Attitudes of Danish and UK General Practitioners towards Early Diagnosis and Management of Dementia: An Exploratory Qualitative Study

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Abstract

**Background:** The United Kingdom (UK) and Denmark have similarly-structured health systems utilizing GPs as the access point to care. In both countries, National Dementia Strategies emphasize the importance of GPs in early diagnosis and management of dementia. A comparison of experiences could identify similarities and differences in the approach to identifying dementia, imparting the diagnosis to the patient and management strategies. These themes could then aid future service development.

**Method:** A defined population-sampling frame and purposive sampling strategy was used to identify 12 UK and Danish GPs. In depth, one-on-one interviews were conducted to ascertain their current practice around diagnosing dementia, informing the patient and managing the condition and their general views towards the disease itself. These were transcribed verbatim and analysed thematically for similarities and contrasting opinions.

**Results:** The lack of sensitive, specific tests for early dementia presents a diagnostic challenge for GPs. UK GPs expressed ambivalence towards the principle of diagnosis. Service coordination and communication were identified as major challenges to management in both countries and dementia was unequivocally viewed as stigmatizing.

**Conclusion:** This study demonstrates heuristic significance, highlighting the need for a diagnostic framework that empowers GPs to make the best use of imperfect diagnostic tests for early dementia, whilst encouraging the continual improvement of such cognitive assessments and further work exploring how best a proactive coordination of care services may be facilitated. A deeper analysis is required to understand the ambivalence of UK GP to early diagnosis of dementia, along with an exploration of factors in both countries that may contribute to stigma associated with the condition and how this impacts on help-seeking behaviour and service provision.

Keywords: General practice; Dementia; Early diagnosis; United Kingdom; Denmark; Qualitative study

Abbreviations: GP: General Practice; UK: United Kingdom; MMSE: Mini-Mental State Examination; GPCOG: General Practice Assessment of COGnition

**Background**

Dementia is a global public health concern achieving ever-increasing prominence within an ageing population. Both prevalence and dementia-related medical and social costs are rising. In 2010, the estimated global prevalence of Alzheimer's Disease was 35.6 million [1], with annual economic costs of around £17 billion in the UK [2] and £670 million in Denmark [3]. Modelling analyses forecast population changes in the UK and Denmark of more than 150% in the very elderly populations (80+), highlighting the growing burden likely to be exerted by dementia and associated conditions [4].

In both countries, National Dementia Strategies emphasize early detection and the importance of effective interventions for management [1,5]. Early diagnosis is generally regarded as beneficial [6], as consolidation of ambiguous symptoms into a recognisable disease process allows for adaptation to functional loss; understanding is increased; support services become accessible; positive coping strategies are promoted and planning and fulfilment of short-term goals facilitated [7-10]. The majority of dementia patients wish to know their diagnosis [11] and prefer early disclosure [12].

GPs often form the first contact point for those worried about signs and symptoms of dementia, thus play a vital role in detection of the disease. In both countries this process commonly involves taking the history of the subjective memory complaints reported by the patient and/or their family, performing a brief cognitive assessment and subsequently assessing the need for referral for further detailed evaluation and instigating different management strategies according to the individual patient. However, only 20-50% of dementia cases are routinely recognised and documented in primary care settings [13-16], reflecting challenges to diagnosis exerted by patient or societal factors, barriers in the general system or in primary care specifically [17]. Whilst there is insufficient evidence to support population screening [18], early diagnostic rates may be improved through evidence-based practice protocols incorporating cognitive function tests [19]. However, sensitive, specific tests for early dementia are currently lacking. One analysis of commonly used screening measures for dementia in Primary Care revealed a sensitivity of 90.9% and 45.7% for the Subjective Memory Complaint Clinical Score; 63.6% and 76.0% for the MMSE and 44.4% and 88.9% for the Clock Drawing Test [20]. This imperfect preciseness presents a deeply challenging situation for GPs, who must somehow deal with the diagnostic uncertainty inherent in using such brief cognitive assessments to inform their decision making.

Effective diagnosis and management of dementia are also limited by the stigma associated with the condition [21]. The negative connotations extend across all levels of society and affect the health-seeking behaviours of individuals [22], impact on the interactions of healthcare professionals and patients [23] and result in increased isolation of sufferers. The choice of language used by doctors to discuss conditions has been identified as a contributor to stigma [24], and therefore should be investigated and optimized in order to promote positive attitudes towards dementia.

The needs of dementia patients and their careers are multiple,
complex and specific to the individual situation at a particular time. An important element in providing high quality dementia care is the co-ordination of services into a multidisciplinary, multi-agency collaboration [25]. In both Denmark and the UK GPs play an active part in this process, given their role as initial contact points and as gatekeepers to services? Therefore, understanding how GPs interpret patient and carer needs, evaluating their knowledge of local services, referral patterns and ability to facilitate interventions for individuals is of great interest to improve service provision.

Previous narratives have emphasized that opportunities to change healthcare policy occur only when policymakers’ values coincide with the implications of research [26]. Dementia currently occupies such a window throughout Europe, as evidenced by the response of governments to the publication of the World Alzheimer Report 2011, which highlighted the economic argument in favour of earlier diagnosis and intervention [27], such as the addition of dementia registers to the UK’s Quality and Outcomes Framework clinical domains list. This study aimed to compare the views of GPs in two similarly structured healthcare systems, in order to identify common themes or contrasting approaches that may highlight areas for further study to inform dementia policy development. Areas of particular interest included: the process of identifying and diagnosing of dementia; how the diagnosis was imparted to the patient and their family; the GPs’ involvement in the evaluation and instigation of effective management strategies and an exploration of opinions regarding stigma associated with the condition.

Methods
Recruitment and sampling
This was a cross-sectional, qualitative study using in depth interviews with a sample of GPs from the United Kingdom and Denmark. Qualitative methods are generally applied to subjects about which little is known. However, although considerable evidence has accumulated regarding the distinct practices and opinions of Danish [28] or UK GPs [29,30], few direct comparisons have been drawn between the two groups, thus it was felt that qualitative interviews were an adequate method of investigation.

Participants were selected using a defined population-sampling frame and purposive sampling strategy [31]. We sampled GPs practicing in the city of Aarhus, Denmark and within the Oxfordshire and North Devon regions of the UK. These practices were selected based on contacts made by medical student General Practice placements. Oxford and Aarhus are urban areas consisting of approximately equal populations of around 150,000. 22 individual GPs across 4 practices serving a total of approximately 30,000 patients were emailed an information sheet and participation invitation sheet. These GPs were selected for participation as they comprised the membership of actively working doctors within the four practices in which medical student placements had previously been undertaken by EL. 12 of the 22 invited agreed to take part (54.5%).

Interviews
11 In depth face-to-face interviews and 1 telephone interview (Oxfordshire GP) were conducted by one of the authors (EL) with the GPs in their practices. The open ended questions were developed from a previous comparative study [31] and the researcher’s own literature review. The interviews lasted between 21 minutes and 40 minutes, with a mean of 33 minutes in length.

The four key question areas identified were:

(1) Diagnosis and disclosure of dementia
(2) Dementia-specific training and practitioner confidence
(3) Patient and carer needs and services
(4) Associated stigma

Interviews were audio recorded anonymized and transcribed verbatim by the researcher. All data was treated in accordance with the Data Protection Act 1998.

Ethics
The study received ethical approval from the Central University Research Ethics Committee (CUREC) of the University of Oxford.

Analysis
The data sets were analysed thematically by one researcher, as two independent groups i.e. UK GP responses were analysed as one distinct data set and the Danish responses as another. QSR NVivo software was used to code, sort and retrieve data. Coded responses were organised into approximately 20 categories e.g.: tools used to facilitate diagnosis; particular challenges to diagnosis/management; positive/negative consequences to disclosure of diagnosis; the needs of the patient and their families and GPs’ views on stigma. These were further examined at a more conceptual level, using constant comparison to relate differences and similarities between each interview. Close attention was paid to both the recurrent as well as the more divergent perspectives in the data. The coded categories and conceptual concepts from the two different nationalities were then compared and contrasted.

Results
Characteristics of the sample
A total of 22 invitations were sent out. 6 GPs in Denmark and 6 in the UK agreed to take part (Table 1). Due to the Ethics Approval requirement for anonymity, the individual GPs have not been linked with their responses.

Emergent themes
Initial analysis of data was consistent with the apriori focus of the questions, identifying three key themes (1) diagnosis; (2) management; and (3) stigma. Subsequent reporting of results has therefore been grouped into these categories.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Current Position</th>
<th>Specific geriatric experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>GP</td>
<td>6 months in a geriatric department in Denmark</td>
</tr>
<tr>
<td>Denmark</td>
<td>GP trainee</td>
<td>3.5 years in geriatric department in Denmark</td>
</tr>
<tr>
<td>Denmark</td>
<td>GP</td>
<td>Nil</td>
</tr>
<tr>
<td>Denmark</td>
<td>GP</td>
<td>2 months geriatric psychiatry locum</td>
</tr>
<tr>
<td>Denmark</td>
<td>GP trainee</td>
<td>1 year in a geriatric department</td>
</tr>
<tr>
<td>Denmark</td>
<td>GP</td>
<td>Parent with dementia</td>
</tr>
<tr>
<td>UK</td>
<td>GP (Oxfordshire)</td>
<td>Nil</td>
</tr>
<tr>
<td>UK</td>
<td>GP (Oxfordshire)</td>
<td>Nil</td>
</tr>
<tr>
<td>UK</td>
<td>GP trainee (Oxfordshire)</td>
<td>Nil</td>
</tr>
<tr>
<td>UK</td>
<td>GP (Oxfordshire)</td>
<td>Parent with dementia</td>
</tr>
<tr>
<td>UK</td>
<td>GP (Oxfordshire)</td>
<td>Nil</td>
</tr>
<tr>
<td>UK</td>
<td>GP (North Devon)</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Table 1: Participant demographics.
Diagnosis

Diagnoses followed concerns raised by the patient; families or the GP themselves, with 1 Danish GP reporting regular diagnosis of patients at their driving license renewal health check. Particular challenges included the desensitization of GPs to subtle changes in their patients, due to long-term therapeutic relationships, and lack of patient insight, whilst several British GPs expressed a degree of therapeutic nihilism not shared by any of their Danish counterparts (Table 2).

‘[early diagnosis] it’s not going to be of great benefit to an individual – uncertainty about that on my part.’

‘I think there’s a general nihilism about it. There is a ‘why bother’ because there’s not much we can do.’

‘There is a bit of, how useful is it [early diagnosis]? Which to a certain extent I share, because although there are some benefits, I don’t think treatments are particularly useful’

[3 UK GPs]

Once concerns were raised, GPs in both countries gathered background information and conducted assessments – commonly using the Mini-Mental State Examination. UK GPs also employed the GPCOG, IQCODE and Hopkins Verbal Reasoning Test. Danish GPs routinely excluded depression. Subsequent referral followed to specialist memory clinics. Danish GPs followed the (Danish College of General Practitioners) DSAM guidelines whilst British GPs were aware of, but rarely used the NICE (National Institute for Clinical Excellence) General Practitioners) DSAM guidelines whilst British GPs were aware of, but rarely used the NICE (National Institute for Clinical Excellence) dementia guidelines (Table 3).

‘I’m absolutely certain that there will be NICE guidance that I can look at if I need to’

[Interviewer] ‘And do you ever use it? [NICE Guideline]’

‘Not recently. But I know it’s there, probably’

[2 UK GPs]

Several Danish GPs expressed frustration at the lack of a test accommodating the patient's background and education, whilst UK GPs desired the development of more sensitive cognitive tests for early dementia giving a greater indication of functional capacity and prognostic prediction. GPs expressed confidence at diagnosing ‘generic’ dementia, but were less confident in detecting early disease or distinguishing subtypes. Some UK GPs felt the time limitations of consultations precluded effective cognitive testing and preferred to refer any patients about whom they had concerns to the local memory clinics for detailed assessment (Table 4).

‘I still think it’s difficult in the early stages […] when people are just starting to lose some cognitive function and can still perform very well on tests and yet you know there’s something that isn’t quite as good as it was,’

[UK GP]

‘I am not really happy and confident I guess, because I think there’s a lack of early stage diagnosis, so the diagnosis it’s always every time in the late stages.’

[Danish GP]

‘…being realistic that in Primary Care you cannot do a Mini Mental assessment’

[UK GP]

Views regarding early diagnosis varied widely. Accessing services, planning and implementing pharmacological or supportive interventions were all appreciated benefits. However British GPs expressed ambivalence towards diagnosis, highlighting the psychological impact; lack of resources to facilitate effective interventions and expressing doubt about the clinical significance of medication.

‘In reality I’m not sure we don’t just cause an awful lot of anxiety for people’

‘If you’re going to live for another 10 years and you’re going to have a slow decline for 3 or 4 do you really want to know what’s down the road?’

‘I think the worst scenario, and I’m worried this is going to be happening under the current new QOF arrangements, is for people to be diagnosed or for concerns to be raised, and there not to be support for them or their families.’

[3 UK GPs]

Danish GPs emphasized the benefits, with 1 GP expressing a desire for cognitive screening to be automatically included in the yearly review of chronic disease patients.

### Table 2: Mechanisms and Challenges of Diagnosis for GPs.

<table>
<thead>
<tr>
<th>Theme</th>
<th>UK GPs</th>
<th>Danish GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns raised by patient</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Concerns raised by family</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Concerns raised by GP</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Driving licence renewal check</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Desensitization of GPs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Therapeutic Nihilism</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### Table 3: Mechanisms of Investigations and use of guidelines.

<table>
<thead>
<tr>
<th>Theme</th>
<th>UK GPs</th>
<th>Danish GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMSE</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>GPCOG</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>IQCODE</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>HVRT</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MoCA</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Exclude Depression</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>DSAM Awareness</td>
<td>N/A</td>
<td>6</td>
</tr>
<tr>
<td>DSAM Use</td>
<td>N/A</td>
<td>5</td>
</tr>
<tr>
<td>NICE Awareness</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>NICE Use</td>
<td>2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Table 4: Challenges to diagnosis; confidence in diagnosing dementia and views of early diagnosis.

<table>
<thead>
<tr>
<th>Themes</th>
<th>UK GPs</th>
<th>Danish GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of test accommodating patient’s</td>
<td>Not mentioned</td>
<td>2</td>
</tr>
<tr>
<td>education and background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for more sensitive cognitive</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>tests for early dementia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tests providing more functional/prognostic information</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Time Limitations</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Confidence in diagnosing generic</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>dementia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of confidence in diagnosing</td>
<td>1</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>early dementia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of confidence in diagnosing early dementia</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Positive attitude towards early diagnosis of dementia</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Citation: Ladds E, Ryan S, Mahtani KR (2013) Attitudes of Danish and UK General Practitioners towards Early Diagnosis and Management of Dementia: An Exploratory Qualitative Study. Primary Health Care 3: 142. doi:10.4172/2167-1079.1000142
Management

Following diagnosis, the information and support provided by individual GPs varied. Danish GPs emphasized the importance of ensuring referral to the Municipality and appointment of a ‘Dementia Key Person’, who determined needs and coordinated care and support. British GPs informed patients about charitable organisations, useful websites and provided written information, whilst also referring them to local memory clinic and social services.

Appropriate and timely coordination of care and communication with other services were identified by GPs as fundamental challenges to managing dementia patients.

‘When the person is in his last stages of dementia, then there are lots of supports in the Municipalities. So I think the greatest challenge is the start and when to start to get all these supports together’

[Danish GP]

'I think they need somebody that they trust, who will coordinate care in a proactive way and whether that's a GP or a dementia care worker in the home or whether it's through the CPN service I don’t think it really matters'

[UK GP]

One British GP emphasized the difficulty of arranging care packages and the continuous cycle of healthcare policies, which made it difficult to remain knowledgeable about currently available services.

The needs of patients and carers were identified as: practical help with personal care and safety, legal issues and finance and medication; psychological support and a consistent approach to care-personnel and environment. British GPs, in contrast to Danish, expressed concern that these needs were currently unmet, particularly with respect to carer respite and coordination of services (Table 5).

‘[carers] would certainly value more respite. The respite options are derisory.’

‘At the moment our team is barely able to meet the needs of the people who are already identified, without tackling the tip of the iceberg.’

[2 UK GPs]

Stigma

Dementia was unequivocally felt to be stigmatizing. The loss of identity and cognitive ability, combined with fear generated by perceptions of end-stage dementia patients, the irreversibly progressive nature of the disease and the changing attitudes of society towards patients were all identified as contributing elements.

Table 5: Key themes identified in the support and management of patients and their families.

<table>
<thead>
<tr>
<th>Theme</th>
<th>UK GPs</th>
<th>Danish GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided by GP</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Referral to local memory/social services</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Appropriate and timely coordination of services</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Practical personal Care and Safety</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Legal issues/finance</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Psychological support</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Support for carers</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Needs currently not adequately supported by current services.</td>
<td>4</td>
<td>Not mentioned</td>
</tr>
</tbody>
</table>

Table 6: Opinions around dementia-associated stigma.

‘with some reason people with dementia might feel themselves to be second class citizens, and to be treated as such, to have perhaps less respect from society than they should otherwise deserve.’

[UK GP]

The attitudes and perceptions attributed to a condition are inherently affected by the language used to discuss it. Individual GPs varied in their choice of language in discussions with patients-although the formal diagnosis was disclosed by specialists. The majority adapted to the patient’s approach but several categorically stated always using ‘dementia’ for clarity, whilst other individuals avoided the term because of the connotations.

‘Dementia's got quite a lot of negative connotations, so I don't always say that that's what they have. I say, look, your memory isn’t as good as it was and I talk in euphemisms slightly’

[interviewer] Just because of the connotations or…

‘Yes, well I think patients are very fearful of it. You know, really, really worried, and I think, I don't know that they gain anything by being told that that’s what they have […] There are things I don't like, and I don't like the word ‘dementia’.

[UK GP]

Interestingly, both attitudes may unintentionally contribute to the stigmatization of dementia, either by enforcing a fearful diagnostic label, or colluding in the generalized perceptions of and negative approach towards the condition (Table 6).

Discussion

Summary

Early diagnosis and effective management of dementia patients are strongly emphasized in current healthcare policies in both the UK and Denmark. GPs play vital roles in these inherently complex processes and this study compares the dementia-related opinions and practices of a sample of Danish and UK GPs. Issues for further research, which may usefully inform service development include:

1. How to deal with the lack of sensitive, prognostic and patient-specific tests for early dementia?
2. Why do British GPs express greater ambivalence towards early diagnosis than Danish GPs and does this extend to management?
3. What factors underlie the language chosen by GPs when discussing dementia and how does this impact on management and contribute to stigma?
4. How can timely and effective communication and coordination of dementia services best be achieved?

Comparison with existing literature

Diagnostic uncertainty, insufficient knowledge and experience of
GPs, difficulties in disclosure post-diagnosis or the inhibiting effects of societal stigma and therapeutic nihilism all impact on diagnostic rates [32]. Fear of diagnosing [33] and disclosure [34] have been shown to contribute to a reluctance amongst GPs to become actively involved in dementia. However, this not evident in this study and may be due, particularly in Denmark, to the implementation of guidelines and appropriate referral pathways to specialists who disclose the diagnosis and instigate management [35], thus removing some of the onus from Primary Care. All the GPs interviewed in this study were routinely involved in the identification and management/support of patients with dementia.

Generally there is a wide disparity in GPs' ability and confidence to diagnose and manage dementia [36]. In this study the majority of individuals expressed confidence in diagnosing generic, well-developed dementia and further training interventions were felt largely unnecessary, despite work indicating that education initiatives do improve GPs’ appreciation of the value of early diagnosis [37]. Within the two cohorts, concerns about possible dementia cases were raised in a similar manner, mostly by families, but also by patients or the GPs themselves. The process for diagnosis was similar, with the GPs gathering information and performing a cognitive assessment. 4 out of the 6 GPs interviewed in both nationality cohorts expressed a lack of confidence in diagnosing early dementia, a finding which is representative of the wider GP population [38]. Several UK GPs expressed the opinion that this uncertainty may be partly underpinned by an absence of more specific diagnostic tests [20]. This is a particular problem, given that current treatments such as the cholinesterase inhibitors have only demonstrated clear benefits in mild-moderate cases of dementia [39-41] and future management strategies are likely to target those with even milder or no symptoms and thus early diagnosis will potentially become crucial in effective management.

Both of these issues were clearly highlighted in this study, with GPs also desiring tests that were more suited to a Primary Care setting and which provided functional and prognostic indication. However, the problem may also be due to a lack of awareness of the most suitable tests – 3 UK GPs mentioned the General Practitioner Assessment of COGnition [42] score, but only 1 routinely used it in practice. This test has been shown to have a good sensitivity and specificity (approximately 85%) [42] and has been recommended for use by GPs in the UK as a screening tool for dementia [18].

Although declining amongst GPs [43], therapeutic nihilism persists [44] due to concerns about the inefficacy of pharmacological interventions and lack of adequate supportive services for patients and their families. This attitude was seen in 50% of the British GP sample and to a limited extent amongst the Danish. The proven cost-effectiveness of psychopharmacological interventions in mild Alzheimer’s Disease [35], suggests this is an untenable position to hold, although limitations may still be imposed by insufficient resource provision and it will be important to further investigate the factors contributing to this position, which was beyond the scope of the current study.

The language used in discussions surrounding dementia has been shown to vary considerably, with euphemisms often employed in place of ‘dementia’ [45]. This may reflect or contribute to stigma, which has been identified as one of the key challenges to be overcome in the battle against the global dementia epidemic, given its impacts on national healthcare priorities and policy; the attitudes of service providers and the isolation, fear and dehumanisation of patients and carers [21]. This study supports the variation in the language used by healthcare professionals to discuss the diagnosis with patients and their families and a clear cross-cultural disparity was seen, with double the number of Danish GPs explicitly stating they used the term ‘dementia’ routinely, mainly to aid clarity and understanding. The use of language, particularly in relation to diagnostic labels has been shown to contribute to stigma through activation of stereotypes [46], thus further work is needed to identify why the use of language differs between different doctors and whether and to what extent this impacts on management.

Implications for future research and/or practice

GPs play fundamental roles in the healthcare systems in Denmark and the UK as gatekeepers to services and as access points to further resources. This study highlights their experiences about issues surrounding diagnosis, management and perception of dementia, which will be important to explore to allow improvement of services. Given dementia’s priority status for healthcare policy makers throughout Europe, these are significant and timely questions to pursue.

Sensitive, specific tests for early dementia are fundamental to timely diagnosis and thus management. In this study a perceived lack of such resources was felt to contribute to the diagnostic uncertainty expressed by interviewees. In the absence of less imprecise tests, the use of quick cognitive assessments in Primary Care with increased referral to specialist memory clinics may help improve detection, but will also place additional burdens on Secondary Care. It will be important to investigate whether educational programs for GPs and evidence-based diagnostic practice protocols improve diagnostic rates and reduce unnecessary specialist referrals. Moreover, the continual refinement of existing assessments and the development of novel tests are required to improve the detection of dementia cases.

Dementia care may also be improved by investigating the most effective method for determining the changing needs of dementia patients and their carers and how appropriate coordination and communication of services may be best achieved to meet this demand. It will also be important to elucidate the most effective role for GPs in this process. Finally, the factors that underlie the language chosen by GPs when discussing dementia and the comparative ambivalence of British GPs towards early diagnosis should be investigated. Both of these may be contributors to dementia-associated stigma and it will be important to determine what interventions could be implemented to encourage a more positive attitude towards the disease and the subsequent effect on the patient’s experience and journey along the tortuous dementia path.

Strengths and limitations

Measuring the quality of qualitative studies is always controversial. Tracy [47] argue for 8 universal quality criteria: a worthy topic, rigour, sincerity, credibility, resonance, significant contribution, credibility and meaningful coherence [47], which can be used to identify the strengths and limitations of qualitative work.

Given the impending threat from dementia and the condition’s increasing status in healthcare policies, the views of those individuals at the front line of dealing with patients must be considered a worthy topic for investigation. Furthermore, international comparisons within similar healthcare systems may help identify strategies for dealing with the disease [32], which could contribute to future service development.

Despite being limited to 12 participants, research demonstrates that data saturation can be reached with small scale studies [48], and is also not a fundamental requirement for qualitative quality [49]. Whilst the rigour of this study was reduced by practical factors involved in data collection eg: time limitations and failing to conduct the Danish interviews in the GPs’ native language, the open-ended interviews were...
conducted by one researcher, lasted a similar amount of time, employed identical questions and were transcribed verbatim within a few weeks. Moreover, a range of GPs were interviewed with different levels of experience, ranging from trainees with only a few years specialist GP experience to GPs with several decades of experience, helping to maximize the breadth of data collected within the available time.

Self-reflexivity [50] and transparency [51] have been lauded as qualities highlighting the sincerity of qualitative research. As the primary researcher in this study was a final year medical student with no stakeholder interests or inherent biases from previous work and a desire to perform the study opportunistically merely through an interest in dementia, self-reflexivity revealed little to detract from the study. Moreover, the transparency was enhanced by the use of verbatim audio transcripts that were subsequently subjected to clear categorization and further conceptual analysis.

The credibility of the study would have been improved through a longer period of immersion within the Danish healthcare system, to improve the researcher's tacit knowledge [52]. As only one researcher was involved in conducting identical interviews with a small number of similar subjects, the multivocality, crystallization [53] and triangulation [54] of the study were limited, further impairing credibility. However, the study does achieve a degree of resonance through its transferability for other healthcare professionals and naturalistic generalizability [55] – for both medical professionals and dementia patients and their families, many of whom would be able to empathize with the practices and experience expressed by the GPs-and also because of the study's illustration of the generalizability of the role of GPs within the larger context of the healthcare systems themselves.

This study also achieves heuristic significance [56]. Issues identified for future research include how best to empower GPs to deal with the uncertainty currently inherent in diagnosing early dementia; an exploration of the ambivalence expressed by some GPs towards diagnosis and the impact this may have on management; how the stigma associated with dementia is generated and the impact this has on dealing with the condition and finally how best co-ordination of and communication between dementia service providers can be achieved. Tracy et al. propose that practical significance is achieved by a study if it captures how practitioners cope with situated problems and provides implications that may help participants develop normative principles about how to act [57]. Whilst this study does not directly provide those guidelines, its heuristic value is further increased because the issues highlighted for further investigation are precisely those that would lead to the future development of normative principles for GPs dealing with dementia.

Meaningful Coherence is the final concept proposed as a criterion of qualitative quality. In this study, coherence is achieved through a clearly stated research question: a comparison of the practices and attitudes of a cohort of UK and Danish GPs regarding the diagnosis and disclosure of early dementia; identification of patient and carer needs and management approaches and the stigma associated with the condition-issues all identified from the current literature. The methods used to address this issue adequately fulfill the purpose of the study, generating responses that illustrate comparisons and provide evidence for further research and investigations that may guide future practice.

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Ethical Approval

Central University Research Ethics Committee, University of Oxford

Author Contributions

EL and KM were involved in designing the study; EL gathered the data, carried out the analysis and wrote the manuscript; KM and SR made considerable contributions to the manuscript draft.

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