Over the past two decades, the influence of ‘stress’ has been extensively studied in doctors and nurses within the human healthcare system (Galantino et al, 2005; Ogińska-Bulik, 2006). The effect of ‘stress’ has also been acknowledged in similar animal-related professions such as veterinarians and veterinary nurses (Huggard and Huggard, 2008). The term ‘stress’ refers to ‘a state of mental or emotional strain or tension resulting from adverse or demanding circumstances’ (Lexico, n.d). Burnout, a form of stress, is a consequence of job stress such as conflict between roles, lack of expectations, or overload (Rizzo et al, 1970). This causes emotional exhaustion, depersonalisation and low personal accomplishment (Schaufeli et al, 1996). More recently, burnout caused by giving constant care to those with pain, trauma and suffering has resulted in a new term, ‘compassion fatigue’. This is used to describe human healthcare and veterinary care workers who have lost their ability to ‘nurture’ (Coetzee and Klopper, 2010). This can lead to workers being ineffective, apathetic, and depressed (Joinson, 1992). In the veterinary clinic setting, compassion fatigue is the emotional exhaustion from exposure to traumatic situations such as managing animal abuse cases, assisting with euthanasia or severe injury, and talking to clients or colleagues about patients (Overfield, 2012).

In studies undertaken in New Zealand, the UK, and Australia, results have shown that veterinarians and other animal care workers suffer from both a high level of work-related stress, and compassion fatigue (Gardner and Hini, 2006; Anon, 2015; Deacon and Brough, 2017). Studies have also shown that veterinarians are a high-risk group for suicide (Bartram et al, 2009; Bartram and Baldwin, 2010). In contrast, research around the incidence and severity of stress and compassion fatigue within the veterinary nurses. 

**Background:** Stress and compassion fatigue are widely acknowledged as prevalent in workers in ‘caring’ roles, however this has not been widely documented in New Zealand veterinary nurses.

**Aim:** This project aimed to investigate the prevalence of stress and compassion fatigue in New Zealand veterinary nurses.

**Method:** Using an online survey, veterinary nurses were asked to self-report their incidence of stress or compassion fatigue felt as a result of their working environment. Veterinary nurses were also asked to report the ways in which they cope with stress and compassion fatigue, and their likelihood of changing jobs.

**Results:** There were 288 responses to the survey. Of these, 94% of respondents reported feeling stressed and 82% reported experiencing compassion fatigue as a result of their work. 30% of respondents reported an increase in the consumption of alcohol/cigarettes and drugs as a result of stress. Most respondents reported managing their stress and compassion fatigue by talking to colleagues or family. A large number of respondents reported having considered a career change at some stage due to stress or compassion fatigue.

**Conclusion:** This research demonstrates a high incidence of stress and compassion fatigue in New Zealand veterinary nurses, with a low percentage of those seeking professional support. Further investigation into combatable causal factors for stress as it differs from compassion fatigue is warranted to ultimately offer support to veterinary nurses to continue their vocation.

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**Key words:** veterinary nurse | compassion fatigue | stress | support | career
Nursing profession is still in its infancy, with limited data emerging in the past few years (Smith, 2016; Scotney et al., 2019).

Veterinary nurses are integral members of the veterinary team, contributing significantly to veterinary practice. Veterinary nurses work directly with veterinarians, and with clients and their pets, exposing them to some of the same stressors as veterinarians, such as excessive workloads, long working hours, physically demanding work, and a hazardous work environment (Black et al., 2011). Harvey and Cameron (2019) also identified role ‘confusion’ within the clinic between veterinarians and veterinary nurses which could contribute to increased pressure and work stress. In addition, veterinary nurses have ongoing emotional demands from clients, as well as being involved in the stressors associated with euthanasia of animals (Black et al., 2011). These factors may place veterinary nurses at high risk of work-related stress, and compassion fatigue (Black et al., 2011).

Stress and compassion fatigue can have an impact on a veterinary nurse’s ability to successfully fulfill their role due to avoidance of situations involving patient suffering (Gallagher, 2013), negative interactions with colleagues and clients, and a decrease in job satisfaction (Mitchener and Ogilvie, 2002). This can significantly impact the wellbeing of the individual, resulting in initiating/increased consumption of drugs (medical/recreational) and alcohol as a coping mechanism, depression and absenteeism in veterinary nurses (Overfield, 2012).

This study measured the prevalence of self-reported stress and compassion fatigue in New Zealand veterinary nurses using a survey. Furthermore, it looked at how veterinary nurses coped with stressors in a clinic and the likelihood that stress or compassion fatigue would lead to a career change. It was expected that New Zealand veterinary nurses would report high levels of stress and compassion fatigue in line with reports from international colleagues.

Materials and methods
The survey
An online questionnaire, designed to be answered in less than 10 minutes, was promoted to veterinary nurses in New Zealand via social media (Facebook), in an email to all members of the New Zealand Veterinary Nursing Association (NZVNA), and by inclusion in the online newsletter sent to all New Zealand Veterinary Association (NZVA) members. The survey was targeted to all veterinary nurses, with no mention of stress and compassion fatigue in the title to minimise selection bias.

The questionnaire was divided into four sections. In Section One, respondents were asked to give their demographic information (age, gender and ethnicity), level of qualification, place of employment, and level of income. In Section Two, respondents were asked about the tasks undertaken in veterinary practice on a regular basis (not addressed in this paper). In Section Three respondents were asked about their ‘wellness’, in terms of stress and compassion fatigue they felt they experienced in their work, and how they coped with stressors. Questions in this section used frequency markers, such as if and how often stress and/or compassion fatigue were experienced. In Section Four, there were questions about the respondents’ current awareness of voluntary registration for veterinary nurses, and their NZVNA membership status.

Questions were predominately multiple-choice or matrix questions, with some allowing for additional comments to be made. Respondents were not required to answer all the questions for their survey to be used in the final analysis.

This research was approved by the Unitec Research Ethics Committee, Auckland, New Zealand (UREC Registration Number: 2014-1070).

Results
Demographic analysis
The survey was completed by 288 veterinary nurses, representing 19% of the self-identified population of veterinary nurses, as per the 2013 New Zealand Census (Stats NZ Tatauranga Aotearoa, 2013). Female respondents represented 99% of respondents and most were aged between 20 and 31 years of age (Figure 1a). Of those, 52% (N = 248) reported having a minimum qualification at diploma level (Figure 1b). Eighty-two percent (N = 247) work full-time (25+ hours per week; Figure 1c), with 60% (N = 251) having been in their current workplace for at least 2 years (Figure 1d).

Figure 1. Percentage of respondents by age (a); by qualification (b); by employment contract (c) and length of employment (d).
Incidence of stress and compassion fatigue
The respondents were asked how they rated their level of stress and compassion fatigue as a result of their working environment (Figure 2). Of the respondents, 94% ($N = 188$) reported feeling stressed and 82% ($N = 189$) reported experiencing compassion fatigue as a result of their working environment. Nearly a third of respondents chose not to answer this question. Of those reporting stress, 49% reported feeling stressed ‘always’, ‘most of the time’ or ‘half of the time’; and 46% reported feeling stressed ‘some of the time’ and 5% reporting ‘never feeling stressed’. Of those reporting compassion fatigue, 33.5% reported to have felt they were experiencing compassion fatigue ‘always’, ‘most of the time’ or ‘half of the time’; 48.5% reported suffering from compassion fatigue ‘some of the time’ and 18% reported ‘never suffering compassion fatigue’.

It was of interest whether there were relationships between age and length of employment and the incidence of stress and compassion fatigue. Considering those respondents that answered all questions ($N = 189$) there were no significant relationships between age and incidence of stress ($r = 0.18, p = 0.803$) or compassion fatigue ($r = -0.004, p = 0.953$); or between length of employment and incidence of stress ($r = -0.03, p = 0.671$). There was a weak but significant negative relationship between length of employment and incidence of compassion fatigue ($r = -0.19, p = 0.008$) indicating that as veterinary nurses remain in the job the incidence of reported compassion fatigue (or what veterinary nurses perceive as compassion fatigue) decreases.

Personal management
A substantial number of respondents reported an increase in the consumption of alcohol/cigarettes/drugs due to experiencing stress (30%; $N = 190$) and compassion fatigue (26%; $N = 184$; Figure 3). More respondents reported talking to people to manage their stress and compassion fatigue, through informal conversations with their work colleagues (65%), family (52%), and friends (49%; Figure 3).

The proportion of respondents seeking professional advice was low with 9% of respondents seeing their doctor, 7% a counsellor, and 1% using a work-paid counselling service. Almost all respondents considered that there should be veterinary nurse-specific resources for emotional health ($N = 179$), as are provided for veterinarians by the New Zealand Veterinary Association.

Impact on career change
Many of the respondents reported considering a different career path due to stress (78%; $N = 162$) or compassion fatigue (50%; $N = 190$; Figure 4). Of those respondents that reported stress in the work environment ($N = 188$), 18% had often considered a new career path, and of those respondents that reported compassion fatigue ($N = 189$), 11% had often considered a different career path. There were positively strong and significant relationships between consideration of a career change and the incidence of stress ($r = 0.59, p <0.001$) and the incidence of compassion fatigue ($r = 0.57, p <0.001$).
Discussion

This research demonstrates that veterinary nurses in New Zealand report a high incidence of stress and compassion fatigue in their lives due to their working environment. Methods of coping by veterinary nurses included utilising mechanisms such as drugs and alcohol, and talking to family and colleagues. Few veterinary nurses had sought professional help, with most reporting the need for access to professional, industry-specific support.

There is a link between work-related stress and compassion fatigue, therefore these two areas cannot be viewed in isolation (Black et al, 2011). Veterinary nurse job satisfaction is negatively impacted by levels of stress, and those performing euthanasia are at high risk of stress and compassion fatigue (Black et al, 2011; Anon, 2015). This is evidenced in two recent informal surveys of veterinary nurses in Australia. They reported prevalence rates of compassion fatigue of 41% and 40% respectively (Hewson, 2014).

One study examined the impact of euthanizing animals and the prevalence of traumatic stress. This study found 11% of respondents experiencing moderate levels of traumatic stress. In comparison with the current survey, where the percentage of respondents experiencing stress and compassion fatigue was greater than 80%, in the Australian study reported by Hewson (2014) those experiencing compassion fatigue were, at most, 40% of those surveyed. There was, however, no explicit distinction between stress and compassion fatigue in the surveys discussed by Hewson (2014). In addition, the information surveys discussed by Hewson (2014) included a variety of participants who work with animals, including veterinarians, veterinary nurses, and research and animal shelter staff and although indicative of those experiencing compassion fatigue, a breakdown of results by profession would be required to be comparable to veterinary nurses as an independent group. A more recent 2019 survey of those working in animal-related professions showed 21% of respondents were at higher risk of burnout, and almost 25% were at risk of secondary burnout (Scotney et al, 2019). Again, this study was not specific to veterinary nurses.

A distinction between stress and compassion fatigue could be unnecessary for the provision of work-related support, however, definitions are necessary and important in identifying the type of support or programme requested by veterinary nurses. According to the survey, there were few veterinary nurses that utilised professional services and it appears that social support networks (friends, family and work colleagues) are the main way veterinary nurses cope with stress and compassion fatigue. These social supports are a vital resource for coping with the negative aspects of veterinary nursing work (Black et al, 2011). For example, dealing with suffering animals and clients in relation to euthanasia, requires a specialised support strategy with which friends and family cannot identify and which is not covered in a typical stress management course.

This study measured the incidence of stress and compassion fatigue in veterinary nurses and how they cope with stressors. There are also impacts on organisational management in veterinary practices and patient care with potential for leaving the profession increasing in likelihood as stress and compassion fatigue increases in the job. This provides more impetus for the need for specific industry support and more research into the work–life balance of veterinary nurses, their working environments, education, and work-related tasks — a project in progress at present.

The need for access to support services is reiterated within the literature for interventions and treatment programmes aimed at human healthcare professionals. In one review article looking at recent studies, they found decreased absenteeism and lower patient mortality when occupational support was provided (Aycock and Boyle, 2009). Another study providing oncology nurses with a specific compassion fatigue intervention programme found participants had a significant reduction in their compassion fatigue scores (Potter et al, 2013). If similar results were to be achieved with veterinary nurses, the rate of staff turnover may decrease, providing a more stable workforce, and potentially better patient outcomes.

Study limitations

There were some limitations to the conclusions that can be drawn from the data due to some respondents choosing to not answer questions. The number of respondents that skipped questions regarding incidence of stress or compassion fatigue may not be experiencing that type of stress currently, or there is a need to increase the specificity of the question to capture those veterinary nurses and their perception of stress in the workplace. Future studies in this area would require the use of a recognised method of determining actual levels of stress and compassion fatigue in respondents, for example, the Professional Quality of Life (ProQOL) measure (The Center for Victims of Torture, 2019). This is currently underway.
KEY POINTS

- There is a high self-reported incidence of compassion fatigue in New Zealand veterinary nurses.
- Many New Zealand veterinary nurses consider a career change due to stress and compassion fatigue in the workplace.
- There is low uptake of the use of professional support services to assist veterinary nurses with managing their stress and compassion fatigue.

Conclusion

The high levels of stress and compassion fatigue in New Zealand demonstrated in this study suggest a place for formally addressing this issue within teaching curricula to provide students a set of tools for recognising and managing stress and compassion fatigue in themselves and their colleagues. It could also help to change the way veterinary clinics are managed, in relation to workplace (national) initiatives to reduce the prevalence and severity of stress and compassion fatigue in veterinary nurses.

Due to the high incidence of reported compassion fatigue and stress among veterinary nurses, further research is important to identify combatable risk factors such as workload, and traumatic or demanding job environments, with the aim of providing ways of reducing stress and compassion fatigue in veterinary nurses in New Zealand.

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