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Research Article

Enablers and barriers to delivering person centred dementia care: Perceptions and experiences of diagnostic and therapeutic radiography practitioners

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ABSTRACT

Introduction: There is a lack of evidence about the experiences of radiographers providing care to people living with dementia (PLWD). This study explored the perceptions and experiences of radiography practitioners when delivering person-centred dementia care (PCDC) in both diagnostic imaging and radiotherapy departments.

Methods: A two-phase qualitative multi-method study was conducted. For phase 1, fifteen diagnostic and two therapeutic radiography practitioners from across the UK participated with online focus group discussions. For phase 2, four key stakeholders involved with the development of the UK Society of College of Radiographers Caring for People with Dementia practice guidelines for diagnostic and therapeutic radiography practitioners took part with individual semi-structured interviews.

Results: Participants from both phases identified enablers and barriers to providing person-centred care to individuals living with dementia. Three themes were identified that were linked to (1) Time and workload pressures in delivering person-centred dementia care, (2) Workplace practice and norms, and (3) Areas for improvement in delivering person-centred dementia care.

Discussion: Delivering PCDC can be challenging in practice. This is often due to workplace cultures where time and resources linked to productivity and waiting lists are the norms and impact on the delivery of PCDC. Leaders and managers of departments were thought to not always value a culture of PCDC but were seen as key influencers in supporting change and impact in delivering PCDC. Radiography practitioners were not always aware that a patient had dementia prior to their attendance in the department making it difficult to prepare ahead of appointments. Care partners were identified as having the potential to help alleviate some challenges radiographers faced. Findings also suggest a need for more education and training linked to dementia awareness. Further research is warranted in this area.

RÉSUMÉ

Introduction: Il y a un manque de données probantes sur les expériences des radiographes qui fournissent des soins aux personnes atteintes de démence (PAD). Cette étude explore les perceptions et les expériences des praticiens de la radiographie lorsqu'ils dispensent des soins de démence centrés sur la personne dans les services d'imagerie diagnostique et de radiothérapie.

Méthodologie: L'étude qualitative multi-méthodes a été menée en deux phases. Pour la phase 1, quinze praticiens de la radiographie diagnostique et deux praticiens de la radiothérapie du Royaume-Uni ont participé à des groupes de discussion en ligne. Pour la phase 2, quatre intervenants clés impliqués dans l'élaboration des directives pratiques sur les soins aux personnes atteintes de démence à l'intention des praticiens en radiographie diagnostique et thérapeutique du UK Society of College of Radiographers ont pris part à des entretiens semi-structurés individuels.

Résultats: Les participants aux deux phases ont identifié les éléments facilitateurs et les obstacles à la fourniture de soins centrés sur la personne aux personnes atteintes de démence. Trois thèmes ont été identifiés, liés (1) aux contraintes de temps et de charge de travail dans la fourniture de soins de démence centrés sur la personne, (2) aux pratiques et normes sur le lieu de travail, et (3) aux domaines à améliorer dans la fourniture de soins de démence centrés sur la personne.

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Discussion: La prestation de soins de démence centrés sur la personne peut s'avérer difficile dans la pratique. Cela est souvent dû à des cultures d'entreprise où le temps et les ressources liés à la productivité et aux listes d'attente sont la norme et ont une incidence sur la mise en œuvre des soins de démence centrés sur la personne. Les responsables et les gestionnaires des services ne valorisent pas toujours une culture des soins de démence centrés sur la personne, mais ils sont considérés comme des intervenants clés pour soutenir le changement et avoir une incidence sur la mise en œuvre des soins de démence centrés sur la personne. Les praticiens de la radiographie ne savent pas toujours qu'un patient est atteint de démence avant qu'il se présente dans le service, ce qui rend difficile la préparation des rendez-vous. Les partenaires de soins ont été identifiés comme pouvant contribuer à atténuer certaines difficultés rencontrées par les radiographes. Les résultats suggèrent également qu'il est nécessaire de renforcer l'éducation et la formation liées à la sensibilisation à la démence. Des recherches supplémentaires sont justifiées dans ce domaine.

Keywords: Dementia; Person centred care; Diagnostic radiography; Therapeutic Radiography; Guidelines

Introduction

More than 55 million people live with dementia worldwide, and there are nearly 10 million new cases every year [1,2]. The word dementia is an umbrella term that describes a collection of symptoms which cause the progressive loss of brain function and cognitive abilities and can affect people of all ages [2,3]. Persons living with dementia (PLWD) often experience a range of complex symptoms depending on the type and progress of the condition such as memory loss, behavioural changes, or aphasia [3,4]. Types of dementia include Alzheimer's disease, vascular dementia, Lewy body dementia, frontotemporal dementia, and mixed dementia [5]. In the UK, dementia is the leading cause of death, accounting for over 74,000 deaths (11.3 %) of all deaths and dementia is also one of the major causes of disability and dependency among older people globally [1].

Person-centred care (PCC) is a care approach that is built around the needs of the individual and contingent upon knowing the person through an interpersonal relationship. It challenges the traditional medical model of care that tends to focus on processes, schedules, staff, and organisational needs [6]. Brooker in 2004 [7], outlined four key components integral to a PCC approach for PLWD including: (a) valuing and respecting persons with dementia and those who care for them; (b) treating PLWD as individuals with unique needs; (c) seeing the world from the perspective of the PLWD, so as to understand the person's behaviour and what is being communicated; and (d) creating a positive social environment in which the PLWD can experience relative well-being through care that promotes the building of relationships. In 2006, Brooker [8], expanded upon these components, identifying key indicators or practices for each of the four components which included communicating effectively, treating individuals with respect and supportive and inclusive physical and social environments. Within the care sector, leaders and managers are very often surprised at what does (or does not) support PCC despite efforts to change care practices to influence this [9]. This may be because they have not considered the impact that these efforts have on the ground or not recognise what features or actions are needed to deliver a person-centred approach for PLWD [9].

PLWD may attend diagnostic imaging and radiotherapy departments for a variety of reasons including differential diagnosis, injury, and co-morbid conditions such as cancer [10,11]. Given that the number of people living with dementia worldwide is expected to increase, this will likely place a further strain on these service providers [3,12]. Regulation in the UK requires all healthcare professionals, including those in radiography, to provide PCC [13]. However, varying clinical protocols used to treat and care for PLWD result in inconsistent training or practice guidelines for health professionals. This may potentially compromise the quality of care provided to PLWD when attending for imaging or radiotherapy appointments [11]. This therefore has implications for radiographic practice and the delivery of patient centred dementia care (PCDC) to PLWD when attending for imaging or undergoing radiotherapy. For example, when arriving in a diagnostic imaging department, PLWD may exhibit behaviours radiographers find to be unpredictable [11]. Frustration, along with an inability to comply with or understand instructions when undertaking imaging procedures, can manifest as aggressive behaviour, thus making it difficult for the radiographer to provide adequate care or establish and sustain rapport with PLWD, especially as imaging can last between 15 and 30 min [11,12], or longer with some diagnostic imaging procedures such as magnetic resonance imaging taking up to 90 min [14]. Nuclear medicine bone scans require a 2–3 hour wait between receiving the radioactive tracer injection and having the scan which may pose problems [15]. Similarly, external beam radiotherapy may take up to 30 min with further sessions of follow-up treatment [16]. Although policy and research in this area is growing there is still a gap in the evidence base reaching radiographic practice where it is needed [17].

The aim of this research study was to explore the reported experiences and perceptions of qualified diagnostic and therapeutic radiography practitioners in the UK when providing PCDC. It also sought to investigate the compatibility of the findings with the perspectives of the key stakeholders involved in developing the second edition of the Society and College of Radiographers (SCoR) practice guideline document 'Caring for people with Dementia: a clinical practice guideline for the radiography workforce (imaging and radiotherapy)' [12].

Table 1
Phase 1 online focus group questions

Icebreaker/Introduction	Can you please introduce yourself by sharing a little bit about your professional background and years of experience
Question 1	Please describe in a few sentences what you do so that persons living with dementia and their carers get support when undergoing imaging/therapy in the department?
Question 2	Think about how you interact with people living with dementia and their carers when attending the imaging/therapy in the department. What are the challenges? What makes it easier?
Question 3	Please describe a situation (good or bad) that you have experienced when delivering care for those living with dementia or their carers when undergoing imaging/therapy
Question 4	What do you think people living with dementia and their carers expect from you when attending for imaging/therapy in the department?
Question 5	What do you think about the role of the carer in these situations?
Question 6	What protocols or guidelines for caring for people living with dementia have you come across in practice?
Question 7	Against the background of your experience what would help you to better support people living with dementia and their carers when undergoing imaging/therapy in the department?
Question 8	Are there any existing programmes in place in your place of work to help develop and improve your care for those living with dementia and their carers, e.g. training programmes?
Question 9	What do you think should be done (if anything) to improve the delivery of care for people living with dementia undergoing imaging/therapy in the department?
Question 10	Is there anything that should have been discussed, but not mentioned here?

Methodology

The research design was a multi-method, two phase qualitative study using a reflective lifeworld approach [15-18]. The aim of reflective lifeworld research is to describe the studied phenomenon as it is experienced by the participants. Online asynchronous focus groups and semi-structured interviews were used to collect data. Ethical approval for the study was granted by the University Ethics Committee (23/11/2020). An inductive qualitative approach was taken as the study sought to explore both enablers and barriers to delivering PCDC by qualified diagnostic and therapeutic radiography practitioners based on their reported experiences and perceptions.

Phase one

Phase one used purposive sampling to recruit qualified Health and Care Professions Council (HCPC) registered diagnostic and therapeutic radiography practitioners of any professional background/role based on the College of Radiographers (CoR) Career Framework [19] from across the UK. They were then asked to participate in online focus groups (OFGs). This offered a solution to the challenge of arranging face to face focus groups with the broad geographical location of participants and social restrictions during the COVID-19 pandemic. Recruitment of participants was conducted via social media and by word of mouth. Participants were recruited to closed online asynchronous semi-structured OFGs that allowed them to contribute at a time that was convenient as well as sharing common experiences using a dedicated online focus group platform (https://www.focusgroupit.com/). Exclusion criteria included pre-qualification students as the purpose of the research was to explore the qualified radiography practitioner experiences when caring for PLWD. It was felt that pre-qualification students might not have the necessary clinical experience needed for the aims of this study.

Questions for the OFG were derived following a synthesis of published literature and research from a similar context and agreed by all authors (Table 1). Author 1 acted as moderator and monitored each OFG as well prompting any further discussions. Each OFG ran for four weeks and closed at the point of data saturation. This was decided by the authors when enough data had been collected for analysis to draw meaningful conclusions and no new discussions would produce added insights [20].

Phase two

Phase two used convenience sampling to invite and recruit participants identified as members of the core and stakeholder groups involved with the SCoR practice guidelines '*Caring for people with Dementia: a clinical practice guideline for the radiography workforce (imaging and radiotherapy)*' [12]. Participants took part in a 60-minute audio-recorded individual semi-structured interview via Microsoft Teams. The interview questions were inductively derived following analysis from the phase one data and agreed by all authors (Table 2).

Results

Phase one

Fifteen diagnostic radiographers and two therapeutic radiographers were recruited for phase one of the study. Demographic information collected included professional background and years of clinical experience (Table 3). The diagnostic radiographer participants were divided into two homogenous OFGs (eight and seven participants respectively) with the therapeutic radiographers in a single OFG (two participants). This was to reflect the contextual difference between therapeutic and diagnostic radiographer practitioners and allow common experiences to be shared and built upon. Despite only having two participants for the therapeutic OFG, the data was

Table 2
Phase 2 individual interview semi-structured questions for stakeholders

Question 1	What do you think people living with dementia and their carers expect from radiography practitioners when attending for imaging or radiotherapy?
Question 2	What do you think might be the barriers (if any) in how radiography practitioners provide patient centred care for PLWD?
Question 3	What do you think might be the barriers (if any) in how radiography practitioners and involve the carers for PLWD when attending imaging or therapy departments?
Question 4	What do you think might be enablers to help radiography practitioners provide a patient centred care for PLWD when attending imaging or radiotherapy departments?
Question 5	What do you think might be enablers help radiography practitioners involve carers for PLWD when attending imaging or therapy departments?
Question 6	What do you think about a carer policy to help provide advice and guidance for radiography practitioners when involving carers in the support of PLWD?
Question 7	What do you think about the idea of dementia leads in imaging and therapy departments?
Question 8	What would you consider to be a supportive environment for PLWD?
Question 9	What learning do you think radiography students need when preparing to care for PLWD?
Question 10	What do you think are the training and education needs for qualified radiography practitioners?
	Any further comments or items not discussed that you would like to raise?

Table 3
Online focus group participant demographics

Participant	**Role**	**Professional Background and Experience**
Diagnostic Radiography Focus Group 1		
Participant 1	Band 5 Radiographer	Qualified in 2017. Special interest in dementia care and teaching students.
Participant 2	Senior Computed Tomography (CT) Radiographer	Qualified 2014.
Participant 3	Consultant Radiographer in Breast Imaging	Qualified in 1979. Education lead for Division of Clinical Services.
Participant 4	Declined to provide any information	
Participant 5	Band 5 Radiographer	Qualified in 2017. Special interest in dementia care and people with special needs.
Participant 6	Training and Development radiographer working in breast screening	Qualified in 2011. Interest in training and research.
Participant 7	Radiography Academic	Did not state when qualified but previous specialist clinical radiographer in CT and Magnetic Resonance Imaging (MRI) and imaged patients with dementia. Area of interest due to personal experiences with relatives.
Participant 8	Declined to provide any information	
Diagnostic Radiography Focus Group 2		
Participant 1	Diagnostic Radiographer – did not specify band	Qualified in 1990.
Participant 2	Consultant radiographer in breast imaging	Worked both in NHS breast screening (BSP) programme setting for approximately 13 years. Interested in clinical-based research, service development and education.
Participant 3	Consultant Radiographer in breast imaging	Worked in breast imaging since 1990 and been a Consultant Radiographer for over 8 years. Have a special interest in breast cancer in older women
Participant 4	CT/MRI Radiographer and Superintendent Radiographer of Education and Professional Development	Qualified in 2005. Dementia Champion for department.
Participant 5	Senior radiographer/mammographer	Qualified for just over 8 years. Majority of experience in plain film and some CT. Working as a mammographer for nearly 2 years.
Participant 6	Declined to provide any information	
Participant 7	Declined to provide any information	
Therapeutic Focus Group		
Participant 1:	Advanced Therapeutic Radiographer in review, information, and support	Qualified in 2003. Worked in several different departments as a treatment and pre-treatment therapeutic radiographer.
Participant 2:	Therapeutic Radiographer / Advanced Clinical Practitioner specialising in Breast and Non-Melanoma Skin Cancer	Qualified in 2002. Trust dementia champion. As part of the MSc project put into place a service implementation project designed to improve the quality of care given to radiotherapy patients who are also living with dementia.

Table 4
Braun and Clarke's (2006) six-phase approach to thematic analysis; including detail of how this was implemented and by whom

Phases	**Application of the phases within this study**
1. Becoming familiar with the data	*First author* conducted the interviews. Transcripts were repeatedly read.
2. Generating initial codes	*First author* coded the data in a systematic fashion across the entire dataset. All focus group and interview data that related to the study aims was coded.
3. Searching for themes	All significant patterns in the data were noted and initial table of second-order codes and quotes created. Throughout this and subsequent stages, findings were reviewed for coherence and credibility by *Author 2 and Author 3* and the raw data were regularly referred to.
4. Reviewing themes	From the initial table of significant second-order codes and discussions with, *Author 2 and Author 3* candidate themes were identified. These were then refined by repeatedly referring back to data and codes, and by creating a detailed thematic map. Candidate themes were examined to establish whether they were coherent, externally heterogeneous, and had explanatory power.
5. Defining and naming themes	Through further discussions a more parsimonious list of themes were created (*First author*). These were refined through peer debriefing and verification with *Author 2 and Author 3*.
6. Producing the paper	The paper was drafted, with each author writing up selected themes and feedback obtained from all authors on the narratives produced.

found to be in-depth and sufficient for the aim of this research. For the OFG data, a narrative approach was used to analyse the data to identify broad 'stories' by the participants. This was initially performed by the first author and then reviewed by authors 2 and 3 for cross-checking. These 'stories' were used to help develop the interview questions for phase two.

Phase two

For phase two of the study, participants included 1 member of the core group (SCoR lead professional officer) and three members of the volunteer stakeholder group (two diagnostic radiographers and one therapeutic radiographer) who provided comments and feedback to update the previous SCoR guidelines 'Caring for People with Dementia: a clinical practice guideline for the radiography workforce (imaging and radiotherapy)' published in 2015 [21].

Data for both phases were transcribed verbatim and then analysed by the first author. They systematically coded the data across the entire dataset for both stages of the study following the six-steps of thematic analysis outlined by Braun and Clarke [22]. Authors 2 and 3 reviewed and then agreed the codes and themes with the first author (Table 4).

Data analysis identified three themes which included:

- Theme 1: Time and workload pressures in delivering person-centred dementia care,
- Theme 2: Workplace practice and norms,
- Theme 3: Areas for improvement in delivering person-centred dementia care.

These themes were identified across both phases and are also referred to within the SCoR practice guidelines [12]. Within the presentation of findings below, the following codes have been used to denote the participants for each phase:

- DR= Diagnostic Radiographer Focus Group
- TR= Therapeutic Radiographer Focus Group
- IP = Interview Participant

Theme 1. Time and workload pressures in delivering person-centred dementia care

There was an acknowledgement by participants that PLWD expected radiography practitioners to deliver PCDC:

> *With regards to dementia care, I think they do expect our practitioners to be trained and well-versed in dementia care.*
>
> (IP1)

However, time and resource pressures were commonly highlighted as a barrier to delivering PCDC throughout the analysis of the data. High workloads combined with short staffing and appointment times for patients appeared to reduce the time radiographers felt they could spend with PLWD:

> *Often radiographers are pushed for time and want to spend more time with patients but are restricted due to the workload and appointment times.*
>
> (Participant 2 DR2)

> *Challenges - Time pressure, especially in A&E [Accident and Emergency department], not rushing the patient and achieving the best image quality possible.*
>
> (Participant 1 DR1)

Not having enough time was found to negatively impact PCDC by reducing communication and interaction time with PLWD and their care partners. Participants noted that often PLWD require more time, especially those with late-stage dementia, and not being able to spend enough time appeared to inhibit radiographers' ability to provide PCDC:

> *It takes time to build a relationship, get to know the patient and family and gain their trust… unfortunately this time has to fit around other clinical responsibilities.* (Participant 1 TR)

> *There's always this pressure and this conflict between, we need you to get your numbers through, plus whether you've got enough time to individualise that care.* (IP2)

Specific examples of how limited time inhibited the delivery of PCDC were evident throughout the transcripts for both phases. For example, one participant explained how some radiographers can be reluctant to invite the care partner into the X-ray imaging room to save time even though this might lead to a better patient experience or outcomes with obtaining diagnostically acceptable images:

> *Those time pressures of trying to get through an examination, it might be quicker for them to just get on and get that examination done, which is what we know happens when they can do. But actually, involving the carer can be the thing that means that you are successful in obtaining your images with the person and the best experience for them as well.*
>
> (IP1)

Furthermore, one participant highlighted how the lack of time prevents radiography practitioners from being able to listen and talk to the patient to find out more about them, which is essential for gaining informed consent or assessing mental capacity:

> *We need that patient-centred, getting to know somebody, taking time to listen, to talk to the patient, find out about them, what they like, how to keep them calm, and to do that you need time.*
>
> (IP3)
>
> *Capacity can be a hard one to judge accurately given time constraints.*
>
> (Participant 1 TR)

However, time pressures were not apparent in all situations and settings. Analysis identified several mitigating factors that facilitated the delivery of PCDC. For example, it was made apparent that in non-acute scenarios, radiographers could arrange appointments or undertake radiographic imaging in quieter periods. Some participants highlighted how having key information about patients before their examination could help save time and enable key adjustments to be made for PLWD:

> *I try to find out as much as possible about the patients' needs prior to an appointment where possible. This enables extra time to be allocated and any adjustments to be made.*
>
> (Participant 3 DR2)
>
> *Ideally, if we were truly providing person-centred care, we would adjust appointment times for the individual.*
>
> (IP2)

Participants also identified that having relevant information on requesting systems if a patient was living with dementia (particularly if attending for a non-dementia related procedure), along with other key information such as like/dislikes on requesting systems would help to deliver PCDC:

> *If each patient had their "this is me"… before the scan. If CRIS [Clinical Record Interactive Search] had notes on for each patient as to what did and didn't work well previously… we just have "alarms" which rarely note that the patient has dementia, and to what degree and mostly you find out on the patient's arrival.*
>
> (Participant 2 DR1)

Participants from both phases of the research recognised the importance of delivering PCDC, but workforce pressures made putting this into practice difficult. High workloads and staff shortages may lead to some radiographers feeling pressurised to prioritising patient throughput rather than PCC when caring for PLWD. Most participants felt that as radiography practitioners they were unable to spend the necessary time with PLWD or deliver PCDC. However, being able to prepare for PLWD attending the department beforehand and allocating longer appointments or at certain times of the day were seen as advantageous in delivering PCDC. Although not explicitly identified by participants in this study, it is acknowledged that some PLWD may experience a growing sense of agitation linked to sundowning (changes in behaviour that occur in the afternoon or early evening) when attending for appointments and this can often make PLWD feel that they are in the wrong place leading to agitation or anxiety [5]. Approaches that mitigate against this were highlighted by a participant to support the delivery of PCDC in their radiotherapy department:

> *We are currently looking into music available to suit the patient to create their environment whilst they are on treatment… I would also like to get a dual digital clock in the room with time and date and an orientation sign with hospital and department name along with good, clear signage.*
>
> (Participant 2 TR)

Theme 2. Practice and workplace norms

Our findings suggest that a lack of time and resources has led to a practice of rushing within some departments where this was the workplace norm. Specifically, it was evident that radiography practitioners were aware of a practice where priority was given to the speed of an imaging examination or radiotherapy treatment with a task focused approach linked to patient throughput being prioritised over delivering PCDC. Although this practice can have an impact on all patients, it was particularly pronounced for PLWD as these patients may experience challenges interacting with radiography practitioners linked to cognitive difficulties such as understanding, speaking fluency, comprehensiveness, word production, syntax, and verbal feedback [23]:

> *Radiographers though, because of the culture of and those time pressures of trying to get through an examination, it might be quicker for them to just get on and get that examination done, which is what we know happens when they can do."*
>
> (IP1)
>
> *There's this very knee-jerk reaction of, we've got to get an image straight away …I think sometimes it's seen that the quicker you can do an examination, there's a worth in that.*

(IP3)

One participant recounted an experience where a PLWD had a poor experience during an imaging procedure. The radiographers did not engage in communication with the PLWD or recognise an unmet need by the patient and instead proceeded tried and get the examination completed quickly as possible:

> *The radiographers at the time were ignoring the patient and just trying to get on with taking the x-ray. Unfortunately, I ended up being hit by the patient as I stood up from aligning the image receptor under the trolley. After that I tried to reassure the patient.*
>
> (Participant 1 DR1)

This workplace norm and practice of high patient throughput appeared to be in part the result of managerial leadership. It was apparent within the data that supportive leadership with a focus on patient care rather than throughput could make a positive difference to dementia care and the workforce cultures within departments. One participant noted that management did not understand the time requirements for PLWD and tend to focus more on productivity:

> *Management often doesn't understand the time commitment that is required with people who have dementia, as sometimes it appears they think about productivity more.*"
>
> (Participant 1 TR)

A participant from phase 2 highlighted how supportive leadership is needed to change this norm and enable radiography practitioners to spend more time with patients and achieve the delivery of PCDC:

> *We also need to have leaders who prioritise patient centred care, so the leadership and management and the organisation itself having some champions persons centred care and says that it's okay for us to take time, to spend time with these people.*
>
> (IP1)

Three participants felt that some staff were unwilling or resistant to learning new practices. They also assumed that younger radiographers did not have knowledge to contribute towards PCDC (equating this to a hierarchy of knowledge) based on years of service rather than personal experience:

> *I suppose it's life experience really isn't it with some people. And that's nothing to do with age because you can have a younger person who has got a grandparent with dementia. And they are usually really good with other carers because they've had that experience and they've been there, so they can emphasise more I think really.* (IP1)

Participants felt that PLWD needed longer appointment slots but there seemed to be a practice of being reactive rather than proactive linked to this, where productivity and getting through waiting lists seen as a priority which act as a barrier to delivering PCDC. Participants thought that dementia was not a priority within some departments and managers were not always sympathetic in allowing additional time for PLWD in departments to help deliver PCDC. These examples of workplace practices and norms may contribute to a culture of radiographers exercising professional detachment from PLWD by not taking enough time, and prioritising volume over quality interactions and a devaluing or dismissal of other viewpoints.

Theme 3. Areas for improvement in delivering person-centred dementia care

A lack of education and training for radiography practitioners when interacting with PLWD was identified as a key gap and enabler in terms of the delivery of PCDC or lack thereof. Participants unanimously agreed for the need for education and training on how to deliver PCDC:

> *Having dedicated dementia training or at least an appointed member of staff with further knowledge for support.*
>
> (Participant 5 DR2)
>
> *Despite the fact that it's a requirement that all health and care staff are trained in dementia care, understanding, I, as a practitioner, had half a day's training in 24 years. That is not enough.*"
>
> (IP1)

An absence of sufficient training was perceived to lead to a lack of awareness about dementia and led to difficulties for radiography practitioners when delivering PCDC:

> *Dementia care is rarely discussed within imaging and imaging departments almost certainly aren't considered as a priority for awareness training in- house.*
>
> (Participant 1 DR1)

This was identified at both at pre and post qualification levels of education/training. More education and training were seen as an essential way to empower radiographers to deliver PCDC, especially as knowledge of dementia and how to deliver PCDC was based on experiential knowledge and therefore subjective based on personal experiences. This limited knowledge seemed to impact the perceptions of PLWD by radiography practitioners regarding consent and mental capacity by PLWD when undertaking procedures:

> *One of the main challenges is judging how much information the patient can understand in order to gain compliance.*
>
> (Participant 3 DR1)
>
> *Capacity can be a hard one to judge accurately given time constraints.*"
>
> (Participant 1 TR)

Similarly, perceptions of PLWD seemed to focus on negative stereotypical characteristics such as being disruptive, aggressive, loud, or referring to them as dementia patients rather than PLWD. Assumptions were often made on what they could not do rather than what they could:

> *Obviously from an MR [Magnetic Resonance Imaging] point of view, there's often this paranoia around, oh my god, they've got dementia, therefore they can't have any capacity, therefore we can't do their safety, we're not going to get a history from them, that kind of stuff.*
>
> (IP 2)

> *Sadly, not all dementia patients can be calmed and are compliant. It can be difficult to deal with patients who are aggressive and non-compliant.*
>
> (Participant 3 DR1)

However, this did serve to highlight the issues mentioned earlier around training to deliver PCDC and overcoming misconceptions linked to dementia. Two participants went further as they felt dementia was not discussed within their speciality or taken seriously by some radiography practitioners:

> *I agree that dementia care is a topic that is rarely discussed - particularly within the breast specialty. It almost seems of little consequence to staff and at times people living with dementia can seem like an inconvenience to time pressured staff.*
>
> (Participant 6 DR1)

> *Experience is key with dementia patients, but unfortunately a lot of staff have a flippant attitude towards these patients.*
>
> (Participant 2 DR1)

However, it is worth noting that participants were enthusiastic about improving their dementia care practices. They acknowledged that partnership working with carers was central to PCDC when imaging or treating PLWD. Most participants recognised and valued the role carers provided by highlighting how they involved the carer to support the imaging examination or radiotherapy treatment:

> *They [the carers] are key, they give so much information and support. They are great at feeding back what does and doesn't work for the person living with dementia.*
>
> (Participant 1 TR)

> *Utilising the carer's knowledge of how the patient can react in different situations and their ability to detect different triggers.*
>
> (Participant 6 DR1)

However, participants noted a lack of guidance and policy around care partner inclusion that would explain how and why care partners can be included. Our analysis suggests the absence of policies and procedure in this area left some radiography practitioners feeling unsure of their current practice linked to caring for PLWD and involving care partners:

> *It would be nice to actually have some guidelines, a clear policy that stated how we could involve carers. And that we should involve carers, you know?*
>
> (IP2)

Participants identified a lack of training and education were key deficiencies when delivering PCDC. Partnership working and being able to recognise and use the knowledge of care partners for PLWD when attending imaging or radiotherapy departments was thought to support a more personalised approach to care leading to better outcomes for all involved.

Discussion

Findings identified three key themes linked to both enablers and barriers to delivering PCDC by diagnostic and therapeutic radiography practitioners. Participants in both phases of the study recognised the importance of delivering PCDC, but time and workforce pressures made putting this into practice difficult. Participants identified that working in busy departments resulted in limited time being availability to deliver PCDC. They also highlighted there was less flexibility to react to their needs along with a workplace culture or norm of rushing to complete tasks and focus on technical skills which has also been identified in previous work by Booth [24]. This culture of productivity in departments also seemed to be endorsed by managers and participants felt that if managers wished to achieve a PCDC for PLWD then there was a need to recognise what actions and behaviours in care delivery would support this. As highlighted by Brooker and Latham [9] without such an effort it to support PCDC it was felt that any attempts to deliver PCDC would not succeed or result in a temporary enthusiasm rather than long-term change or impact.

Participants identified ways to improve PCDC including having more forewarning as part of the referral process to allow prior planning with longer appointment times or to make any adjustments for PLWD (including time spent communicating with the PLWD). Providing more forewarning and information about patients before examinations has also been highlighted in a recent study exploring end of life care in medical imaging, which found when radiography staff were aware of patients' needs, they were able to prepare and adapt care during imaging examinations [25]. It is common for PLWD to have a care partner accompany them during medical appointments, including radiography appointments. Care partners play a crucial role in providing emotional support, ensuring patient comfort, and assisting with communication [26]. Care partners are also seen as important to delivering PCDC as they may know what the PLWD can and cannot do. McEntee [27] in their personal reflective article also strongly advocate the inclusion of care partners during imaging examinations as they can support the provision of more personalised approaches to care when imaging PLWD who may not always comprehend instructions or exhibit cooperative behaviours. This not only supports PCDC but may also avoid the necessity of repeated x-ray exposures [27]. However, it is important to note that the presence of a care partner may not always be guaranteed. Factors such as the severity of dementia, the availability of a dedicated care partner, and any specific healthcare facility's policies (some facilities actively encourage carers to be present, while others may limit their involvement due to logistical or safety reasons such as during the COVID-19 pandemic) which can influence whether a care partner accompanies the PLWD to radiography department [12,26]. Nonetheless, it was evident that there was a need for some practical guidance linked to partnership working with care partners in imaging or radiotherapy departments to support this. Given the potential impact on PLWD and the care partners themselves, it is suggested by the authors that they should have an active role in the development of any policies or practice guidelines linked to this.

One key area identified by the participants from both phases was the need for more education and training on PCDC to help raise awareness. Findings suggested that training should commence at undergraduate to help develop knowledge, skills, and confidence at an early stage of their profession. Additionally, experienced practitioners could learn to recognise the new knowledge that recently qualified practitioners bring to the role and department. Despite policy and research starting to grow with PCC and practice guidelines for caring for PLWD, it may still not necessarily reach practice level. The need for further role specific dementia education and training has also identified by the Society and College of Radiographers [12]. However, delivering this type of training or education in the workplace may be difficult in busy work environments where there are staff shortages or high turnover of staff [28,29]. This research also highlighted concerns regarding a lack of knowledge with identifying mental capacity and managing consent when caring for PLWD despite current Society and College of Radiographers guidance on mental capacity decisions [30].

This research study demonstrated a need to raise radiography practitioners' awareness of dementia and how to effectively deliver PCDC to PLWD attending imaging and radiotherapy departments. By providing support to radiography practitioners in delivery of PCDC, it is anticipated that this will lead to improvements to the quality of care provided not only to PLWD but to all people who use these services. This drive for change will also need the support and influence from the leaders and managers within these services to support actions and behaviours that empower PCDC.

Limitations

Despite being a UK nationwide study, recruitment to phase 1 was lower than expected. However, the wide geographical spread of participants supported the representativeness of experience and practice across a range of radiography practitioners for the study. This study also excluded pre-qualified student radiographers who may have shared their own experiences or perspectives linked to practice and whether there any differences or issues linked to practitioner-student power relationships in this area. Participants for phase one may have self-selected due to already having an interest in dementia. For phase two wide recruitment from members of the core stakeholder group was not achieved but nonetheless the data acquired can still be considered relevant in relation to the study aims. The small sample size inherent in qualitative research also limits generalisability. It is also important to recognise that social desirability bias may have also affected the findings by participants trying to present a positive self by not disclosing certain thoughts or perceptions to avoid embarrassment and repercussions from others [31].

Further work

Further research is needed to explore further the practices of radiography practitioners when delivering PCDC. Investigating the experiences of PLWD and their care partners when attending imaging and radiotherapy service providers will bolster this work and help to further develop the evidence base in this area. This may also enable a culture of PCDC delivered by radiography practitioners and that is supported by leaders and managers within departments.

Conclusion

Themes around enablers and barriers when delivering PCDC to PLWD were identified from both phases. Barriers to delivering PCDC were mostly contextual linked to time and workload pressures, culture (focus on task getting done quickly) and deficiencies around dementia awareness training. Enablers to delivering PCDC included the inclusion of care partners, prior identification of PLWD as part of the referral process and more training and education to raise awareness of dementia and PCDC. To facilitate these enablers, leaders need to value PCDC, support the long-term delivery of this, and promote a workplace culture where the basics of PCC (such as giving sufficient time, getting to know the patient, and good communication, are prioritised).

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