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University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Title

A Qualitative Evaluation of Community and Acute Hospital Nursing Oncology Services in Ireland.

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Cancer; community care; patient preference; qualitative analysis; primary care

Introduction

Cancer is one of the leading causes of morbidity and mortality across the world with an estimated 18.1 million new cancer diagnoses and 9.6 million cancer deaths reported in 2018(Bray et al., 2018). Cancer, along with its treatments, has been shown to be debilitating, worsening the patient's physical and mental well-being(Stein et al., 2008, Stark and House, 2000, Mitchell et al., 2011). Cancer patients face long term difficulties in a range of physical and mental conditions. Cancer has a long term impact on quality of life (QoL), anxiety, depression and fertility as well as social difficulties such as a feeling of shame or stigma attached to the condition(Chapple et al., 2004, Wagner et al., 2010, Zebrack et al., 2004, Ferrell et al., Reich, 2008). Cancer patients have been shown to have fears of uncertainty and

recurrence, triggering a worsening of their mental health(Gil et al., 2004). Patients face additional financial burdens, with Irish cancer patients facing an average income drop of €1,527 per month, as well as additional medical and home bill expenses(Irish Cancer Society, 2019). Travel time and distance has been shown to influence a patient's decision to decline treatment, particularly in rural areas which are an hour or more away from a treatment facility(Zucca et al., 2011).

Primary care is becoming a key component in cancer care delivery. A recent report in the Lancet highlighted the expanding role of primary care in cancer control and management. Primary care has a diverse set of roles in cancer care, ranging from screening and early detection to end of life care (Rubin et al., 2015). Primary care was found to have a continuous role in care for cancer patients. This report showed that the strengths of primary care, especially the development of a continuous relationships with the patient, is particularly evident in cancer care.

There is universal agreement that home-based chemotherapy is the preferred option for patients receiving cancer treatment(Rischin et al., 2000), and patients with advanced cancer have been shown to prefer home care for end of life treatment(Higginson and Sen-Gupta, 2000). Home care treatments have been shown to improve clinical outcomes for patients, including gastro-intestinal side effects, pain, fatigue, insomnia and anxiety(Molassiotis et al., 2009, Hall and Lloyd, 2008). Patients have shown to value the care provided by nurses in the community which provides them with psycho-social benefits,(Griffiths et al., 2013) an "*unsurpassable*" level of care(Vooght and Richardson, 1996) and increased communication during their treatment(Griffiths et al., 2012). Nurses have been shown to have improved care abilities when dealing with patients in the patient's own home, due to better observation of surroundings and a more personal relationship with the patient and their primary carers/families(Leirbakk et al., 2017).

A community oncology nursing programme was developed in Ireland in 2010 in response to service pressures in acute medical oncology departments. Ireland is in the process of implementing a 10-year plan for health reform called Sláintecare. The aim is to establish a universal, single-tier health service as well as re-structuring the health system "towards integrated primary and community care that is consistent with the highest quality of patient safety in as short a time-frame as possible"(Burke et al., 2018). Sláintecare aims to move health services into primary care where possible, with a focus on patient-centred care. The programme enables community nurses to provide shared nursing care to

acute cancer patients at home/in a community setting (i.e. via a primary healthcare centre). The nurses first complete a specifically tailored Level Nine (postgraduate) University accredited education course (in collaboration with National University of Ireland Galway - NUIG)(Nursing and Midwifey Board of Ireland, 2020). The programme consisted of didactic lectures, case scenarios, reflective learning and workshops. The nurses completed a clinical placement of 20 hours and a final assessment consisting of a multiple-choice questionnaire and a detailed case study presentation. Upon successful completion of this programme, nurses are then deemed competent to perform certain clinical interventions safely for cancer patients in their own home which would previously have been delivered in the acute hospital setting, such as 5-Fluorouracil (5-FU) pump disconnections, PortaCath flushes, the care of Peripherally Inserted Central Catheter (PICC) lines and Hickmann lines, head-to-toe full nursing assessment focusing on cancer and the consequences of its treatments, and other auxiliary cancer support services such as medication administration and medication management. A pilot program of this initiative (undertaken in the northwest of Ireland) has been evaluated and was found to have had a positive impact on patients, on community-based and acute hospital-based cancer services showing enhanced integration of care(Hanan et al., 2012). However, community nursing services in Galway, Mayo and elsewhere are challenged in responding to the increased demand of caring for these patients without the support of additional resources.

A concurrent cost-comparison study, comparing the hospital versus community setting was undertaken simultaneously to this study {O'Mahony et al., 2020}. However, this pure costing study will not show some of the personal and professional benefits or drawbacks of this new programme. Hence, a qualitative approach is proposed to elucidate the thoughts/opinions of those involved in the programme, as well as its impact on patients. This study aimed to capture the benefits and challenges of this programme, as well as to examine the facilitators and roadblocks for future rollout of the programme, potentially at a national level

Methods

Ethical considerations

Ethical approval was granted from the clinical research ethics committees of both the local hospital network and primary care network in the region.

Participants

Those involved in providing care and patients receiving care via the new community oncology nursing programme were invited to participate in this study. This included cancer patients in both the day ward and community setting. The oncology day ward is part of a University teaching hospital in the west of Ireland, with 521 beds providing a range of specialities. Patients are assessed and manages and treatment and interventions include chemotherapy, adjuvant therapies, 5-Flurouracil (5-FU) pump disconnections, catheter insertion supportive care and dressings. The community service is provided in two counties in the west of Ireland (Galway and Mayo). Mayo is particularly sparsely populated, with a population density of 23.3 individuals per km^2, especially compared to Dublin which has a population density of 1459.2 individuals per km^2.(Central Statitics Office, 2016). For each county, a community nurse who has completed the community oncology education programme is responsible for a given area and population. Patients in this area are given care in either Primary Care centres located in the given area, or in the patient's own home depending on certain circumstances. Nurses in both settings were also invited to participant, including nurses in the oncology day ward, clinical nurse managers, liaison public health nurses, primary care regional general nurses who have been trained as part of the programme and regional manager nurses.

Sampling Strategy

Purposive sampling (Patton, 2002) using a pre-defined matrix for maximum variation sampling of patients, and nurses in the hospital setting and public health nurses in the community. A sampling framework was used to ensure that there was as wide a variation as possible in interview participants. The sample framework is detailed in Table 1 below. Final sample size for interviews was determined using the Francis *et al* method of sample size calculation for qualitative interviews(Francis et al., 2010). This method involves setting out a minimum sample size for initial analysis, the initial analysis sample, and a stopping criterion, specifying how many interviews will be conducted with no new ideas emerging. The initial analysis sample was decided to be 7 Interviews across nurse and patient interviews, and the stopping criterion was 3 new interviews with no new themes arising. Data collection was complete when thematic saturation was deemed to have occurred.

Table 1 Sampling matrix for participants

Nurse	
Hospital	Community

Patient	
Hospital	Community

>10 years experience	>10 years experience
<10 years experience	<10 years experience
Accredited cancer qualification	Completed CONP (or other accredited cancer qualification)
No accredited cancer qualification	Not completed CONP (or other accredited cancer qualification)
Experience in community	Galway urban based
	Galway rural based
	Mayo urban based
	Mayo rural based

>60 years old	
40-60 years old	
<40 years old	
Urban Galway residence	Urban Galway residence
Rural Galway residence	Rural Galway residence
Experience with CONP	Urban Mayo residence
No experience with CONP	Rural Mayo residence
Male	
Female	

Recruitment

Participants were identified with the help of the Clinical Nurse Manager in the oncology day ward and the Director of Public Health Nursing in both counties. When identified, participants were provided with Participant Information Leaflets and consent form by a nurse. Participants were invited to read the information leaflet and given time to decide whether they wished to take part. Where possible, this information leaflet was provided days or weeks in advance. If patients were willing to participate then their contact details were given to the primary researcher (COM) to arrange the interview. Prior to the beginning of the interview, participants were given the opportunity to ask any questions before signing the consent form. Participants were made aware of the reason behind the interviews, and the motivation of the primary researcher of using this research as part of a PhD thesis.

Data collection

Study participants were asked questions according to a topic guide (Appendix 1 attached). Three distinct topic guides were used, one for each type of participant. The topic guides focused on the participants' thoughts on any benefits or drawbacks of the programme, how it could be improved and envisioning a scenario where the service was no longer available. More specific questions for each participant group were also included, such as thoughts on the training aspect of the service for those nurses who had undertaken the programme. Given that the topic guides shared broadly similar questions and discussion points, all participants were analysed as one group. Topic guides were developed using the research groups own experience as well as direct input with experts with experience in the process of cancer care. The topic guides were initially piloted with one member of each participant group, and were amended following feedback. These pilot interviews were not included in the final study analysis.

Interviews were carried out face-to face by the primary researcher (COM), who was trained in qualitative research methods from a university postgraduate training module. Audio recordings of these interviews were transcribed verbatim. Field notes were also taken to inform of non-auditory responses.

Interviews took place where best suited the participants. For the hospital nurses and patients interviewed in hospital, interviews took place in a room adjacent to the oncology day ward. Interviews in the community took place in a suitable meeting room in the Primary Care centre. One interview took place in the patient's own home due to travel issues. All interviews were conducted in private. All participants who were approached took part in the study. No transcripts were requested by the participants. The shortest interview was 8 minutes long, the longest was 26 minutes long. The median duration was 13 minutes.

Analysis

The interviews were audio recorded and transcribed by COM. The data was coded by COM and a portion of the anonymised data was also coded by a second researcher (KDM) to ensure consistency of coding. The data was analysed using thematic analysis, as set out by Braun and Clarke.(Braun et al., 2019) This method of qualitative analysis is a six step process; (i) familiarisation of the data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes, (vi) producing the report.

Software

Audio recordings were made using a Dictaphone (Sony® ICD-PX240) and Mobile Device (OnePlus® Pro 7T) The transcribed interviews were analysed using NVivo® Version 12.

Guidelines

This study was written in accordance with the consolidated criteria for reporting qualitative research (COREQ) statement (Tong et al., 2007).

Results

18 interviews were completed. There were 6 patients, 5 hospital nurses and 7 community nurses.

Using thematic analysis detailed by Braun and Clarke(Braun et al., 2019), four major themes were generated from the data, with a number of categories which are detailed below.

Table 2 Major and categories identified

Themes	**Categories**
Improved patient experience	• Patient Safety and efficiency • Psychological impact • Expense and freedom • Improved community nurse capabilities
Nurse- Patient relationship	• Many community nurses already known to patients 'cradle to grave' building on that relationship • Education of nurses to ensuring they are competent in meeting their needs, giving patients confidence in their ability to assess and manage their care
The importance of location	• Urban vs rural • West vs rest
Programme roadblocks	• Increased caseload • Difficulty in release of staff for training

	• Absence of recognition on taking on new roles • Specialisation not always beneficial • Increased support in hospital • Knowledge gap

Improved patient experience

It was unanimously agreed by both patients and nurses interviewed, that the community service was of additional advantage to the patient. A number of reasons for this were put forward including; patient safety and efficiency, psychological impact, and fewer expenses and greater freedom from having services delivered in the patient's community or own home.

Patient safety and efficiency

The hardship that patients go through during treatment was particularly noted, and nurses were keen to minimise this as much as possible. Nurses felt that patients were more comfortable in their own homes.

> "*I think they feel a lot safer at home, they're often pretty sick and exhausted.... I think the recovery is much better once they have someone coming into their own home or into a local health centre*". **CN3**

Nurses were aware of the clinical impact of patients travelling to a hospital setting, noting the increased risk of infection for these susceptible patients.

> "*We try and quarantine people, anyone with the superbugs and things like that. But there are other bugs and people come in with respiratory infections and they are exposed…. we've only two single rooms here so they are limited*" **HN3.**

> **"***They're sick patients and neutropenic and you don't want them to be going into the hospital and picking up something else***" CN1.**

Moving the support services to the community allows for a more efficient service in the hospital, reducing time for treatment.

> "*Certainly from the hospital point of view…. to be able to facilitate the likes of these disconnections and pumps and different things, enhances our job here …. allows for us to treat people quicker you know from the time of diagnosis that there is not that wait list*" **HN5**.

Psychological impact

Outside of the long travel times and the related difficulties in accessing the hospital service, patients faced psychological difficulties when confronted with the hospital environment. Patients already dealing with the mental trauma of their condition are particularly vulnerable and nurses were aware that there may be increased anxiety in patients who travel to hospital.

"*A lot of patients get anxious having to come in here. You know just the whole idea of coming into hospital*?" **HN2.**

Patients often had negative memories of the hospital, both related to their cancer and for other more personal reasons.

> "*Well it just brings all your memories back of your diagnosis and operations and you're still there, you're not just finished in the hospital when you're going in and out. So it's not a pleasant experience a lot of the time, there's a lot facing you when you're going in*" **Pat1.**
>
> *"I suppose the hospital setting itself is a bit more daunting… it's just a mental picture we have, going back to when we were kids"* **Pat6.**

Nurses in the hospital noted that the appearance and location of the day unit itself may have an impact. The day unit itself was described as uncomfortable for the patients, particularly while they were waiting.

> "*Even to access the ground floor, they go down a flight of stairs you know so. I just think we could do more to make it more pleasant for them, I think a lot of them might dread coming here, just because of the look of it and where it is*" **HN4**.
>
> "*The drawbacks for the patients would be probably because it's so busy and we've got an increase in patient number, the waiting area isn't big enough for a lot of patients even to wait around. Sometimes some of them are waiting on the steps waiting for treatment*" **HN5.**

Patients experienced longer waiting times in the hospital, and felt more uncomfortable doing so.

> "*The waiting times can be a bit tedious and they can be very long sometimes… could be a wait of 3 or 4 hours…. And when you're waiting, there isn't a lot of room outside and just the room itself can be a bit uncomfortable. And when you're coming in you don't really want to be waiting around"* **Pat4.**

In contrast, attending the local health centre was familiar and easier for patients. Patients did not face the same mental barriers when accessing these facilities.

"*A lot of them enjoy coming here, it's probably mentally easier for them I imagine. Because going into the hospital sometimes had negative connotations with it, whereas we are not as hospitalised as the hospital*"**CN4**.

Expense and freedom

Non-clinical outcomes such as the expense of travelling for patients was important. Related to this was the time and the fact that spending the day travelling to the hospital and long waiting times limited the patients and accompanying persons' freedom to work or carry on usual daily activities.

"*When I'm going to the hospital I usually get a taxi… The community centre is only a short ways away so it's not expensive, that's a big thing. Especially when you're older"* **Pat2.**

"*It's a day gone. For mothers it's a day gone from their kids, family at home*" **HN1**.

The time saving as well as the physical toll of car parking was important for the patients. Particularly ill patients being treated with chemotherapy could face a physically draining walk to access the day-ward, which wasn't the case in the community.

"Well much better for parking, much better for time in general. There's never a problem finding a spot here, you could be ages in the hospital" **Pat1.**

"Definitely it's physically easier, because there is a designated car park for patients in the hospital, but it's away from the front door, down a hill. So if you are sick with having chemotherapy, you have to walk a good bit." **CN4.**

A patient's ability to work might be impacted by the increased time spent travelling to the hospital.

"*I think the fact that they're at home and are free to do their daily basis and can get to work if they need to. Because most of them will want to work…. So when you take in travel time to the hospital and the long waits they'd have, and then it saves them from sitting in a sick bed when they're not actually sick. So freedom of movement almost"* **CN6**.

Patients would be less reliant on others to help them travel, sparing them from the guilt of burden that often arises from their condition.

"*I'd often not have the energy so I'd need someone else to bring me in and out which is a burden on them*" **Pat4**.

Improved community nursing capabilities

The training given to community nurses as part of the programme was universally lauded by those who had received it. As well as the obvious improvement in knowledge that the education provides,

the course helped foster improved relationships between the two settings, allowing for better communication and improved patient care as a result.

> "*I think your knowledge base really improves. I think we have a better relationship with our colleagues in the hospital compared to what we had. There's a lot more communication…. If I ever had a query for a patient it was easier to get through, I knew my way a bit better*" **CN3**.

The community nurses were more confident and felt more capable following their training. It allowed them to increase their knowledge of the condition and also familiarise themselves with the patient journey.

> "*Once I did the programme, you visited all these sites and you saw exactly and you saw what exactly was decided and what happened the patient in the hospital setting…. And for different therapies, what happened there and how a different therapy was delivered. And even just the different cancers, you know, how they manifest themselves in the body, and all of that was touched on in the course. It was excellent, for me it was a great learning*" **CN7.**

The training the nurses received as part of the community oncology nursing programme allowed them to better appropriately assess and manage queries from the patients.

> "*And then when the patients come in and they might question something or might describe an experience they had in the house you'd be in a position to understand it more, because you've done placements in the different areas as well*" **CN6.**

Nurse-patient relationship

In all responses there was a noticeable bond formed between the patient and nurses in both settings. Many nurses felt a sense of duty of care when caring for the patients.

> "*When you're seeing the same person every few weeks you really do get a sense of what they're going through and how tough it is. And with that you don't mind putting in the extra hour it might take to travel, you know if you're going into someone on the way home after you're supposed to finish. I'd have no problem doing that" **CN2**.*

Patients were put at ease upon seeing a familiar face.

> *"You get to know them better, puts you more at ease and stuff like that. You see the same girl each time so you get to know them a bit more. It helps when you know who's coming"* **Pat2**.

Following the patient's journey from beginning to end of treatment provided a sense of satisfaction for nurses.

"*You kind of get to see patients from the start of their diagnosis right through to completing their chemotherapy and so on. It's quite special really, it does make you appreciate the work that you're doing*" **HN5**.

The familiarity gained from repeated meetings provided benefits in the delivery of care.

"When you see them regularly, that's when you start to spot there's problems. They may be picked up sooner. That they're really starting to lose weight, that they're really struggling. That you can ring the unit and say I think this client needs to be reviewed" **CN3.**

For patients, the ease of access to a local community nurse they knew enabled more direct and enhanced communication when needed.

"*I can make a phone call to have it done in the morning. While if you go to (day ward), you can't do that…. And if I have any questions, I can ring and I know they'll answer me quickly. I have the nurses mobile number so I know if I'm ever not feeling well or need something, I can get her on the phone" **Pat6**.*

This was different to the arduous process of getting through to hospital staff.

"*They will say to you that they can ask questions, they feel safer, they feel happier, that they have a link so even when we take off the pump, the next day if there's a problem they have someone rather than trying to get through to the regional*" **CN3**.

The importance of location

Urban versus rural

The divide between patients in a rural setting compared to those in a more urban setting was a central point in discussions. The long travel times from rural settings was a challenge for these vulnerable patients, a challenge exacerbated by treatment side-effects such as nausea. The more immediate access to a local community centre and nurse was a benefit for these patients.

"*You'd be going nearly 100 kilometres to get to your furthest patient. So if you're thinking of a sick patient travelling that distance, that's very hard on them…. And if you were up in Belmullet or somewhere like that, they have a nurse up there. Otherwise the patients would be coming down to Castlebar. Even some of them travel to Galway, not even to Castlebar. And that's too much to be asking of them*"**CN7**

Cost was another factor.

"*We'd have a lot of people coming from various parts of the west and midland you know? So it reduces down their commute, it reduces their cost and again it gives them a bit of security to think that they have a local centre that they can go to*" **HN2**.

Patients in rural areas have an increased reliance on others for travel due to public transport limitations.

"*They might have to ask their families. A lot of them would rely on their families and their families might have to take time off work. Especially if public transport doesn't suit timewise. For instance, to Castlebar, to get a bus you'd be gone at 9 and a bus might not be coming back until 4 in the afternoon*" **CN7.**

Patients in locations closer to the hospital did not experience as much difficulties with travel as those in rural areas, but did note that they were fortunate in this.

"*I think it's great for people who live further out you know, I'd meet people inside in the hospital who've come from Belmullet and that's awful hard on them*" **Pat1.**

West versus rest

Community nurses were aware that some of the problems faced by them might not be the case across the country. The more sparsely populated West of Ireland provided greater challenges to care when compared to other parts of the country, particularly to Dublin.

"*I suppose one thing is that it might be easier in other parts of the country. Like, for example, when I was in Dublin, it's much more compact and it might be easier to get to patients. And there's more staff there*" **CN6**.

Some community catchment areas in Galway and Mayo extend to islands, presenting a distinct challenge. Patients would have had to stay on the mainland due to travel restrictions back to their islands.

"*I suppose when I started doing the course it was in Connemara, the difference for those clients was huge. Because you've got to remember they're travelling huge distances. When you work on the islands, it's even more so. A lot of these clients would have had to stay in town. When they have an oncology nurse on the island, they can stay home. So that was a huge benefit for them"* **CN3**

Programme roadblocks

The stakeholders universally found benefit in the programme, however some issues with its implementation and future prospects were raised.

Increased caseload

Community nurses experienced an increased caseload while undergoing the accredited course. Nurses said that completing the course presented challenges due to the fact that it was extra work on an already busy schedule.

> "*Well it could be a drawback for us because it increases our workload…. it is difficult to get away from the work to do the course*… t*here are some courses you can do here in the centre through the Galway Centre for Education but it's not always possible to attend those. And then there is the oncology nurse course. But again because our workload is so big, some of us wouldn't always be able to attend those courses*." **CN6**.

Others noted that upon completing the course, they would have extra oncology services added on to their own caseload.

> "*Like if I was doing it for other nurses it's not like anything's being taken away from my caseload, it's just something that's added on for me*" **CN1.**

This increase in caseload, as well as a lack of places in the programme has meant that the roll-out in some areas has been limited, reducing the number of trained community nurses.

> "*But there is only like 6 people, 6 PHN's that have done it this year now, there is more on board to do it. But, the roll-out of it in (here) has been pretty poor"* **CN4**

Specialisation not always beneficial

One community nurse felt that by doing the course she had been shoehorned into a specific role, and that this may prevent other nurses from seeking this specialisation.

> "*If you've been able to do a course and you're specialised in it, you're nearly holed into that area if they're short. There are palliative care teams that help with the oncology as well, whereas is we do just this it covers us for our registration. But generally what happens is if you do anything extra, you could be pulled into other areas*" **CN6.**

Others felt differently, thinking it was a step in career progression.

> "*For the nurse, it makes you more competent and expands your scope of practice. Any nurse that gets an opportunity to improve themselves, in knowledge and prospectives, should do it*" **CN7.**

Increased support in hospital

Nurses were noted to be more isolated in the community than in the hospital, presenting challenges. Where nurses in the hospital setting often had numerous colleagues, both nurses and other healthcare professionals, to have discussions and aid in queries, nurses in the community were often acting more on their own or in smaller groups.

> "*I think you'd have more of a support network in the hospital, compared to the community*." **CN4.**

Hospital nurses appreciated the extra security blanket that came from being surrounded by colleagues.

> "*There's a lot of us here so if we're ever stuck we can get someone around us to help, which is great when you're just starting. I know when I started you always like having the more experienced girls around to help out if you need it*" **HN1.**

For one patient, the hospital was a better location if something went wrong during their treatment.

> **"***I guess I feel safer in one way. Whereas at home I think if something went wrong or if it wasn't done right, whereas a hospital I am kind of aware that it is done properly. If anything ever happened well I'm in the right place***" Pat 4**.

This could be a particular problem in more isolated areas with less nurses. The limited allotment of places in the programme had left some nurses relying on the help of others to teach them.

> "*You learned on the job. Whoever had been doing it (oncology care) demonstrated it to you*" **CN2**.

Knowledge gap

One community nurse was concerned that there may be a gap in knowledge between nurses in the two settings.

> "*Since I became a public health nurse, I have noticed a big gap in knowledge compared to nurses working in the hospital and public health nurses. I would know a lot about oncology, but some public health nurses don't because they are very generalised, they look after a lot of different patients"* **CN4.**

This nurse was concerned that patients might not be as confident in community nurses as they were with hospital nurses.

"*Some patients might see us as more generalised not as specifically specialised in oncology nursing as they would be in the hospital. So I think that sometimes they are a bit afraid of coming to us, because they think oh Jesus they might not know what they are doing*".

This nurse saw the community oncology nursing programme as a big step in helping to bridge the gap.

"*The community oncology programme would be massively beneficial to Public Health Nurses… if I had my way, I would make sure that they all had taken part in the community oncology nurse programme, because they really shouldn't be providing care for these patients if they don't know what they are doing*".

Discussion

This study provides an insight into the thoughts of those involved in community cancer services, the patients and community nurses, as well as the thoughts of nurses in the day ward who have experience with treating these same patients. Most evident in this study was the universal belief that community cancer care provided a benefit for the patient.

The development of a nurse-patient relationship over time has been previously reported. Wright et al(Wright, 2002) reported that the development of this relationship was the basis through which care was given. Nurses focused their care based on their observations from this relationship. Nurses in this study noted that increased familiarity can lead to improved care due to faster recognition of problem symptoms such as weight loss. Griffiths *et al*(Griffiths et al., 2013) reported the value patients place on this relationship and the psycho-social benefits they receive from home visits. Patients in this study found benefit in the increased familiarity they had with their primary care nurses, who they could contact more easily than the hospital nurses if needed. Being a short distance away and having more contact options such as a mobile phone number meant that the patients had more immediate access to the nurses in the community. Both patients and nurses felt that seeing the same nurse each time was another key factor in improving bonds between patient and nurse in the community. None of the patients stated any difference in knowledge or quality of care across the two settings and while one nurse in the community was concerned about a potential knowledge gap between nurses in hospitals as compared to nurses in the community, they also identified the education and learning provided by the programme as a manner of minimising this problem.

Given findings that show that between 23-30% of cancer patients develop some form of psychological need over the course of their treatment(Mitchell et al., 2011), reducing factors that may exacerbate this should be a part of cancer care. Both nurses and patients in this study noted the psychological impact that a journey to the hospital day ward can have on a patient. Patients' negative connotations of the hospital came from both their condition and prior personal convictions, such as negative thoughts of the "*daunting*" hospital from their childhood. Patients have been shown to prefer home care for reasons including less worry about childcare(Rayson and Ruedy, 2001) and finding the journey to hospital emotionally draining(Coates et al., 1983, Rischin et al., 2000). Tralongo *et al* reported that 90% of cancer patients found hospital admission to be more distressing than home care(Tralongo et al., 2011).

This study was carried out in two counties in the West of Ireland, Galway and Mayo. This put a particular focus on the plight of patients in rural areas who had to travel to hospitals sometimes located more than 100km away. For these patients, travel time saved was the most important value from the introduction of the community service. Nurses in both settings were aware of the physical and mental impact of these long journeys, when they described that this service was of particular benefit to those in more rural areas. Sláintecare, Ireland's health reform plan, aims "towards integrated primary and community care that is consistent with the highest quality of patient safety in as short a time-frame as possible"(Burke et al., 2018). It aims to provide a health service accessible to all residents, showing the importance of primary care teams and cancer services in the more rural areas of the country.

Another aspect of Sláintecare is the increased focus on patient-centred care. The findings of this study show this type of care is evident in both settings. Both community and hospital nurses displayed sympathy for the patients' difficulties and it is clear they want to have a service that is the most beneficial for the patient and their families. All the nurses believed there was an advantage for the patient if their cancer care could be delivered in the community by trained community nurses and expressed that they believed that this is the service that should be offered.

For this programme to become successful and implemented as part of cancer care services nationally, the concerns raised by the community nurses in this study will have to be addressed. Concerns raised included:

i. lesser support than their hospital counterparts
ii. the addition of study days
iii. extra cancer oriented work on top of an already busy caseload

The nurses were appreciative of the training course and the increased capabilities it provided them, however there is concern that where only one nurse in a large catchment area might have cancer care training, they might be required to assist their colleagues should any cases arise. This problem may mitigate if more nurses are permitted to participate in the programme and upskill to allow them to be capable cancer care practitioners. There has been a limited number of nurses within regional areas who have been able to complete the programme, and often there is a reliance on other nurses who have more experience in cancer care to help teach them.

The original pilot study of the programme found no worsening of clinical outcomes compared to patients treated in the day ward(Hanan et al., 2012). Patients should be made aware of these findings when undergoing care in the community to assuage their worries about safety of treatment in the community versus the hospital. However, this non-worsening was reliant on the nurses in the community undergoing the training as part of the programme. For the desired clinical outcomes in the community, there should be an emphasis placed on an increased participation in the programme among primary care nurses.

A concurrent study that compares the cost of providing cancer services in the community and hospital was undertaken as part of the evaluation of the community oncology nursing programme.{O'Mahony, 2020 #266} This found a significant increase of €6.86 ($p<0.001$) in the cost of travel for the patient for each intervention. Patients' journeys were found to be an average of 34.67 minutes longer when travelling to hospital ($p<0.001$). These findings lend credence to the claims of increased costs for patients travelling to hospital, as well as the concerns regarding arduous journey distances for these sick patients. Increased travel time has been shown to be a financial, time and practical hardship on patients(Payne et al., 2000, Zucca et al., 2011). Nurses interviewed in this study were keen to minimise patient difficulties as much as possible. Having care take place in the community has been shown to reduce the financial and travel hardship incurred by the patient, as well as any travel companions such as family / carers who often accompany cancer patients due to their illness.

Limitations

There was a risk of bias in the responses of the nurses in both settings, as they may have felt that it is important to put their work and environment in a good light. To the authors' best judgement this was not the case, as many of the nurses were critical of their own environment and reflected positively on their opposing setting. Patients may have been reticent to criticise some aspect of their care for fear of reprimand or embarrassment. This was mitigated by ensuring them that all interviews were confidential and that no detail of their interview would be shared with their cancer nurse unless requested by the patient themselves. Selection bias of interviewees was attempted to be minimised by the use of a sampling matrix to ensure representation. There was no prior relationship between the primary researcher and the interview participants. Some of the interviews with patients were shorter than expected, the shortest being 8 minutes in duration. While this may have led to a proportionally skewed response from some patient groups, the authors were confident that a sufficient level of detail was acquired from these interviews and were thus included.

Conclusion

The responses of both patients and nurses showed that the community oncology nursing programme has benefits for the quality of care provided for the patient. Benefits mentioned included reduced risk of infection, reduced stress, increased freedom, reduced cost, reduced waiting time and reduced reliance on others such as family for transport and support. The previously reported bond developed between cancer patient and nurse was once more evident, and was highlighted as allowing for an increased insight into the patient's condition. Ireland's health reform plan Sláintecare is aiming for an accessible healthcare system that has an increased focus on primary care. For this quality cancer care to continue to be delivered in the community, there seems to be a need for an increase in the number of nurses participating in the programme.

Future Work

The ultimate aim for the Health Service Executive is a national rollout of this programme. While this study aimed to be as generalisable to the rest of the country as possible, there may be some themes raised in other areas and new issues that need to be addressed before a full rollout can be undertaken. A quantitative method of examining patient and nurse satisfaction with the programme may be useful. Regular surveying of both patient and nurse satisfaction and enablement throughout the national implementation of the community oncology nursing programme would allow for timely identification

and resolution of stakeholder concerns and region-specific issues that may not have arisen in this study or indeed any qualitative examination of the service.

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