

Research

Managing depression in patients with vision impairment: A descriptive study of practitioners' beliefs and confidence

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Aim: Depression is common in older adults with vision impairment yet it often remains unidentified and untreated. Eye health professionals (EHPs) and rehabilitation workers (RWs) may be able to assist in detecting depression. This study identified EHPs' and RWs' beliefs about depression and confidence in working with patients with vision impairment and depression.

Methods: A self-administered cross-sectional survey of 94 EHPs and RWs assessed beliefs about the symptoms and treatment for depression, and confidence in working with depressed people with vision impairment.

Results: Participants showed awareness of both the symptoms and treatment options for depression. However, some important misconceptions were identified and many symptoms of depression were commonly attributed to vision loss. Participants lacked confidence in communicating about depression with patients and their families.

Conclusions: Training programs are needed to enable EHPs and RWs to confidently identify depression and discuss appropriate treatment and referral options with their patients.

Key words: belief, confidence, depression, eye health professional, vision impairment.

Introduction

Vision impairment refers to significant vision loss that is not correctable by refraction or treatment. It is primarily due to age-related eye conditions such as macular degeneration, glaucoma and diabetic retinopathy, and prevalence rates increase dramatically with age. Epidemiological data from Australia estimate that the prevalence of vision impairment double by each decade from 0.6% in the 40–49 year age group to 39% among people aged older than 90 years [1].

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The relationship between vision impairment and ageing is reflected in the patients served by eye care and vision rehabilitation services. The average age of first-time users of low vision rehabilitation services in Victoria was found to be 80 years [2]. In a recent mapping of patients attending a major public eye hospital in Victoria, the Royal Victorian Eye and Ear Hospital, the greatest proportion of patients (40%) were in the 60–79 age group [3].

Individuals with low vision experience a range of behavioural restrictions, especially with regard to reading and accessing information, mobility, leisure and activities related to household and personal care [4]. These restrictions are likely to result in loss of independence, increased social isolation and decreased general life satisfaction [5]. In fact, the negative impact of vision loss on quality of life is comparable to that of other major medical conditions including stroke, coronary heart disease, diabetes and asthma [6]. Consequently, depression is a common comorbidity for older adults with vision impairment, which substantially reduces level of functioning and increases disability beyond that accounted for by vision loss [7]. It is well established that older people with vision impairment are at greater risk of depression or depressive symptoms compared with peers of comparable age in the general population [8]. Studies conducted largely in the USA have found that up to a third of all people with vision impairment in later life report clinically significant depressive symptoms [9].

The diagnostic criteria for depression are well established and a number of well-validated depression screening tools exist [10]. A large number of randomised controlled trials have shown that antidepressants and specific psychological therapies are evidence-based treatment options [11]. For mild to moderate depression brief psychological therapies based on cognitive behavioural approach are recommended. For moderate to severe depression a combination of antidepressants and psychological therapy (cognitive behavioural therapy or interpersonal therapy) is recommended [11]. Despite these recommendations, reports have highlighted that older patients with depression are infrequently referred for psychological therapy [12]. Self-help strategies (e.g. books based on cognitive behavioural approaches) have some supporting evidence, but further studies are required [13]. Complementary and lifestyle interventions (e.g. taking vitamins, consuming alcohol) have shown to be commonly reported by the Australian community as depression management strategies, although the majority of these strategies do not have sufficient supporting evidence [13]. One notable exception is that

physical activity has fairly strong evidence to support this as an effective intervention for older adults with mild to moderate depression [14].

Whilst effective treatments for depression are available, depression often remains undetected and therefore untreated in older adults with vision impairment [15]. Depression is often difficult to identify in primary care settings especially for patients with chronic illness [16]. Recently, emphasis has been placed on health-care providers who work with patient groups at risk of depression in settings such as aged care [17], oncology [18] and palliative care [19]. Research from both primary and tertiary care settings has indicated that two important barriers to depression management are practitioners' attitudes to depression and their low confidence in recognising and assessing depression [20,21].

Eye health professionals (EHPs), including ophthalmic nurses, ophthalmologists, optometrists, orthoptists and rehabilitation workers (RWs), are key care providers for older people with vision impairment and could play a role in detecting depression. A recent paper outlined the symptoms of depression and proposed that the practitioner's role is threefold: (i) to identify patients who may be depressed, (ii) to communicate effectively with these patients and (iii) to make appropriate referrals [22]. However, it is currently unclear if EHPs and RWs have the knowledge, skills or confidence to fulfil these tasks. This study therefore assessed EHPs' and RWs' beliefs about depression, knowledge of its symptoms and treatment options, as well as confidence in managing patients with vision impairment who may be depressed.

Methods

Participants and recruitment

A cross-sectional survey of EHPs and RWs across the Australian state of Victoria was conducted. This project adhered

to the guidelines of the Declaration of Helsinki. Ethical approval was received from the Human Research and Ethics Committee of the Royal Victorian Eye and Ear Hospital and all participants gave signed consent. Questionnaires were distributed via professional organisations or employing agencies.

Measures

Background

Sociodemographics and details of professional background, training and current work were recorded.

Beliefs about depression in individuals with vision impairment

Beliefs about the symptoms of depression were assessed using the Illness Perception Questionnaire (IPQ) for depression [23]. This consists of a list of 14 symptoms based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) [24] criteria for major depressive disorder (please see Table 1). For the purposes of this study, participants were asked to indicate if they believed each symptom was related to vision impairment alone (yes/no) and depression in people with vision impairment (yes/no). Individuals' responses for symptoms were then classified into one of four categories: (i) related to depression in people with vision impairment; (ii) related to vision impairment only; (iii) related to both depression and vision impairment; and (iv) not related to either depression or vision impairment.

Beliefs about treatment approaches for depression

Participants rated 13 treatment approaches as 'helpful', 'harmful', 'neither' or 'never heard of it'. Items were derived from the *beyondblue* Depression Monitor [25]. This measure was developed in Australia to assesses the public's understanding of depression and its treatment. Two additional items, 'support from family and friends' and 'low

Table 1: Beliefs about symptoms of depression reported by 94 eye health professionals and rehabilitation workers

	Symptom not related to either depression or vision impairment, n (%)	Symptom related to depression in people with vision impairment, n (%)	Symptom related to vision impairment, n (%)	Symptom related to both depression and vision impairment, n (%)
1. Depressed mood	–	16 (17.0)	2 (2.1)	73 (77.7)
2. Loss of interest in activities	–	13 (13.8)	5 (5.3)	74 (78.7)
3. Weight loss or gain (not through dieting)	9 (9.6)	53 (56.4)	3 (3.2)	25 (26.6)
4. Increase or decrease in appetite	12 (12.8)	59 (62.8)	2 (2.1)	17 (18.1)
5. Problems with sleep	6 (6.4)	44 (46.8)	2 (2.1)	38 (40.4)
6. Loss of energy	7 (7.4)	57 (60.6)	26 (27.7)	–
7. Feelings of worthlessness	3 (3.2)	28 (29.8)	2 (2.1)	58 (61.7)
8. Problems with concentration	4 (4.3)	30 (31.9)	2 (2.1)	55 (58.5)
9. Increased thinking about death	8 (8.5)	43 (45.7)	–	39 (41.5)
10. Loss of interest in sex	14 (14.9)	53 (56.4)	1 (1.1)	19 (20.2)
11. Feelings of hopelessness and despair	–	29 (30.9)	2 (2.1)	61 (64.9)
12. Increased irritability	3 (3.2)	27 (28.7)	4 (4.3)	58 (61.7)
13. Feelings of guilt	20 (21.3)	30 (31.9)	6 (6.4)	34 (36.2)
14. Physical symptoms such as heaviness in limbs, backache, headaches, muscle aches	22 (23.4)	47 (50)	2 (3.2)	19 (20.2)

The per cent do not total 100 owing to missing data.

Table 2: Perceived helpfulness of treatments for depression rated by 94 eye health professionals and rehabilitation workers

	Helpful, <i>n</i> (%)	Harmful, <i>n</i> (%)	Neither, <i>n</i> (%)	Never heard of it, <i>n</i> (%)
Sleeping tablets/sedatives	35 (37.2)	23 (24.5)	36 (38.3)	–
Brief psychological therapies (e.g. cognitive behavioural therapies)	76 (80.9)	–	13 (13.8)	5 (5.3)
Antidepressant medications	88 (93.6)	1 (1.1)	5 (5.3)	–
Learning about other people with similar problems and how they have dealt with them	92 (97.9)	–	1 (1.1)	–
Natural remedies (e.g. vitamins)	31 (33)	2 (2.1)	55 (58.5)	3 (3.2)
Becoming more physically active	86 (91.5)	1 (1.1)	7 (7.4)	–
Having an occasional alcoholic drink to relax, get to sleep or help to cope	21 (22.3)	24 (25.5)	47 (50)	2 (2.1)
Self-help materials	76 (80.9)	16 (17.0)	–	2 (2.1)
Self-help/support group	92 (97.9)	–	1 (1.1)	1 (1.1)
Long-term counselling	85 (90.4)	1 (1.1)	8 (8.5)	–
Changing diet	34 (36.2)	–	55 (58.5)	4 (4.3)
Support from family and friends	94 (100)	–	–	–
Low vision rehabilitation	93 (98.9)	–	1 (1.1)	–

The per cent do not total 100 owing to missing data.

vision rehabilitation', were added (see Table 2). The items include three treatments, which have a strong evidence base to suggest they are effective (brief psychological therapies, antidepressant medications and becoming more physically active), and three that are not recommended for the treatment of depression (sleeping tablets/sedatives, having an occasional alcoholic drink to cope, and change in diet). The remaining items may or may not be helpful treatments for depression and insufficient evidence exists to make recommendations.

Beliefs about the efficacy of treatment for depression in people with vision impairment

This was assessed using an adaptation of the Illness Perception Questionnaire (Revised) (IPQ-R) treatment control subscale [26]. This subscale consisted of five items, which assess the degree to which participants believe treatments for depression can be effective (e.g. 'Treatment can control depression in a person with vision impairment'). Items are assessed using a 5-point scale ('strongly disagree' to 'strongly agree') and scores ranged from 5 to 25, with high scores representing a belief that treatment is effective.

Confidence in recognising and responding to depression in people with vision impairment

A measure to assess confidence in working with older people with depression was adapted for use in working with people with vision impairment based on our focus groups with EHPs [21,27]. Items were reworded to refer to patients with vision impairment rather than 'older people', and made relevant to the eye care setting rather than nursing home setting. Items concerning monitoring symptoms and distinguishing depression and dementia were not relevant in this context and were removed, and new items concerning educating patients about depression and its treatment strategies were added. Participants responded to 14 items on a 4-point scale ('not confident' to 'very confident') (see Table 3). Total scores ranged from 14 to 56,

Table 3: Confidence in managing depression in patients with vision impairment reported by 94 eye health professionals and rehabilitation workers

Area of depression management	Mean (SD) possible range 1 (not confident) to 4 (very confident)
Providing education on possible treatment strategies for depression	1.59 (0.78)
Providing education on the link between vision impairment and depression	1.84 (0.83)
In discussing my concerns about possible depression with a patient's family members	2.12 (0.86)
Knowing if a patient might have depression or is just dissatisfied with their current situation	2.30 (0.78)
Overall, in providing care for patients with depression	2.32 (0.83)
Knowing which signs to look for to tell if a patient with vision impairment might be depressed	2.36 (0.77)
Knowing what to do if I suspect a patient with vision impairment might be depressed	2.37 (0.88)
Being able to recognise that a patient with vision impairment might be depressed	2.41 (0.74)
Passing on my concerns about possible depression to a patient's general practitioner	2.44 (0.101)
Directing a patient who might be depressed to appropriate services or agencies	2.47 (0.92)
Asking patients with vision impairment about their feelings or mood	2.54 (0.91)
Passing on my concerns about possible depression to vision rehabilitation agencies	2.55 (0.85)
Listening to patients with vision impairment talk about their feelings or mood	2.97 (0.77)
Discussing my concern that a patient might be depressed with my supervisor/team leader/ ophthalmologist	3.06 (0.89)

with high scores representing greater confidence in working with depressed patients.

Analysis

Descriptive statistics (using SPSS version 17 for Windows; SPSS Inc, Chicago, IL, USA) described beliefs about symptoms, treatment approaches and level of confidence. Univariate analyses using *t*-tests and correlations were used to determine factors associated with confidence levels.

Table 4: Sociodemographic, work and personal characteristics of the 94 participants

Participant characteristics	
Age (years)	
Mean	42.1
Range	23.3–69.4
Sex, <i>n</i> (%)	
Female	71 (75.5)
Male	23 (24.5)
Professional background, <i>n</i> (%)	
Rehabilitation worker	28 (29.8)
Orthoptist	22 (23.4)
Ophthalmologist (consultant)	20 (21.3)
Ophthalmic nurse	12 (12.8)
Optometrist	12 (12.8)
Time in current role (years)	
Mean	8.5
Range	0.4–37
Time in eye care services (years)	
Mean	14.6
Range	0.4–42
Previous depression training, <i>n</i> (%)	
Yes	18 (19.1)
No	76 (80.9)
Personal experience of depression, <i>n</i> (%)†	
Yes	15 (16.0)
No	65 (69.1)
Family or friends' experience of depression, <i>n</i> (%)†	
Yes	66 (70.2)
No	27 (28.7)

†Percentages do not total 100 due to missing data.

Results

Participants

In total, 666 questionnaires were sent out to optometrists ($n = 82$), ophthalmic nurses ($n = 97$), orthoptists ($n = 205$), ophthalmologists ($n = 189$) and RWs ($n = 93$). A total of 94 questionnaires were returned, giving an overall response rate of 14.1%. Responses rates were significantly higher for RWs ($n = 28$, 30.1%) than the EHPs: optometrists ($n = 12$, 14.6%); ophthalmic nurses ($n = 12$, 12.4%); orthoptists ($n = 22$, 10.7%); ophthalmologists ($n = 20$, 10.6%); ($\chi^2 = 24.33$, *d.f.* = 4, $P < 0.001$).

Table 4 describes the participants. The sample comprised largely women aged between 23 and 69 years. The number of patients with vision impairment seen each week ranged from 1 to 120 and the time spent with each patient also varied considerably (1–200 minutes). Less than 20% ($n = 18$) of participants reported having ever received any training in depression.

Beliefs about symptoms of depression

When asked 'approximately what proportion of people with vision impairment do you think suffer from depression at some point?' the responses ranged from 10% ($n = 5$, 5.3%) to 100% ($n = 7$, 7.4%). The median value was 60%. The majority of participants believed each symptom to be related to depression (Table 1). The symptoms least likely to be related to depression were feelings of guilt ($n = 64$, 68.1%) and physical symptoms ($n = 66$, 70.2%). Half of the 14 symptoms

of depression were also related to vision impairment as well as depression. Most importantly, over three-quarters of participants thought that the two main symptoms of depression (depressed mood and loss of interest in activities) were related to both depression and vision impairment. Other symptoms of depression (feelings of hopelessness, worthlessness, irritability and problems concentrating) were also difficult to distinguish from the consequences of vision impairment, with over half of participants attributing these symptoms to both depression and vision impairment. Symptoms attributed to depression alone by more than half of participants were largely physical symptoms, including changes in appetite, loss of energy, weight change, loss of libido and physical symptoms. However, 23% of participants did not believe physical symptoms to be related to depression.

Beliefs about treatment approaches

The mean value on the IPQ-R treatment control subscale was 19.76 ($SD = 2.55$), suggesting that participants believed in the efficacy of treatments for depression in people with vision impairment. Table 2 outlines participants' beliefs about the potential benefit and harm of different treatments approaches. The vast majority (over 90%) of participants believed that family support, low vision rehabilitation, self-help/support groups, antidepressants and long-term counselling could be helpful for people with vision impairment and depression. Over 80% also believed that brief psychological therapies and self-help materials would be helpful for a person with vision impairment and depression. However, a substantial proportion of participants believed that sleeping tablets/sedatives and alcohol were also effective strategies (37 and 22%, respectively).

Confidence in managing depressed patients

Table 3 outlines the average score for each item on the confidence measure. Participants were least confident in educating patients about treatment options for depression, discussing the link between depression and vision loss, and discussing concerns about depression with family members. Participants also expressed low levels of confidence in distinguishing depression from dissatisfaction with current situation and knowing what signs to look for.

Total confidence scores were not associated with professional group, age, sex, personal experience of depression, duration in eye care services, number of patients with vision impairment seen per day, or duration of consultation with patients ($P > 0.05$). However, levels of confidence were associated with having previously received depression training. Those who had received training were significantly more confident ($n = 18$, mean = 38.5, $SD = 8.71$) than those who had not ($n = 69$, mean = 31.87, $SD = 7.73$) ($t = 3.58$, *d.f.* = 85, $P = 0.002$). Level of confidence was also significantly positively correlated with beliefs about the efficacy of treatment for depression ($r = 0.291$, $P = 0.007$). Confidence was negatively correlated with time in current position ($r = -0.231$,

$P = 0.032$, $n = 86$), meaning that participants who were newer to their current role expressed more confidence.

Discussion

The EHPs and RWs are in a unique position to identify individuals who may be suffering from depression and provide referrals to appropriate services. In this study we have shown that in general EHPs and RWs show awareness of both the symptoms and treatment options for depression. However, there are difficulties in distinguishing symptoms of depression in older people with vision impairment and practitioners lack confidence in communicating about depression and treatment options with patients and their families. This confirms findings from our earlier qualitative study [27].

Whilst practitioners reported a good awareness of the symptoms of depression, some knowledge deficits and confusions were revealed. Just over a quarter of participants were not aware that feelings of guilt or physical symptoms such as muscle aches can be symptoms of depression. Even when symptoms were recognised as symptoms of depression they were commonly also attributed to vision impairment, meaning that depression maybe overlooked in this patient group. This issue has also been identified in other caring professions. For example, aged care staff have been shown to believe that depression is a normal consequence of old age or of relocation to an aged care facility [28]. The confusion between depressive symptoms, ageing and vision impairment may result in fewer older patients with vision impairment and depression being referred for psychological support services. It is therefore important to raise awareness that whilst depression may be prevalent in older individuals with vision impairment, it is an additional disorder requiring specialised treatment.

Participants generally held positive beliefs about the efficacy of treatment for depression in individuals with vision impairment. This is important as practitioner beliefs have been associated with ease of depression management in general practice settings [29]. However, some misconceptions exist, with about a third of participants believing sedatives and a fifth believing alcohol use to be helpful strategies. The perceived helpfulness of treatment approaches in our sample largely mirrors that found in Australian surveys assessing awareness of, and attitudes to, depression [25]. However, our sample was more sceptical about the benefits of natural remedies (33% in our survey believed them to be effective compared with 72% of a sample of Australian adults), but was more likely to believe in the effectiveness of antidepressants (94% compared with 65%) and self-help materials (81% compared with 57%). A number of strategies, such as low vision rehabilitation and support groups, were also rated as helpful treatments for someone with depression. Whilst these strategies may indeed help individuals cope with the impact of vision loss, their effectiveness as a treatment for depression is not known. In order to be able to provide appropriate referrals practitioners need to be able to distin-

guish evidence-based treatments specifically for depression and general supportive strategies that may be beneficial to all people with vision impairment.

Despite the awareness of treatment options for depression, practitioners reported low levels of confidence in discussing depression and its treatment with their patients. We have reported previously that practitioners' level of confidence is associated with their likelihood of undertaking various management strategies such as providing referrals [30]. Research in aged care settings has also indicated that practitioners' confidence levels are associated with efforts to identify and respond to depression in older adults and can be effectively targeted by training programs [21]. Interestingly, we did not find that practitioner's confidence was associated with the number of patients with vision impairment they see, or the lengths of their consultation. However, our results suggest that training specifically regarding depression was associated with increased confidence. Overall, these findings indicate that EHPs and RWs would benefit from training programs to enhance their understanding of the nature and aetiology of depression, to clarify effective and ineffective treatment approaches and increase confidence in recognising depression and communicating concerns with patients.

To our knowledge this is the first quantitative study to investigate the beliefs and confidence in responding to depression in older people with vision impairment held by those practitioners who care for them. This study is, however, limited to self-reported data provided by voluntary participants. Despite a detailed consultation process to enhance recruitment, the response rate for this survey was poor, although similar to other studies on EHPs. The small sample size limited us to simple descriptive analysis. More concerning, however, is that our sample is likely to be biased to those with an interest in mental health issues, and may therefore portray an optimistic view about practitioners' beliefs and confidence levels.

On the basis of our results, we are currently developing a training program for EHPs and RWs to provide skills and tools to identify depression and support the development of local referral pathways for patients. Future studies will evaluate the impact of this training, and determine patients' reactions to depression screening in eye care and vision rehabilitation services, their care pathways following referral and their uptake and outcomes of services.

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Key Points

- Depression is common in older people with vision impairment yet it often remains untreated.
- Symptoms of depression may be missed in older adults with vision impairment.
- Eye health professionals (EHPs) and rehabilitation workers (RWs) lacked confidence in communicating about depression with patients and their families.
- A training program designed to assist EHPs and RWs to identify depression and enhance confidence in communicating about depression with people with vision loss is required.

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