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Knowledge and Attitudes of Occupational Therapists to Giving Advice on Fitness-to-drive

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(i) Key findings

Occupational therapists have greater awareness and knowledge of medical fitness-to-drive than other therapists and psychologists. Advising patients about driving is seen as an important part of their role.

(ii) What the study has added

Occupational therapists are well placed to expand their role in advising patients on fitness-to-drive, this study identified a need for further training and clarification of roles and responsibilities.

Abstract

Introduction

A range of medical conditions can affect driving, and health professionals should advise patients accordingly. This study examined knowledge of occupational therapists, other therapists and psychologists regarding medical standards for driving, their attitudes to advising patients about driving, and barriers to giving that advice.

Method

A structured questionnaire measured knowledge of medical standards and attitudes to advising patients about driving. Analyses compared responses of occupational therapists with those of other therapists and psychologists. Semi-structured interviews were carried out with therapists and psychologists after they had watched a video-taped clinical consultation with an actor-patient who was unfit to drive. Interviewees, unaware the study was about driving, were asked how they would advise the patient. Focus groups were held with a range of health professionals to discuss facilitators and barriers to giving driving advice.

Results

82 questionnaires were completed. Occupational therapists were most aware of driving guidelines and most likely to advise patients to stop driving ($p < 0.01$). 98% of occupational therapists believed they should discuss driving compared with 68% of other therapists and psychologists ($p < 0.01$). Therapists were more likely than psychologists to spontaneously raise the issue of driving after viewing the video-consultation.

Conclusion

Occupational therapists are well placed to expand their role in advising patients about fitness- to-drive. For this they require additional training and clarification of their role and legal responsibilities.

Introduction

In Great Britain, the majority of adults hold a driving licence and there are currently almost 38 million licence holders, representing 73% of the adult population (Department for Transport 2013). Consequently, the majority of adult patients presenting to health care services are also drivers. There are a number of medical conditions which can significantly affect fitness-to-drive and the Driver and Vehicle Licensing Agency (DVLA) produces a guide to the medical standards of fitness-to-drive which is regularly updated, and is available on their website (Driver and Vehicle Licensing Agency 2013). This guide contains information for medical practitioners on how to advise patients and states that although the DVLA is legally responsible for deciding if a patient is medically unfit to drive, doctors should ensure that patients understand that their condition may impair their ability to drive and remind them of their legal duty to notify the DVLA. Furthermore, if a medical practitioner does not manage to persuade an unfit driver to stop driving, s/he should notify the DVLA directly (Driver and Vehicle Licensing Agency 2013). However, although the DVLA guide is available to everyone, there is no specific advice for health professionals who are not medical doctors (other than optometrists) regarding their roles and responsibilities in advising patients.

Occupational therapists play an important role in assessing fitness-to-drive and in enabling patients to continue driving when it is safe to do so. Driving is an important means of community mobility and an activity of daily living for many people. Consequently it falls within the professional remit of occupational therapists. Harries and Unsworth (2013) have argued that occupational therapy should be positioned for workforce development in the field of fitness-to-drive, and could learn from North America and Australia where occupational therapists have been legally authorised to make recommendations to licensing agencies for many years.

Although doctors are generally expected to advise patients on fitness-to-drive, previous research both in the UK and worldwide has demonstrated that they often lack the necessary knowledge or training. O'Neill et al (1994) found that doctors have limited knowledge of driving guidelines and of assessing fitness-to-drive. Hawley et al (2008) showed that doctors receive little training on medical aspects of fitness-to-drive. Ormerod and Heafield (2007) reported that GPs and hospital doctors often gave incomplete advice to patients about fitness-to-drive, whilst hospital doctors and medical students showed poor awareness of how to access DVLA guidelines.

Few studies have examined the attitudes and knowledge of fitness-to-drive among non-medical health professionals, although they are often placed in a position to advise patients about driving. Christie et al (2001) found that clinical psychologists showed poor knowledge of fitness-to-drive guidelines in relation to patients with head injury. De Bono et al (2004) discovered that although cardiac nurses' knowledge of the driving regulations for their patients was often incorrect, their knowledge of the guidelines was often superior to that of doctors.

Although occupational therapists are particularly well placed to assess and advise those patients whose medical condition can affect driving, a search of PubMed in 2014 failed to find any studies which examined the knowledge and attitudes of occupational therapists to giving driving advice to patients.

In order to better understand how patients are advised about driving, the UK Department for Transport (DfT) commissioned a comprehensive study of the attitudes of health professionals to giving advice to patients on fitness-to-drive (Hawley et al 2010). This research studied the full range of healthcare disciplines using multiple research methods.

The current paper reports the findings as they relate to occupational therapists, other therapists and psychologists.

The aims of this paper are to:

- 1) identify the level of knowledge among occupational therapists, other therapists and psychologists regarding DVLA guidelines, and their own responsibilities regarding giving driving advice.
- 2) examine attitudes of occupational therapists other therapists and psychologists to giving advice to patients on fitness-to-drive.
- 3) identify facilitators and barriers to giving that advice.

Method

The study used both quantitative and qualitative methods.

1. A questionnaire-based survey assessed knowledge of the DVLA medical standards and attitudes of whose role it is to advise patients on fitness-to-drive. Questionnaires were developed and piloted with representatives of several health professional groups and DVLA and DfT medical advisers. The final version was created in both paper and electronic formats and distributed by: a) by placing a link on the websites of professional groups (psychologists, physiotherapists and occupational therapists); b) distribution at conferences (rehabilitation, psychology and neurological); c) an advertisement/alert on the website of Therapy Weekly (a journal aimed at therapists); and d) a link on the DVLA website.

The questionnaire investigated:

- Knowledge of the DVLA regulations regarding different conditions which may affect driving performance.

- Knowledge of the role of the healthcare professional in giving advice about fitness-to-drive.
- Knowledge of legal obligations to advise patients of their fitness-to-drive.
- Knowledge of how to access information about fitness-to-drive.
- Where health professionals had obtained their knowledge.
- Attitudes regarding giving advice about driving to patients.

2. Semi-structured interviews were carried out in conjunction with video-taped vignettes in which actors portrayed patients who were unfit to drive due to a medical condition.

Interviewees were recruited using existing research networks. They were told that the study was about giving lifestyle advice to patients with various medical conditions. The video vignettes and interviews were designed to examine how study interviewees would manage a patient presenting with a medical condition which affects their fitness-to-drive. Conducting interviews based on video vignettes provides an opportunity to observe usual practice with regard to noticing, raising and discussing driving and other lifestyle issues, and any constraints to doing this, it also includes an element of realism (Hughes 1998).

Vignettes depicting patients who had suffered either a transient ischemic attack (TIA); diabetes with visual impairment; or depression with alcohol dependence were created with advice from medical doctors and DVLA medical advisers. A consultation between a health professional and the 'patient' was then recorded as a ten minute video. Patients were played by actor-simulators using an outline script to ensure they included the same key clinical symptoms and biographical details. In each video the patient revealed that they were a driver by describing a lifestyle involving driving. A real health professional played the role of the consultant in the videos. They took a history from the patient but did not mention driving. They were non-judgemental and did not voice opinions. The health professional in

the video was played by either a GP, a neurologist or a community psychiatric nurse depending on the health condition being portrayed. The vignettes were recorded on DVDs. We systematically varied the gender and medical condition of the simulated patients in the vignettes, and created pairs of vignettes so that each study participant was shown two different patient-professional consultations.

A researcher played the vignettes to each study interviewee. First, in the free recall section, interviewees were asked them to voice their main concerns about the patient, how would they manage the patient and what advice would they give them. A semi-structured interview schedule was then used to explore the reasons why they would manage the patient in that way. They were then asked questions specifically about giving driving advice to patients.

3. Focus groups discussed barriers and facilitators to advising patients on fitness-to-drive in the context of different professional groups and clinical settings. Focus groups stimulate debate between participants and produce responses and ideas not obtainable from one-to-one interviews (Kitzinger 1995, Gibbs 1997). Three focus groups, all involving occupational therapists, were held to gather a varied set of views. The first group consisted of occupational therapists at one mobility centre; the second group consisted of a range of health professionals working as a multidisciplinary rehabilitation team at one hospital centre; the third was a group of mixed health professionals at one hospital but not working as a team. The groups were facilitated by either two or three researchers depending on group size.

Data Analysis

Quantitative analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 21 (IBM Corporation 2012). For the purpose of analyses, and to permit comparisons to be made, respondents were divided into two groups: 1) occupational

therapists, and 2) other therapists and psychologists. For frequency data, statistical comparisons were made using the Chi Squared statistic. Non-parametric data were analysed using the Independent Samples Median Test. Interviews were audio-recorded and all were transcribed verbatim. Interview transcripts were analysed qualitatively and coded using QSR NVivo 9.0 software NVivo (2010). All focus groups were audio-recorded and transcribed verbatim. Conceptual thematic analysis was applied to the transcripts to examine the barriers and facilitators to giving advice on fitness-to-drive.

Ethical and Research Governance Approvals

This study received approval from South West Devon Multi-centre Research Ethics Committee, reference number: 05/Q2103/95. Additionally, research governance approvals were received from each participating NHS hospital Trust and Primary Care Trust (PCT).

Results

1. Questionnaire survey

The questionnaire was completed by 44 occupational therapists, 18 physiotherapists, 16 clinical psychologists, and four social workers. Due to occasional missing data the numbers and percentages below may differ between questions. Occupational therapists showed significantly greater awareness of the DVLA fitness-to-drive guidelines, 42 (95.5%) were aware of the guidelines compared to 22 (58%) other therapists and psychologists ($\chi^2 = 16.79$, $df=1$, $p = 0.0001$). Significantly more occupational therapists (35, 85%) than other therapists and psychologists (14, 37%) had consulted the DVLA guidelines in the past two years ($\chi^2 = 19.72$, $df=1$, $p = 0.0001$).

Asked where they had obtained their knowledge of the DVLA guidelines, only eight individuals (10%) said this was from basic training; seven (8.5%) obtained it from continued professional development (CPD) training, and a further seven (8.5%) from postgraduate training.

Occupational therapists were also significantly more likely to record in the patient notes that they had discussed fitness-to-drive. Thirty occupational therapists (68%) said they always recorded this in the notes compared to 17 (49%) other therapists and psychologists, and only one occupational therapist never did this (2%) compared to 10 (29%) other therapists and psychologists ($\chi^2 = 12.14$, $df=3$, $p = 0.007$).

Occupational therapists were also twice as likely than other therapists and psychologists to advise patients to stop driving. During the previous three months 25 (55%) occupational therapists had advised patients to stop, compared to nine (24%) other therapists and psychologists ($\chi^2 = 8.08$, $df=1$, $p = 0.004$).

Respondents were asked to indicate their agreement or disagreement with a number of attitudinal statements, such as 'I have a duty of care to my patients and the public to discuss fitness-to-drive with my patients'. A list of these statements and levels of agreement for all respondents are shown in figure 1. There was general agreement among all respondents that it is their role to discuss fitness to drive with patients. Most respondents felt they did not have sufficient knowledge and that there is a need for additional training on giving advice on fitness-to-drive.

When the responses of occupational therapists were compared with other therapists and psychologists there were significant differences in agreement for five statements. The results are presented in table 1.

Figure 1 about here

Table 1 about here

The questionnaire asked respondents to rate their knowledge of fitness-to-drive issues using a ten-point scale (1 = 'no knowledge at all' and 10 = 'extensive knowledge'). Occupational therapists rated their knowledge more highly than other therapists and psychologists on all four questions (Table 2).

Table 2 about here

Respondents were asked to rate a) the importance of patients being given information about fitness-to-drive by health professionals in general, and b) by themselves in particular. Figure 2 presents the results for occupational therapists and other therapists and psychologists.

Figure 2 about here

2. Video vignette interviews

Five therapists (three occupational therapists, one speech therapist and one physiotherapist) and nine psychologists viewed a total of 28 vignettes. Three therapists (60%) and 2 psychologists (22%) spontaneously raised the issue of driving as one of their main concerns regarding at least one of the patients portrayed in the video. Despite strong driving clues

within all vignettes, concerns about fitness-to-drive were expressed unprompted in only a quarter (7 out of 28) of the patient scenarios viewed by interviewees.

The free recall data was analysed for those interviewees who, unprompted, mentioned driving as an initial concern. If the interviewee had registered that the patient was driving, then they were more likely to raise the issue of driving. For example, the cues which triggered thoughts about driving included 'driving children to school' and 'making deliveries by car'. Examples of interviewee main concerns are:

'I am a bit concerned about his ability to drive and whether he is still drunk. There are issues around risk'. Psychologist 1V, Depressed patient with alcohol dependence.

'It would be things like see if she is driving for work, how it is going to affect her driving. Day to day life, leisure interests, all those kind of areas'. Occupational therapist 1V, TIA patient.

'I am particularly concerned about him driving his kids to school in the morning depending on how much alcohol he's actually got in his system. Is he actually safe driving the kids to school in the morning?' Psychologist 2V, Depressed patient with alcohol dependence.

'...if her vision is impaired is she going to be safe with things like driving amongst other things... from my point of view I picked up one of her ADL's was driving'. Occupational therapist 2V, diabetic patient.

'I would be concerned about the smoking ... and the driving... the problems he has on his right side might be affecting his driving or be exacerbated by his driving. I think perhaps I would ask him a little more about that'. Occupational therapist 3V, TIA patient.

In response to the question “How would you advise the patient today?” only one interviewee volunteered specific driving advice regarding the first vignette patient they saw, and two volunteered advice regarding the second vignette patient. For example:

‘Driving might be an issue and if he’s having TIA’s fairly regularly then he would need to be contacting the DVLA to see where they stood on that. Then that is obviously going to have a major impact on his job’. Occupational therapist 2V, TIA patient.

Often advice was unspecific or general, and interviewees showed reluctance to tackle the problem of driving whilst unfit:

‘We don’t know how much he is drinking, we don’t know whether he’s drunk when he’s actually driving. Ethically I think I would have to point that out as one of my concerns, hoping that he’d stop. It’s a bit too early for advice’. Psychologist 1V, Depressed patient with alcohol dependence.

‘I would kind of advise him that maybe he could perhaps find a different way of getting the children to school for safety reasons. Is there a different way that could be sorted out’. Psychologist 2V, Depressed patient with alcohol dependence.

Asked whose responsibility it is to advise patients on driving, four interviewees believed it was doctors, seven said every health professional had this responsibility, and three did not know.

All interviewees identified barriers that made it difficult to advise patients about their fitness-to-drive. The most frequently voiced barriers were to do with not believing it to be their role to give advice (6, 43%); patient resistance or denial (4, 29%); a lack of knowledge (2, 14%), and not thinking of driving as an issue (2, 14%).

Five interviewees (three therapists and two psychologists) said they had advised a patient to stop driving. Of those who had not, many said they did not routinely consider driving during consultations:

'I don't think I have, but equally you have made me realise that perhaps I don't ask a lot of questions around driving.' Psychologist 3V.

Interviewees were asked if they had obligation to advise patients:

Are you aware of any legal obligations regarding giving advice on fitness-to-drive to patients?'

'No, I don't think I am. I am aware of the legal aspects of needing to inform the insurance companies and DVLA about people's diagnosis, but about advice giving I'm not aware of anything.' Psychologist 4V.

Do you think you have any obligation to advise patients about their fitness-to-drive?

'Yeah I think we do. Especially from an OT point of view because a lot of leisure activities that we're looking at, if you're looking at someone's perception and cognition as well it is usually us that are picking that up as well. We probably are likely to pick up a lot more things related to driving than most other professionals would I guess.' Occupational therapist 1V.

Asked how they would usually broach the subject of fitness-to-drive with patients, one occupational therapist said that often the subject of driving had already been raised by a doctor:

'usually the consultant would mention it initially which is usually quite helpful because as OT's and the other health professionals on the team you tend to have more contact so the

rapport that we have with them is usually quite well established or a lot better than maybe it is with a consultant'. Occupational therapist 3V.

'We would usually take quite a softly, softly approach and just try and get people to think for themselves around how their driving has been affected'. Occupational therapist 2V.

3. Focus groups

Participants:

A) Mobility centre: four occupational therapists specialising in driving.

B) Multidisciplinary team: Fourteen participants (rehabilitation consultant, registrar, senior house officer, occupational therapists, physiotherapists, psychologists, neuropsychologists, rehabilitation nurses, brain injury co-ordinator, wheelchair service occupational therapists).

C) Mixed health professionals: Seventeen participants (occupational therapists, specialist nurses, ward sister, ophthalmologist, eye clinic personnel, disabled driving centre personnel).

Thematic analysis of the transcripts identified four major themes: Clinician Factors, Patient Factors, Guideline Factors and Health Care Context Factors. Each theme was divided into barriers or facilitators to giving advice on fitness-to-drive.

Clinician Factors

An example of Clinician Factors was provided by the occupational therapists in the mobility centre focus group. They believed that occupational therapists as a professional group would be well placed to give driving advice. Below is an example of the debate:

'For your average GP how are they going to know each condition and whether a person is fit to drive?' Occupational therapist 1F.

'Driving is a thing that the occupational therapist could pick up more because it is an activity of daily living'. Occupational therapist 2F.

'Yes you're right but the training that would have to go in place for that is quite wide ranging'. Occupational therapist 3F.

'It's something that should be brought to Council for debate because I think occupational therapists are all over the place, most of our clients see them, so I don't know why they haven't done that already'. Occupational therapist 4F.

The issue of professional hierarchies was raised in several groups, as was the danger of the patient receiving contradictory advice:

'Sometimes they have seen their GP who has told them they are fit to drive, but we look at them and say, "actually, no you're not." So again, it's where do we stand as lower professionals, can we overrule their GP?' Occupational therapist, mobility centre focus group.

'I think the fact that ... a number of different professionals will give different advice and opinions, highlights the fact there's quite a lack of clarity around what the guidelines are'.

Neuropsychologist: multidisciplinary team focus group.

There was considerable debate about whose role it is to advise patients on fitness-to-drive. There was uncertainty amongst non-medical health professionals as to whether or not they should advise patients.

'I don't know whether I'm allowed to give advice'. Occupational therapist, multidisciplinary team focus group.

Patient Factors

An example of Patient Factors was the lack of knowledge among patients regarding fitness-to-drive, and a fear of losing their driving licence. This was seen as an important barrier to giving advice.

'It's an automatic assumption that they will lose their licence'. Occupational therapist, mobility centre focus group.

'One of the issues is public awareness of what their requirements are, a lot of people aren't aware that's a requirement for them to tell their insurance company' [that they have a disability]. Occupational therapist, mixed professionals focus group.

Guideline Factors

Guideline Factors included barriers regarding the clarity and accessibility of DVLA guidelines. Many health professionals were also uncertain of what they should do when faced with a patient who is unfit to drive, in particular there were concerns regarding patient confidentiality.

'I don't think I would be good at advising because is anybody actually aware of what people can and can't do when it comes to driving, if you don't read the small print [within the guidelines] which the majority of us don't'. Registrar, multidisciplinary team focus group.

Concern was expressed by some health professionals, regarding the action they could or should take if a patient defied advice and continued to drive whilst unsafe:

'What would I do if I had told a person not to drive and I saw them in their car driving, it has never happened to me yet but where do I stand, what would I do?' Occupational therapist, mobility centre focus group.

Clarification of roles and responsibilities would be welcomed by many health professionals:

'I've always been told that we shouldn't be contacting the DVLA, but if someone said, "Yes you are within your rights to contact the DVLA," then it would make you feel more confident in making that decision'. Occupational therapist, mixed professionals focus group.

'If I knew I had a legal obligation to do something about this issue, then I would have more confidence in dealing with that'. Optometrist, mixed professionals focus group.

Health Care Context Factors

The Health Care Context theme encompasses those issues relating to the health care environment such as time constraints, staffing, team co-operation and facilities.

'It is identifying drivers, in a busy [outpatient] clinic we don't have that much time with patients'. Nurse, mixed professionals focus group.

'We have the Mobility Service, I will sometimes ask them to go there for a full assessment, so that means there's another agency that says, "No you can't drive." Which is quite helpful'.

Doctor, mixed professionals focus group

Discussion

Occupational therapists demonstrated superior knowledge of DVLA driving guidelines compared with other therapists and psychologists. Occupational therapists were also more likely to advise patients about fitness-to-drive. Quantitative data demonstrated significant differences in the knowledge and attitudes of occupational therapists compared with other therapists and psychologists. Qualitative data from interviews and focus groups found that occupational therapists show a willingness to expand their role in advising patients on driving. These findings confirm that occupational therapists are well placed to develop their role in the field of fitness-to-drive. However, most respondents believe that more training is needed in giving advice to patients, and also that there should be increased clarification of the roles and responsibilities of different health professionals.

Previous research suggests that health professionals often fail to advise patients about their fitness-to-drive (Marshall and Gilbert 1999, Steier et al 2003, Frampton 2007; Ormerod and Heafield 2007). Goodyear and Roseveare (2003) found that only a minority of stroke patients received advice on driving from doctors. Hawley (2010) interviewed 140 drivers with medical conditions, half of these patients had received driving advice from a health professional but only one third received advice without having to ask for it. The current study found that non-doctors, particularly occupational therapists, are more likely to notice that a patient may not be fit to drive. As one of our interviewees stated, occupational therapists are more aware of mobility issues such as driving than other health professionals.

Despite considerable evidence to suggest that health professionals may not give accurate and consistent advice on driving, few studies have explored the reasons why this should be. Culshaw, Wooton and Wylie (2005) suggest that clinicians may be reluctant to give driving advice out of concern for their therapeutic relationship with patients and that informing a patient that s/he is unfit to drive may discourage that patient from continuing with treatment. Hawley (2010) identified other barriers to advising patients which included simply 'forgetting to do it' or an assumption that another health professional had advised the patient. In the current study most respondents disagreed that giving driving advice has a negative effect on patient-professional relationships. However, patient denial or resistance to receiving advice was cited as a barrier.

Although results of the questionnaire survey indicated that most respondents claimed to give driving advice to patients, the video vignette study of actual behaviour has shown that when faced with a 'patient' who is clearly unfit to drive only a small minority actually voice concerns about driving within a consultation setting. Given the number of driving clues embedded within the video vignettes, which is likely to be higher than those presented in most routine patient consultations, in practice concerns about fitness-to-drive will probably be raised in significantly fewer than a quarter of usual consultations. These findings indicate that most patient presentations, even when they incorporate driving cues, do not trigger thoughts about fitness-to-drive as a patient concern. Although occupational therapists were more likely to notice that the patient was a driver, they rarely offered driving advice, preferring to take a 'softly, softly' approach and develop a rapport with the patient first.

Hawley (2010) studied the attitudes of all health professionals to advising patients on fitness-to-drive. Part of that study involved workshops with representatives of different professional groups in which the roles and responsibilities of each group were discussed. It was found that although doctors have the clearest roles and responsibilities regarding fitness-to-drive, occupational therapists, specialist nurses and health professionals based in community

contexts appeared supportive of changes in role. The data suggested that there is little resistance to improving their knowledge and increasing their involvement. For most of these healthcare professionals, the inclusion of fitness-to-drive advice within their CPD activities and professional practice appears straightforward and should lead to effective implementation in practice. However, although the data indicates a willingness of individuals to expand their role in fitness-to-drive, development would require the support of professional organisations such as the College of Occupational Therapists (COT). In the current study, there was a general view among occupational therapists that their governing body did not allow them to notify DVLA directly if a patient was unfit to drive. On the other hand, the DVLA is willing to receive notifications from anyone, including the general public. Since our study was carried out, the British Association of Occupational Therapists (BAOT) and College of Occupational Therapists (2012) have issued a Briefing which outlines the responsibilities of occupational therapists regarding service users who are not fit to drive. This Briefing states that occupational therapists must balance the need for confidentiality with a duty of care to others. If a service user is assessed to be unfit to drive but refuses to cease driving, then occupational therapists now have a duty to inform the DVLA.

Driving promotes community mobility and plays an important role in health, wellbeing and social inclusion (Hawley, 2001). In 2009 the Canadian Association of Occupational Therapists (CAOT) published a position statement on the role of occupational therapists and driver rehabilitation (Canadian Association of Occupational Therapists 2009). They argued that due to their understanding of the relationship between person, occupation and environment, occupational therapists are uniquely positioned to provide valued and evidence-based services that promote safe driving. They went on to recommend that occupational therapists explore the expansion of driver safety services, which includes fitness-to-drive screening and planning for driving retirement; develop consensus regarding standards and protocols for driver rehabilitation; and enhance their skills and knowledge in the field of driving through continuing professional development.

All of the CAOT recommendations are entirely consistent with the findings of the current study. Our own results confirm that in the UK, occupational therapists often assess fitness-to-drive, are more likely to discuss fitness-to-drive with patients than other health professionals, and would welcome additional training and an expansion of their role. Further, the UK Department of Health (2012), in their guidance for commissioners, recently placed driving assessment within the remit of occupational therapists (Department of Health 2012). Our findings suggest that an approach similar to that taken in Canada could work in the UK. CAOT also recommended that occupational therapists collaborate with stakeholders at national and regional level to promote and engage in research. Future research should focus on the role of occupational therapists in facilitating safe driving for those with a medical condition that affects their ability to drive.

Limitations

The questionnaire survey was carried out over a short period, and recruited 44 occupational therapists and 38 other therapists and psychologists. Although respondents came from a variety of backgrounds, and are likely to be somewhat representative of their profession, a larger sample would have made the findings more robust. Recruitment was made via a range of methods, such as conferences, websites and advertisements, but it is possible that professionals recruited by these means may be more engaged and interested in research. Qualitative research, such as the video vignette study, gathers large amounts of data from a small number of respondents. The five therapists and nine psychologists provided rich data, but cannot be fully representative of their professions.

Conclusion

This study used three research methods to examine the knowledge, beliefs and attitudes of therapists and psychologists regarding the giving of advice to patients on fitness-to-drive. Occupational therapists demonstrated good knowledge of the medical guidelines on fitness-to-drive, they also indicated a greater willingness to advise patients on driving than other therapists and psychologists. Occupational therapists see driving as an activity of daily living and an important means of community mobility. Consequently assessing and advising patients on driving is seen as part of their role. However, many respondents felt hampered by uncertainties regarding their legal responsibilities such as notifying the DVLA if an unfit patient continues to drive. These responsibilities have now been clarified by the BAOT and COT. They also felt that if doctors gave incorrect advice to patients, then this could undermine their own advice. Other countries with health systems similar to the UK, such as Australia, New Zealand and Canada have demonstrated that occupational therapists can develop and expand their roles of driving assessment and rehabilitation to include making recommendations to the licensing authorities regarding fitness-to-drive. This study found that occupational therapists were supportive of developing their roles in the promotion of fitness-to-drive and it is recommended that this is taken forward in the UK.

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Table 1 Levels of agreement to attitudinal statements: comparison of occupational therapists and other therapists and psychologists

Attitudinal statement	Occupational therapists agree Number (%)	Other therapists and psychologists agree Number (%)	Chi square, and p value
Discussing fitness-to-drive with my patients is very important'	40 (91%) (n=44)	26 (68%) (n=38)	$\chi^2 = 10.83$, df=4, p = 0.029*
There is a need for more training on giving advice on fitness-to-drive'	43 (98%) (n=44)	30 (84%) (n=37)	$\chi^2 = 15.77$, df=3, p = 0.001**
There is a need for clearer guidelines on giving advice about fitness-to-drive'	43 (98%) (n=44)	26 (68%) (n=38)	$\chi^2 = 24.72$, df=4, p = 0.0001**
I believe the medical standards are fair'	28 (65%) (n=43)	10 (26%) (n=38)	$\chi^2 = 24.08$, df=4, p = 0.001**
I believe I have a duty of care to my patients and the public to discuss fitness-to-drive with my patients'	43 (98%) (n=44)	26 (68%) (n=38)	$\chi^2 = 13.83$, df=4, p = 0.008**
I do not have sufficient knowledge	27 (61%) (n=44)	24 (63%) (n=38)	$\chi^2 = 2.84$, df=4, p = 0.59
I have sufficient time	25 (57%) (n=44)	30 (79%) (n=38)	$\chi^2 = 5.74$, df=4, p = 0.22

I feel that it is my role	31 (70%) (n=44)	19 (50%) (n=38)	$\chi^2 = 6.86$, df=4, p = 0.14
I feel it would have a negative effect on my relationship with my patient	9 (21%) (n=44)	2 (5%) (n=38)	$\chi^2 = 5.46$, df=4, p = 0.24

* significant at the 0.05 level. ** significant at the 0.01 level. df = degrees of freedom.

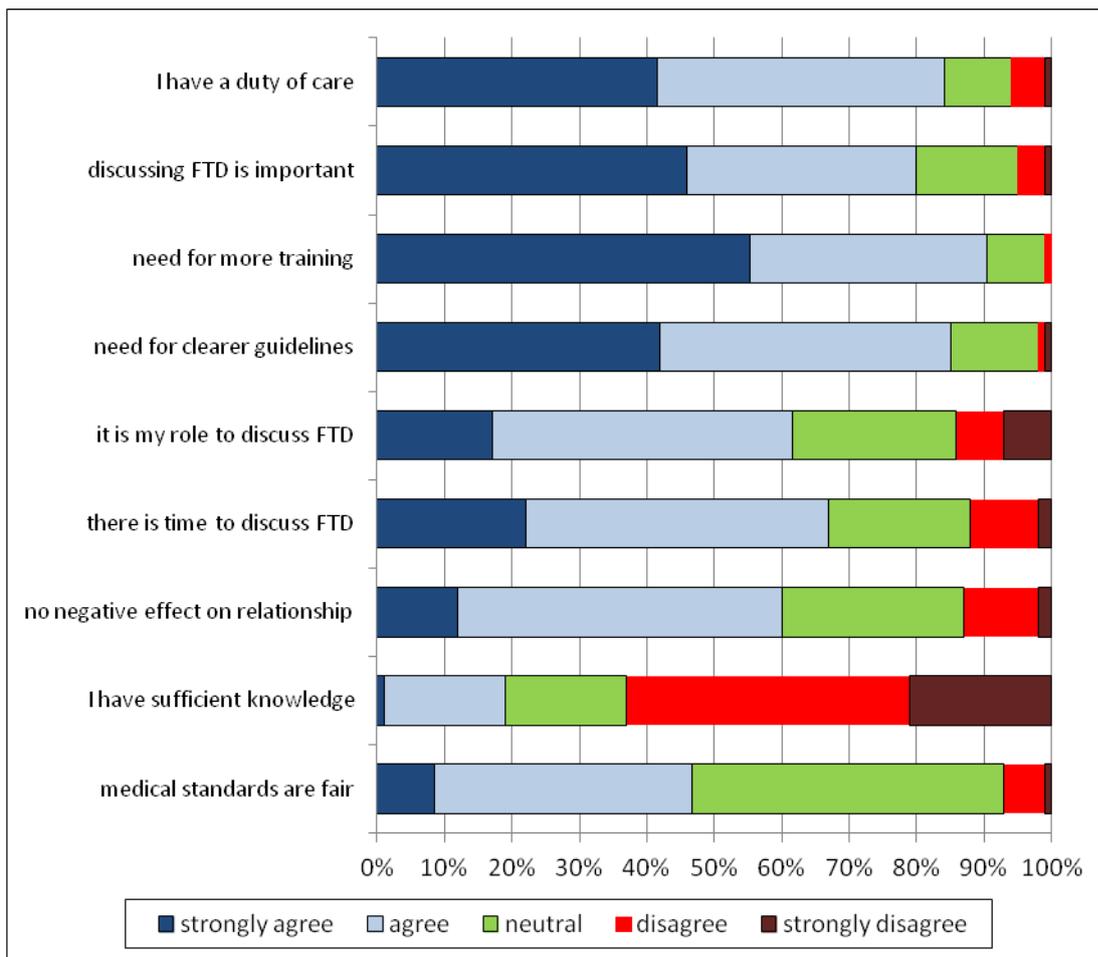
Table 2 Ratings of knowledge by occupational therapists and other therapists and psychologists

Knowledge statement	Occupational therapists (n=44)	Other therapists and psychologists (n=38)	P value
Knowledge of the guidelines regarding different conditions which affect fitness-to-drive	Median = 5.0 Mean = 4.66 SD =2.18	Median = 3.0 Mean = 3.37 SD = 2.32	0.178
Knowledge of the role of health professionals in giving advice about fitness-to-drive	Median = 5.0 Mean = 5.32 SD = 2.61	Median = 3.0 Mean = 3.89 SD = 2.53	0.239
Knowledge of how to access information on fitness-to-drive	Median = 6.5 Mean = 6.34 SD =2.66	Median = 3.5 Mean = 4.29 SD = 2.86	0.007*
Knowledge of who has the legal responsibility to inform patients they are not fit to drive	Median = 5.0 Mean = 5.24 SD = 2.99	Median = 3.0 Mean = 3.55 SD = 2.95	0.023*

* significant at the 0.05 level. SD = standard deviation

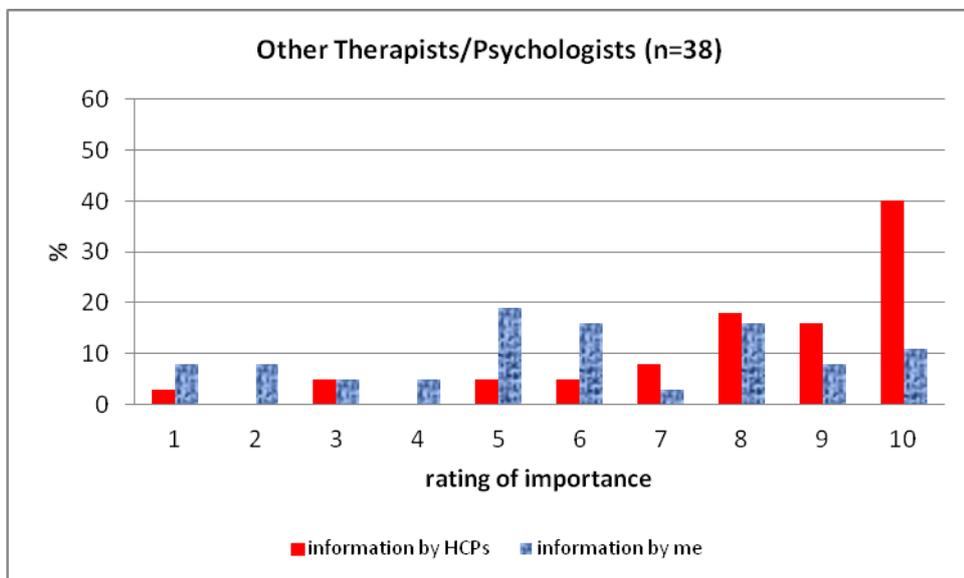
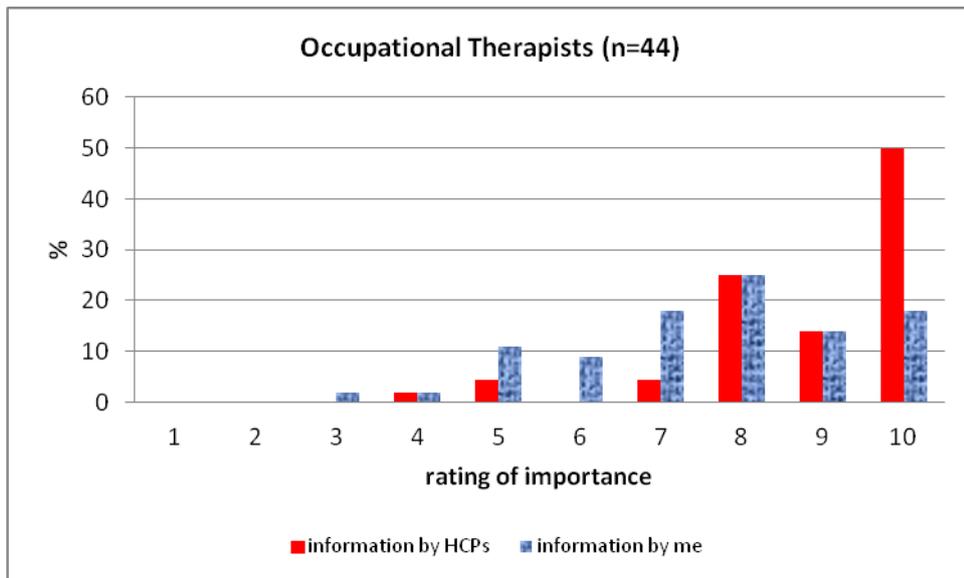
Ratings were made using a ten-point scale (1 = 'no knowledge at all' and 10 = 'extensive knowledge').

Figure 1 Summary of responses to all nine attitude statements by all respondents (n=82)



Questions are reproduced in full in Table 1

Figure 2 Importance of patients being given information on fitness to drive by healthcare professionals (HCPs) or by myself. Comparison of occupational therapists and other therapists and psychologists



* 1 not important to 10 extremely important