

# An evaluation of a veterinary-specific mental health service

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<b>Background</b>	Veterinary professionals are at increased risk of suicide and mental health difficulties compared to the general population. Vetlife Health Support (VHS) is a mental health case management service for veterinarians with mental health difficulties.
<b>Aims</b>	To evaluate the VHS case management service from the service user's perspective.
<b>Methods</b>	Service users ( $n = 98$ ) completed questionnaires assessing their experience with VHS and current mental health status using the Kessler-6 Scale. A sub-sample was interviewed and the data qualitatively analysed ( $n = 14$ ).
<b>Results</b>	The results show that 97% ( $n = 95$ ) reported a positive experience with VHS and 98% ( $n = 96$ ) reported VHS staff respected and listened to them. Participants reported significant improvements in relationships with others after VHS ( $P < 0.001$ ) and were significantly more likely to be in receipt of formal mental health care after VHS than before ( $P < 0.01$ ). The main emergent themes from the qualitative interviews were (i) positive communication between clinician and service users, (ii) veterinary-specific mental health services were regarded as important to understanding service users' circumstances, (iii) knowing someone is supporting them positively impacted wellbeing and (iv) confusion with discharge status.
<b>Conclusions</b>	Most participants reported positive experiences with VHS. Quantitatively, data showed that participants reported significant improvements in relationships and access to formal mental health care after contact with VHS. Interviews with service users revealed that they felt speaking to a mental health professional with veterinary-specific knowledge was beneficial for their wellbeing. Further evaluation assessing whether VHS leads to a measurable impact on psychological wellbeing is recommended.
<b>Key words</b>	Mental health; occupational health; service evaluation; veterinary surgeon; wellbeing.

## Introduction

Mental health at work is a much-discussed topic. With 526 000 employees reportedly experiencing work-related anxiety, stress and depression in the UK [1], unsurprisingly there is a substantial body of literature concerning workplace wellbeing. Research has identified that wellbeing risk factors can vary across occupations. For instance, long working hours, characterized by the medical profession, can contribute to experiences of burnout [2].

Veterinary professionals have been identified as an at-risk group with one-third of veterinarians reporting psychological wellbeing issues [3] and a US study with

11 627 participants found that 1 in 11 veterinarians showed serious psychological distress and 31% have experienced a depressive episode [4]. Additionally, despite a low absolute number of suicides, suicide rates in the veterinary profession are double those of medical professionals and up to three times greater than the general population [5]. International research has also identified rates of suicide amongst veterinary surgeons being elevated internationally [6].

Numerous veterinary psychological wellbeing risk factors have been identified which may contribute to psychological issues such as anxiety and depression [7]. A systematic review identified 12 veterinary-related

## Key learning points

### What is already known about this subject:

- Veterinarians are known to be an occupation at high risk of suffering from mental ill-health.
- Various occupationally specific risk factors have been identified which negatively impact veterinary professionals' psychological wellbeing.
- Suicide rates amongst veterinarians are three times higher than those compared to the general population.

### What this study adds:

- A veterinarian-specific mental health case management service (Vetlife Health Support) was well received by service users.
- VHS service users were significantly more likely to report better interpersonal relationships and more likely to access therapeutic services after engaging with VHS.
- Service users valued the veterinary-specific knowledge of the VHS clinicians.

### What impact this may have on practice or policy:

- Occupationally specific mental health services may help improve the psychological health of employees at risk of suffering from poor mental health.
- Such services may help to navigate a pathway to effective care, through the NHS or privately.
- Further research is required to examine whether services like VHS lead to improvements to health and occupational function.

stressors including job-role support, work–life balance, working hours and client/job demands [3]. Whilst the evidence is somewhat mixed, studies show that euthanasia, a unique veterinary demand, is associated with the development of adverse psychological wellbeing issues [8]. One study suggested that convenience euthanasia, the ‘waiting period’ before euthanizing an animal and the act of euthanizing are particularly stressful aspects of the job [9]. The mental ill-health of veterinary surgeons is also subject to more routine stressors such as long working hours [10] which may contribute to burnout [11]. Authors have found evidence of presenteeism, such as significantly more car and workplace accidents, in veterinary surgeons working over 48 h a week as well as the reduced performance at work [10,12].

Vetlife is a major veterinary charity that provides independent, confidential and free help for everyone in the veterinary community including veterinary nurses and students. Vetlife commissions a remotely delivered veterinary-specific mental health service called Vetlife Health Support (VHS) which aims to improve the psychological wellbeing of veterinary professionals. VHS provides beneficiaries with a comprehensive mental health assessment and clinical case management to provide, or facilitate access to, evidence-based support and care. Such care may be available from the National Health Service, private providers, using self-help materials or elsewhere. This study aimed to (i) evaluate the effectiveness of VHS from the service users' perspective and (ii) identify elements of VHS that might benefit from improvement.

## Methods

This was a mixed-methods study comprising of a quantitative retrospective survey of VHS service users to

evaluate their experiences using the service and qualitative interviews with a smaller sample. Ethical approval was granted by the King's College London Ethics boards, PNM Research Ethics Subcommittee (reference number HR-17/18-5567).

Potential participants were approached via an introductory email to all past and present VHS service users since April 2017, as it became evident to Vetlife that with growing case numbers, there was a pressing need for a formal mental health service rather than the previous *ad hoc* clinical provision.

The introductory email provided information about the study and contained a link to an online questionnaire; potential participants were explicitly informed that by completing the questionnaire they were consenting to take part in the first part of the study. This information was also restated on the first page of the questionnaire. Potential interview study participants opted-in once they had completed the online survey. All those who agreed to be interviewed were asked to retrospectively evaluate their experiences with VHS.

The online questionnaire contained 23 items that asked about participant's overall opinion of VHS with responses on a five-point Likert scale ranging from 1 (*very positive*) to 5 (*very negative*). Participants were also asked whether VHS clinicians respected them and whether they felt listened to with responses being from 1 (*strongly agree*) to 5 (*strongly disagree*). Participants were also asked to answer how likely they were to recommend VHS to others, responses varied from 1 (*extremely likely*) to 5 (*extremely unlikely*). Questions about whether participants found their job stressful and/or enjoyable had response options from 1 (*strongly agree*) to 5 (*strongly disagree*). Evaluation of relationships with others (family, friends, colleagues and clients) before and after using VHS had

response options from 1 (*extremely good*) to 5 (*extremely bad*). Respondents were also asked about whether they were receiving additional help from other sources of formal mental health support before using VHS and at the point of discharge. Participants also provided free-text responses through open-ended questions about their recommendations for improvements to VHS, what was most positive about VHS and their current work-life balance and hobbies.

Telephone semi-structured interviews were carried out with a sub-sample of beneficiaries who opted-in for the interview. They were asked to complete and return a consent form after reading a second information sheet before the interview could take place. Interviewees were asked about their journey to using VHS, their views on whether the use of VHS had impacted their wellbeing since being discharged, their retrospective evaluation of VHS, the VHS discharge process, current mental health status and other wellbeing support services used. The last interview was conducted in mid-July 2018.

Quantitative data were analysed using SPSS IMB 22. Data regarding relationships before and after using VHS and additional services used were analysed using a Wilcoxon signed-rank test. Descriptive statistics were used to analyse other quantitative data from the questionnaire. Independent *t*-tests were used to compare differences between participants experiencing high psychological distress and those who were not.

A thematic analysis approach was used to analyse the qualitative data using NVivo software. Without using a pre-existing coding framework, themes were identified within the data to develop a coding map which was used to further develop themes used in the final analysis. The thematic content analysis led to the creation of a thematic map that was used for the final analysis. This method was chosen as deciphering a framework from previous literature would have proven difficult due to the specificity of the research and the little literature focussed on this area.

## Results

A total of 194 past and present VHS users were approached to take part in the online questionnaire. In total, 113 individuals began to complete the online questionnaire; 15 responses were excluded as no questionnaire items were completed and thus 98 questionnaire responses were included in the final analysis (51% response rate). All completed responses were included in the final analysis except for the K6 data which were only reported when all six items were completed. Of the 98 participants who completed the online questionnaire, 14 consented for a qualitative interview.

Overall, 97% ( $n = 95$ ) of participants reported a positive experience with VHS; the remainder providing

neutral responses. Extremely positive (scores of 1) and positive responses (scores of 2) from the Likert scale were grouped together. From the participant's responses, 98% ( $n = 96$ ) agreed that their VHS clinician showed them respect and they were listened to carefully, and 95% ( $n = 93$ ) reported it was extremely likely they would recommend VHS to others.

We identified a significant increase in respondents reporting receiving additional formal mental health support after using VHS (59%,  $n = 56$ ) compared to beforehand (43%,  $n = 42$ ) ( $z = -2.667$ ,  $N = 94$ ,  $P < 0.01$ ). The sources of formal mental health provision are given in Table 1; there was a high frequency of participants receiving additional help after VHS privately when compared to public sector services.

Significant improvements were also found in participants' relationships with others after VHS than before. The proportion of participants rating their relationship with family as good rose significantly from 64% ( $n = 62$ ) to 78% ( $n = 76$ ) ( $z = -4.597$ ,  $N = 82$ ,  $P < 0.001^*$ ) (\* indicates a significant finding), with friends from 62% ( $n = 59$ ) to 82% ( $n = 77$ ) ( $z = -4.750$ ,  $N = 74$ ,  $P < 0.001^*$ ), with clients from 65% ( $n = 61$ ) to 82% ( $n = 77$ ) ( $z = -4.465$ ,  $N = 93$ ,  $P < 0.001^*$ ) and with colleagues from 53% ( $n = 50$ ) to 79% ( $n = 75$ ) ( $z = -6.037$ ,  $N = 76$ ,  $P < 0.001^*$ ) (see Table 2).

The K6 responses ( $n = 97$ ) showed that 59% of participants ( $n = 57$ ) were experiencing high psychological distress at the time of completing the questionnaire. No significant difference was found between the distressed participant's and non-distressed participant's relationships before using VHS. However, after using VHS less distressed beneficiaries were more likely to report good relationships with family, friends, clients and colleagues ( $t(95) = 3.198$ ,  $P < 0.01^*$ ;  $t(95) = 0.130$ ,  $P < 0.01^*$ ;  $t(92) = 2.188$ ,  $P < 0.05^*$ ;  $t(92) = 2.685$ ,  $P < 0.01^*$ ).

Numerous themes emerged from the qualitative analysis of free-text responses ( $n = 98$ ) of subjective experiences with VHS (Table 3). The most common themes were positive in that VHS staff were helpful, supportive

**Table 1.** Sources of additional help participants were receiving before and after using VHS

	Before using VHS	After using VHS
Additional help received ( $n$ )	GP (10) Talking therapies (Private) (9) Talking therapies (NHS) (19) Medication (3) Other (2)	GP (10) Talking therapies (Private) (18) Talking therapies (NHS) (15) Medication (2) Other (5)

Data were not available from all participants.

**Table 2.** The total frequency, percentage and mean of how participants rated their relationships with family ( $n = 82$ ), friends ( $n = 74$ ), clients ( $n = 74$ ) and colleagues ( $n = 76$ ) before and after using VHS

	Good relationship $n$ (%)	Bad relationship $n$ (%)
Family (before)	62 (64)	23 (24)
Family (after)	76 (78)	6 (6)
Friends (before)	59 (62)	15 (16)
Friends (after)	77 (79)	2 (2)
Clients (before)	61 (65)	13 (14)
Clients (after)	77 (82)	2 (2)
Colleagues (before)	50 (53)	26 (28)
Colleagues (after)	75 (8)	4 (4)

Extremely good and good scores were combined, as were extremely bad and bad scores. Neutral responses were excluded from the table. Not all participant data were available.

**Table 3.** The key themes of the participant’s positive experiences of VHS and aspects they would improve ( $n = 98$ )

Positive experiences	Aspects to improve
Understanding	Nothing to change
Helpful	More face-to-face contact
Supportive	More time with the service
Listened well	Bigger service
Expert knowledge	More availability
Personal	Better system
Empathetic	More tailored to specific needs
Improved wellbeing	
Quick service	
Professional	
Life saving	

Responses were given from open-text items.

and understood participants’ needs. The most common response to the question ‘what should change with VHS’ was ‘nothing’; however, a minority stated that they would have preferred face-to-face to telephone consultations.

Semi-structured interview ( $n = 14$ ) qualitative data generated three themes: (i) reasons that led service users to VHS, (ii) experiences with VHS and (iii) the impact VHS had on service users’ psychological wellbeing. Most respondents highlighted workplace risk factors including a lack of support, bullying culture and long hours had led to them using VHS (see **Box 1** for service user’s quotes).

Most participants found that VHS clinicians’ veterinary-specific knowledge was an important element of them feeling understood; this contributed to their appreciation of the care received. Many also reported that good quality communication between VHS and the service user had contributed to an overall positive experience. Many participants also reported positively

### Box 1. Quotes regarding workplace-related factors leading them to VHS

- I was struggling because I had a difficult relationship with my boss, who wasn’t particularly supportive.... I guess bullying in some ways... and some of the criticism you would get would be really unreasonable [P4].
- The reason I became depressed was because I had no plans or intentions of retiring I was obliged to retire by my last employer...who made life difficult for me [P12].
- A lot of the ways we are treated as people would just not be acceptable like being called a ‘stupid little woman’ or a ‘stupid little girl’ [P2].
- I was working quite long hours and we did out of hours as well. There were a few times where I’d get no sleep at all... [P4]
- ... there were a few times where I’d sleep on the floor next to a dog.

on VHS being remote as they always felt someone was there to support them. However, half ( $n = 7$ ) reported that they would have preferred face-to-face support. A minority of participants ( $n = 6$ ) reported feeling uncertain as to when they were formally discharged from the service, which appeared to have caused some confusion (see **Box 2**).

When asked about the potential impact of VHS on their mental wellbeing, several sub-themes were generated. These included VHS being accessible in times of crisis, acting as a ‘stepping-stone’ to receiving additional help elsewhere and giving participants self-help tools to improve psychological wellbeing (see **Box 3**).

### Discussion

The main study findings indicated that service users reported a positive experience with VHS; none reported their experience as negative. Lack of workplace support was the most common risk factor that led service users to VHS and engaging with VHS was associated with significant improvements in relationships and accessing further professional mental health care.

This study had a number of strengths. The mixed-method study allowed for a more detailed evaluation from the service user’s perspective and qualitative findings to be compared with quantitative ones. The methodology allows greater confidence to be placed on the finding that most service users found engaging with VHS to be a positive experience. The relatively respectable response rate is likely to have minimized the chance that a response bias may have impacted upon

## Box 2. Quotes regarding positive aspects of VHS and aspects to improve

### Positive aspects

- They understand the kind of job...., because you expect to work long hours, you're supposed to have aspects that didn't go so well because that's part of the job. But it was helpful to have someone who understood that [P4].
- He was very good to me. He used to ring me up every five weeks or so and say 'how are you getting on' and it was a help [P14].
- I have to say I am really impressed with the over the phone stuff and also, time wise he was really flexible [P2].
- Just knowing that someone was checking in on you was really helpful, because you just know that you've got that net... And actually knowing that I had that net was enough for me to not need it [P4].
- I think just knowing that I could just, I could just call and speak to someone. Even though you don't necessarily do it, just knowing that there's someone there who has an understanding of it [P7].

### Aspects to improve

- I don't think so, I mean I haven't spoken to anyone for a while, but there's been no formality of being discharged [P13].
- Apparently I've been discharged and I wasn't aware of this, this wasn't discussed with me [P11].

## Box 3. Service user's quotes regarding VHS and the impact on psychological wellbeing

- We were trying to get me some, some local, face-to-face help [P6].
- They try to help you to help yourself. I wouldn't want to be three years down the line, still needing to talk to someone [P2].
- Crystalizing the plans I had to make myself well and talking through things like exercise and sleep [P9].
- Impact on my mental health and made me change little things about my lifestyle [P13].

the results. The sample of qualitative interviews, which is in keeping with other similar evaluative studies [13], is likely to have provided a true reflection of relevant themes. However, over half of the sample population scored probable for high psychological distress, this may raise questions regarding reliability. As the data

were collected retrospectively, the distress experienced by participants at the time of the study may have influenced responses. This would be something to consider in future work and perhaps excluding those who scored above the high psychological distress threshold would increase results reliability. In future work, we suggest the inclusion of a K6 test before and after using VHS to measure any possible changes to psychological distress, possibly associated with VHS. The study also had several limitations. Retrospective recall of the participant's experiences before and after using VHS may have impacted on the validity of the data. Some participants reported taking psychotropic medication which has the potential to negatively impact cognitive functioning [14], and possibly impair recall ability; however, medication use was not included. The study also did not collect service user's demographic information in order to encourage participation; future research should prioritize collecting this information. Lastly, the study does not compare the mental health of veterinary professionals who did not use VHS, important for future work.

We identified a significant increase in the perceived quality of relationships between service users and social and occupational contacts. This finding has relevance, given the consistent evidence that good interpersonal relationships can improve psychological wellbeing [15], including increased self-efficacy, life satisfaction and quality of life. This finding is substantial given the strong links between social support and psychological wellbeing especially in occupational settings [16]. Additionally, a significant association was found between the improvement in relationships after using VHS and lower reporting of distress. This may suggest that positive relationships largely impact psychological distress. Alternatively, distress may impede benefitting from, forming or maintaining positive relationships. Whatever the nature of the association, these data suggest that helping veterinarians to experience positive relationships with others is likely to help improve their mental health.

The study also identified that engagement with VHS was significantly associated with service users being more likely to access professional psychological support services. Given the strong evidence that many people with mental health problems do not access professional care [17], this is an important outcome. Once again, it was not possible to identify the mechanism for this effect but postulate that the VHS clinicians had both advocated for service users to help them access NHS care providers and helped others to navigate into private care. Indeed, evidence shows that many people find themselves unable to readily access community mental health care [18], especially if, as applicable to many VHS users, they do not have a serious mental health disorder associated with risks to self or others [19].

Although few service users accessed VHS due to personal, non-work related, reasons, a large majority

highlighted the importance of a mental health support service specifically tailored for the veterinary profession had led to them feeling understood by the VHS clinician. These results suggest that ensuring the clinical care providers for specific occupational groups, especially those at known increased risk of mental ill-health, are well acquainted with the nature of the roles undertaken by potential patients, may foster help-seeking and satisfaction with care. This finding is consistent with studies that emphasize the importance of understanding occupation-specific needs when delivering interventions [20,21].

We also found that most participants reported that good communication between themselves and VHS staff had positively impacted their overall care experience. This finding corresponds with existing research, as a strong partnership between client and clinician has been identified to improve psychological outcomes [22,23]. Participants identified that ‘knowing someone is there’ was felt to greatly impact on service-users’ psychological wellbeing. This is in keeping with literature showing that having perceived available support can relieve stress and improve wellbeing which has been described as part of the stress-buffering model of social support [24].

One consistent negative finding from the qualitative results was that a number of participants were confused as to whether VHS had discharged them or not. Uncertainty over discharge may be problematic for service users who may need to return to VHS as studies show that patient’s awareness of their service status contributes to whether they would return to the service [25]. Our results suggest that if VHS addresses the patient discharge process, it may reduce any negative implications on wellbeing.

In conclusion, this study suggests that a remotely delivered, occupationally aware mental health assessment and case management service was well received by veterinary professionals. This is an important finding given they are an occupational group at high risk of suffering mental health problems and suicide. The use of VHS was associated with improvements in relationships and increased utilization of mental health treatment; both of which are likely to lead to positive changes in mental health. Whilst this study was not able to determine if VHS use did in fact lead to positive changes in mental health, the results suggest that the service has promise and may represent a model that other employers may want to consider, especially occupations with known substantial risks of mental health issues.

## Competing interests

NG, KG and DH are employees of March On Stress Ltd which currently provides the clinical service for veterinarians that is the subject of this paper, and RA and KM

are employed by Vetlife which is the charity associated with the veterinary mental health service in the current paper suggesting potential conflicts of interest. However, all data were independently collected and analysed by AM with no conflicts of interest.

## References

1. Health and Safety Executive. The Working Time Regulations (1998). <http://www.legislation.gov.uk/ukxi/1998/1833/contents/made>. (19 June 2018, date last accessed).
2. Howe A. Doctors’ health and wellbeing. *Br Med J* 2013;347:f5558.
3. Platt B, Hawton K, Simkin S, Mellanby RJ. Suicidal behaviour and psychosocial problems in veterinary surgeons: a systematic review. *Soc Psychiatry Psychiatr Epidemiol* 2012;47:223–240.
4. Nett RJ, Witte TK, Holzbauer SM *et al*. Risk factors for suicide, attitudes toward mental illness, and practice-related stressors among US veterinarians. *J Am Vet Med Assoc* 2015;247:945–955.
5. Mellanby RJ. Incidence of suicide in the veterinary profession in England and Wales. *Vet Rec* 2005;157:415–417.
6. Platt B, Hawton K, Simkin S, Mellanby RJ. Systematic review of the prevalence of suicide in veterinary surgeons. *Occup Med (Lond)* 2010;60:436–446.
7. Johnson S, Cooper C, Cartwright S, Donald I, Taylor P, Millet C. The experience of work-related stress across occupations. *J Manag Psychol* 2005;20:178–187.
8. Rollin BE. Euthanasia, moral stress, and chronic illness in veterinary medicine. *Vet Clin North Am Small Anim Pract* 2011;41:651–659.
9. Tran L, Crane MF, Phillips JK. The distinct role of performing euthanasia on depression and suicide in veterinarians. *J Occup Health Psychol* 2014;19:123–132.
10. Trimpop R, Kirkcaldy B, Athanasou J, Cooper C. Individual differences in working hours, work perceptions and accident rates in veterinary surgeries. *Work Stress* 2000;14:181–188.
11. Meehan MP, Bradley L. Identifying and evaluating job stress within the Australian small animal veterinary profession. *Aust Vet Practit* 2007;37:70–83.
12. Hilton MF, Whiteford HA. Associations between psychological distress, workplace accidents, workplace failures and workplace successes. *Int Arch Occup Environ Health* 2010;83:923–933.
13. Farrand P, Jeffs A, Bloomfield T, Greenberg N, Watkins E, Mullan E. Mental health service acceptability for the armed forces veteran community. *Occup Med (Lond)* 2018;68:391–398.
14. Stilley CS, Bender CM, Dunbar-Jacob J, Sereika S, Ryan CM. The impact of cognitive function on medication management: three studies. *Health Psychol* 2010;29:50–55.
15. Nielsen MB, Einarsen S, Notelaers G, Nielsen GH. Does exposure to bullying behaviors at the workplace contribute to later suicidal ideation? A three-wave longitudinal study. *Scand J Work Environ Health* 2016;42:246–250.
16. Jones N, Seddon R, Fear NT, McAllister P, Wessely S, Greenberg N. Leadership, cohesion, morale, and the

- mental health of UK Armed Forces in Afghanistan. *Psychiatry* 2012;75:49–59.
17. Thornicroft G, Mehta N, Clement S *et al.* Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *Lancet* 2016;387:1123–1132.
  18. Kovandžić M, Chew-Graham C, Reeve J *et al.* Access to primary mental health care for hard-to-reach groups: from ‘silent suffering’ to ‘making it work’. *Soc Sci Med* 2011;72:763–772.
  19. Salaheddin K, Mason B. Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. *Br J Gen Pract* 2016;66:e686–e692.
  20. Brooks SK, Gerada C, Chalder T. Review of literature on the mental health of doctors: are specialist services needed? *J Ment Health* 2011;20:146–156.
  21. Bajorek Z. *Employee Assistance Programmes (EAPs) Supporting Good Work for UK Employers?* London, England: Work Foundation, 2016.
  22. Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *J Adv Nurs* 2013;69:4–15.
  23. Epstein RM, Fiscella K, Lesser CS, Stange KC. Why the nation needs a policy push on patient-centered health care. *Health Aff (Millwood)* 2010;29:1489–1495.
  24. Cohen S. Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychol* 1988;7:269–297.
  25. Makaryus AN, Friedman EA. Patients’ understanding of their treatment plans and diagnosis at discharge. *Mayo Clin Proc* 2005;80:991–994.