiatrica Scandinavica*, vol. 67, no. 6, pp. 361–370, 1983, doi: 10.1111/j.1600-0447.1983.tb09716.x.
- [26] D. L. Vogel, N. G. Wade, and S. Haake, "Measuring the self-stigma associated with seeking psychological help," *Journal of Counseling Psychology*, pp. 10–1037, 2006.
- [27] S. Evans-Lacko *et al.*, "Development and Psychometric Properties of the Mental Health Knowledge Schedule," *Can J Psychiatry*, vol. 55, no. 7, pp. 440–448, Jul. 2010, doi: 10.1177/070674371005500707.
- [28] E. P. Holmes, P. W. Corrigan, P. Williams, J. Canar, and M. A. Kubiak, "Changing Attitudes About Schizophrenia," *Schizophrenia Bulletin*, vol. 25, no. 3, pp. 447–456, Jan. 1999, doi: 10.1093/oxfordjournals.schbul.a033392.
- [29] B. W. Smith, J. Dalen, K. Wiggins, E. Tooley, P. Christopher, and J. Bernard, "The brief resilience scale: Assessing the ability to bounce back," *Int. J. Behav. Med.*, vol. 15, no. 3, pp. 194–200, Sep. 2008, doi: 10.1080/10705500802222972.
- [30] P. Hyland *et al.*, "Predicting risk along the suicidality continuum: A longitudinal, nationally representative study of the Irish population during the COVID-19 pandemic," *Suicide and Life-Threatening Behaviour*, Jun. 2021, doi: 10.1111/sltb.12783.
- [31] J. L. Perret, C. O. Best, J. B. Coe, A. L. Greer, D. K. Khosa, and A. Jones-Bitton, "Prevalence of mental health outcomes among Canadian veterinarians," *Journal of the American Veterinary Medical Association*, vol. 256, no. 3, pp. 365–375, 2020.
- [32] C. O. Best, J. L. Perret, J. Hewson, D. K. Khosa, P. D. Conlon, and A. Jones-Bitton, "A survey of veterinarian mental health and resilience in Ontario, Canada," vol. 61, p. 7, 2020.
- [33] E. L. Fink-Miller and L. M. Nestler, "Suicide in physicians and veterinarians: risk factors and theories," *Current Opinion in Psychology*, vol. 22, pp. 23–26, Aug. 2018, doi: 10.1016/j.copsyc.2017.07.019.
- [34] D. J. Bartram, G. Yadegarfar, and D. S. Baldwin, "Psychosocial working conditions and work-related stressors among UK veterinary surgeons," *Occup Med (Lond)*, vol. 59, no. 5, pp. 334–341, Aug. 2009, doi: 10.1093/occmed/kqp072.
- [35] S. Lokhee and R. C. Hogg, "Depression, stress and self-stigma towards seeking psychological help in veterinary students," *Australian Veterinary Journal*, vol. 99, no. 7, pp. 309–317, 2021, doi: 10.1111/avj.13070.
- [36] G. M. Hayes *et al.*, "Investigation of burnout syndrome and job-related risk factors in veterinary technicians in specialty teaching hospitals: a multicenter cross-sectional study," *Journal of Veterinary Emergency and Critical Care*, vol. 30, no. 1, pp. 18–27, 2020, doi: 10.1111/vec.12916.
- [37] P. Huggard and J. Huggard, "WHEN THE CARING GETS TOUGH Compassion Fatigue and Veterinary Care." *Vet Script*, 2008.
- [38] WHO, "Mental health in the workplace," *Mental health in the workplace*, 2021. <https://www.who.int/teams/sexual-and-reproductive-health-and-research/areas-of-work/fertility-care/infertility-definitions-and-terminology/mental-health-and-substances-use> (accessed Apr. 27, 2021).
- [39] A. Milner, K. Witt, H. Maheen, and A. LaMontagne, "Access to means of suicide, occupation and the risk of suicide: a national study over 12 years of coronial data," *BMC Psychiatry*, vol. 17, no. 1, p. 125, Apr. 2017, doi: 10.1186/s12888-017-1288-0.



Published by: National Suicide Research Foundation, Cork.

Copyright © National Suicide Research Foundation, 2021

This research was commissioned by the Veterinary Council of Ireland, funded by the HSE National Office for Suicide Prevention in alignment with *Connecting for Life, Ireland's National Strategy to Reduce Suicide*, and completed by a combined team of researchers from the National Suicide Research Foundation and HSE National Office for Suicide Prevention.

