Commencing a career in Research Nursing during a Global Pandemic

Keywords: Research nursing; Research nursing during a pandemic; Commencing a research nursing career; Clinical Research Nurse; Clinical research; Reflection.

Abstract:

In the spring of 2020, two nurses (KR and AJ) commenced their nurse research careers, amidst the SARS-Cov2, Covid 19, global pandemic. This reflective article discusses their experiences commencing a clinical research nursing career, presented as a case study of their learning journey rather than detailing the randomised controlled trial they delivered in GP practices. The main study compared standard care to nurse led management of Irritable Bowel Syndrome, which will be published separately. The article identifies three overarching concepts: 1) Green as grass; keen as mustard; 2) Spires and Steeples and; 3) Down the rabbit hole. The article offers insight from the two nurses for other professionals contemplating a career in research.

Introduction:

In March 2020, the World Health Organisation declared the Covid 19 pandemic, which limited research activities and career advancement for those in research (Iles-Smith et al. 2020; and Castro-Sanchez et al. 2021). Castro-Sanchez et al. (2021) suggested that a lack of clinical research beyond acute care environments may have hampered learning opportunities particularly for nurse-led research, until collaboration expanded across geographical and professional disciplines during the pandemic. Iles-Smith et al. (2020) concur that contingency plans be built into protocols for services to be 'research ready' to capitalise on innovations that enhance care delivery. Indeed, research was elevated through pivotal vaccine trials and new treatments that transformed evidence-based care post pandemic (discussed by Whitehouse et al. (2022). The authors, two nurses (KR and AJ) were appointed just before this global event; within this reflective paper, they share their transition into research whilst navigating the ensuing change of professional identity and culture and aim to identify some of the operational barriers and facilitators experienced and offers strategies that counter these challenges (as described by Braun and Clarke. 2019 and Whitehouse et al. 2022).

'Green as grass, keen as mustard'

The research nurses were recruited to a National Institute for Health Research trial (see Box 1) to explore novel management of symptoms of patients with irritable bowel syndrome. Both research nurses were new to clinical research; this section represents the context of their naivety and motivation for a career change. To clarify, AJ had worked in critical care since qualifying as a nurse and felt that the time had come for a change towards research nursing. In contrast, KR had an extensive background beyond the acute sector in Health Visiting via Midwifery; she was keen to retain autonomy yet broaden her skillset by exploring a new speciality. Their respective new roles presented the opportunity to pioneer a nurse-led approach devised and overseen by an experienced Consultant Gastroenterologist and Professor with bespoke training and assessment.

Box 1:

The study hypothesis presumes that many people with IBS-like symptoms have organic underlying diagnoses which are missed if NICE criteria for the diagnosis and treatment of IBS are followed. Patients who presented to primary care surgeries with IBS like symptoms including diarrhoea were allocated to one of two 'arms' to compare outcomes from management following NICE Guidance compared to more detailed but largely non-invasive investigations which aimed to identify currently missed organic disorders. NIHR study funded by Research for Patient Benefit; International Standard Randomised Control Trial Number 87945798. 2020

Inevitably, the Covid-19 pandemic disrupted the scheduled induction to the organisation, tailored educational programme and orientation to the field of research launch that incurred operational consequences. The urgent need and prioritisation of Covid-19 research caused other health research to become a casualty of the pandemic (Singh et al. 2020; and Iles-Smith et al. 2020) with new studies suspended, including postponement of the study that KR and AJ were employed to lead and manage (Box 1). The halting of studies reduced the visibility of research whilst clinical redeployment impacted capacity (Castro-Sanchez et al.2021). In addition, resources were redirected to deliver patient care to address chronic nurse understaffing, constituting a sector wide issue that resulted in depleted research expertise during a critical time as nurses were redeployed to the frontline. Ultimately, both nurses were allocated to a community hospital; this was a re-acclimatisation for KR to be back in uniform, working exhausting twelve-hour shifts in a ward environment where the culture and practices had significantly changed from her previous experiences on wards in the 1990s, such as computerised drug rounds and use of National Early Warning Scores (Royal College of Physicians. 2017). However, she extended her sphere of competence with the clinical upskilling and refresher training provided on syringe drivers, urinary catheterisation and frailty assessments. Castro-Sanchez et al. (2021) identified the emotional toll of bedside nursing and fear of contracting or conveying the virus to others which resonated with both nurses.

As the duration of the redeployment was unknown, both nurses contemplated if or when their research nursing career would start, balancing duty of care, with establishing a new expression of self as a 'research nurse' (Goffman. 1959). Although unplanned, redeployment provided them with

an opportunity to foster a professional relationship with one another, during a time of uncertainty with a shared lived experience of the transition from clinical practice to research. KR and AJ were cognisant of their enthusiasm for, and naivety of research and the trajectory faced.

KR and AJ also experienced heightened insecurity as they had both relinquished permanent positions to uptake fixed-term contracts. Singh et al. (2020) highlighted the uncertainty and stressors of fixed-term contracts, especially during the height of the pandemic due to research restrictions and career instability. Whilst it was a consolation to be employed by a large NHS organisation, the implications for retaining and valuing professionals and precarity of short-term contracts to advance career pathways merits attention beyond this paper (including frameworks for early career researchers and clinical academic careers).

Spires and Steeples: Mitigation of the challenges that arose.

The nurses experience of learning how to navigate research processes during Covid-19 can be portrayed using the 'Spires and Steeples' simile, evocative of the Lincolnshire County landscape.

After two-months delivering clinical care KR and AJ were released back to the research team and embarked upon intense specialist preparation for their new roles, albeit remotely, utilising Microsoft Teams and other hybrid platforms. The nurses shadowed their research nurse colleagues by listening to phone calls or offering virtual consultations. At times, whilst their presence was overt and with patient consent, they felt they were eavesdropping on sensitive clinical conversations, experiencing a sense of imposition. KR also wondered whether this mode subtly influenced discussions with patients pertaining to their continence and gastric symptoms. The participants' choice of being seen or keeping the camera off was respected. Despite the challenges that arose from virtual consultations, such as technological competency and connectivity issues (see Fowler. 2023), study participants anecdotally reported that the virtual consults were more beneficial than face-to-face, facilitating flexibility of venue and time. In particular, the option to stay at home in a familiar

environment with access to private toilet facilities, avoiding travel and waiting also reduced anxiety. Such sentiments are corroborated by Oxleas survey. (2020) wherein the convenience of remote appointments was reviewed positively overall for follow-ups that did not require physical examination although appropriateness was dependent on the nature and style of the appointment, with preference for video rather than telephone expressed.

The lack of face-to-face interaction prevented the nurses from meeting the multidisciplinary research team in person for several months. Consequently, research recruitment practices were adapted, study amendments were required to permit the use of electronic consent, and virtual consultations (shown in Figures 1-3) as discussed by Iles-Smith et al. (2020). Notable changes were a shift from paper-based documents to uploading data thereby adhering to infection prevention measures along with the formation of a 'QR' code on recruitment resources. Although undertaking research during a pandemic caused some obstructions, the learning experience still held value as research staff were forced to adapt, be pragmatic and find new ways to work.

The nurses overcame feeling daunted from working closely and meeting weekly with the Chief Investigator and came to recognise the privilege of discussing progress to tailor input. KR and AJ developed resilience and regained confidence as they transitioned from formerly expert practitioners to novices, honing skills and embedding assimilated knowledge to emerge once more as competent beings (Benner. 1982). This echoes the potential discomfort of immersion into a new culture, unfamiliar terminology, and power in the research relationship, as discussed by Lainson et al. (2019) who recounts the frustrations and solutions moving between 'practitioner' and 'researcher' social identities and need for reassurance. Consequently, making suggestions and sharing information to prompt discussion, enhances a sense of value and nurse participation in multidisciplinary decision making (Wallace et al. 2019).

During their research training, KR and AJ received an assessment of competency via examination, which was combined with role play, which added to a sense of scrutiny for the nurses, particularly when filmed or recorded for quality assurance. Additional competencies were developed such as use of digital systems (SystemOne), databases (EDGE) and venepuncture, by simulation shadowing and supervised practice in phlebotomy clinic. Presenting cases and applying analytical reflection enhance fidelity, develops integrity that echoes 'narrative practitioner' (Lainson et al. 2019) whereby the 'story' is told.

Importantly, the nurses also attended a teaching session on motivational interviewing (Rollnick et al. 1991) to develop knowledge and ensure competency with establishing participants' willingness to change health behaviours.

Together KR and AJ overcame many hurdles, 'found our feet' and traversed the 'muddy swamps' Finlay. (2002) likens researchers to explorers with a 'map' to self-discovery. Their mutual journey from 'study buddy' to 'critical friend' facilitated honest and regular rapport with one another to share thoughts, ideas and division of labour so capitalising on respective strengths. They integrated with their research colleagues under the nurturing leadership of their line manager as a team. With the guidance of the Professor, the nurses became practitioner-researchers, encouraged to present their work locally within the Trust and externally to university students, staff and at conferences.

Figure 1: Timeline January-December 2020.

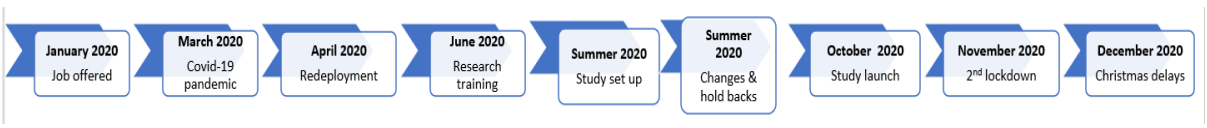


Figure 2: Timeline January-December 2021.

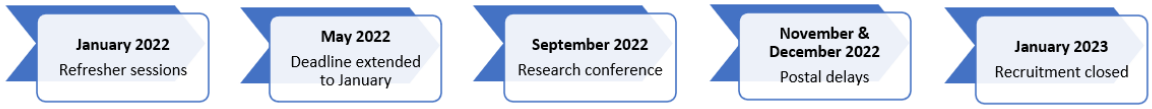
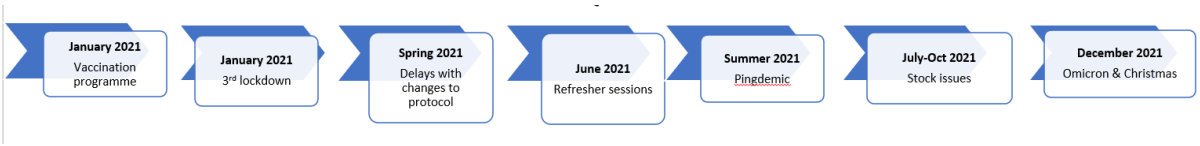


Figure 3: Timeline January 2022 –January 2023.



Down the rabbit hole.

The study required the research nurses to be involved in producing resources, including the design and creation of case report forms, patient information sheets, packs, and tools, even a logo. Neither of them appreciated the need for audit, logistics or implicit marketing skills to 'promote' the study to sites for recruitment. Communicating and encouraging others to partake in research has previously been described as a "sales pitch" (Fletcher et al. 2012). Such activity, whereby a research study is presented as a care option offered to potential participants was initially disconcerting for both nurses which added to a sense of unease as both KR and AJ are inclined to be introverted, self-effacing and quiet. Their personality traits made this aspect of research more challenging, however as the nurses honed these processes, they developed a greater appreciation of how the opportunity to contribute to a trial is underpinned by informed choice. Moreover, it has increased both their confidence and competence in public speaking and presenting. The art of being a patient advocate balancing enthusiasm to maintain a sincere, credible, and unbiased approach is recognised as a 'caring recruitment dichotomy' (Tinkler et al. 2018; Hernon et al. 2019; and McCabe et al. 2019). The nurses were also required to link in with social media and communications to raise awareness, amid restricted footfall following subsequent lockdowns. To overcome barriers to this, they liaised with statutory, pharmacological, charitable, and corporate organisations along with guidance from Patient and Public Involvement (PPI) steering group members.

A particular nemesis was the need to adapt the breath test process as outlined in the study protocol for those participants randomised to 'nurse led' arm of the trial (see Box 2). This incurred a change

from supervised collection of breath samples to an independent approach, as it was considered an 'Aerosol Generating procedure' due to Covid. Consequently, an instructional video clip was created to complement the explanatory leaflet for successful home sampling (an internal link with demonstration how to do it was provided to participants). The delivery and return of breath kits also necessitated circumvention with postal issues, requiring the use of other methods, for example collecting the samples in person, which was an additional time resource. Overall, such actions showed flexibility and accountability that echo innovations in data and sample collection (Iles-Smith et al. 2020).

Box 2:

The glucose breath test was a first line intervention advocated to identify whether an underlying condition: Small Bowel Bacterial Overgrowth was present. It is caused by bacteria who produce gases which can be treated with antibiotics.

Lainson et al. (2019) discuss the notion of hurdles in the research terrain. Obstacles encountered by the nurses consisted of unavailability of treatment options, equipment and administrative anomalies which incurred frustrating delays. Sadly, a 'launch event' for the research study was not possible due to the Covid-19 restrictions. The nurses appreciated disparity of agenda and priorities between study team and frontline clinicians compounded by the pandemic, offering sensitive and tailored support by balancing enthusiasm with drive for targets.

It was pertinent to identify the 'gatekeepers' or research minded practitioners, to establish whom best to liaise with, when and how to avert friction, optimise appropriate referrals and avoid frustrating or overwhelming recruitment sites. The nurses recognised the importance of networking and building a rapport with primary care staff to deliver effective research. Similarly, Lech et al. (2021) discuss the significance of GP involvement in research. Likewise, recognition that issues arise for individuals who do not enrol, withdraw, or disengage serve to reinforce that consent and

capacity are ongoing rather than one-off events. Empathy epitomises advocacy and values honest, holistic partnership with research participants, rather than merely seeing them as conduits for data collection (Finlay. 2002; and Lainson et al. 2019). It is also ethical to explore participant expectations, and motivations and establish that it is the right time during the patient journey to take part in a research study.

Recruitment for the study used a convenience sampling approach, whereby participants are selected as the most readily available (Polit and Beck, 2021) as they presented to their primary care health care professional with the relevant symptoms. It was the responsibility of the practitioner to inform the patient about the study and seek permission to pass their details onto the research team. According to Lech et al. (2021), recruitment of GP's and their patients is a challenge in the conduct of research in primary care, due to lack of time and administrative burden. These issues were amplified during the pandemic as the GP practices were required to prioritise the Covid 19 and influenza vaccination programmes (Privor-Dumm et al. 2021). On occasion, potential participants contacted the research team directly after seeing study adverts or word of mouth, however such inquiries then required clinical endorsement to proceed, as the nurses could only access the care record after completing the consent process. Consequently, the research nurses relied upon participant and practitioner commitment, using effective communication skills with primary care staff. Fletcher et al. (2012) identified various primary care research barriers including poor communication or misunderstandings in the research methods, a sense of feeling overwhelmed and concerns about patient harm or problems that could occur. This highlights that good quality communication, study education and integration between the research team and clinicians in the delivery of effective research, as imperatives. Connelly and Peltzer. (2016) suggest that using GP services as the intermediary source for recruitment can be a demographic or structural barrier to ensuring a representative sample. Whilst GP sites that declined to participate were a source of frustration for the research nurses, KR and AJ endeavoured to be inclusive in their approaches to recruitment

within the rural community practices that agreed to participate, but their influence did not extend to all practices.

Despite disappointment when potential participants were not eligible, declined or withdrew from the trial, the nurses demonstrated resilience; learning that it was not a personal rejection. Furthermore, the nurses developed an awareness of unconscious pressures to 'justify' progress to Chief Investigator, at weekly meetings, compounds this sentiment. For both nurses, this is congruent with 'fear of failure,' avoiding conflict, seeking to impress, achieve recognition approval and validation that can be both unsettling and motivational, particularly against an authority gradient. From the outset, the nurses were constantly reacclimatising to the language and symbols used in research and gastroenterology, such as clarifying use of language, for example, 'motion' when referring to bowel movement (which a participant even misunderstood as emotion) or 'power' when assessing trial viability. Visual tools, such as charts depicting stool form and units of alcohol, were used with participants to clarify, normalise and overcome inhibition, along with contemporary references to contextual issues, such as the 'Bowel Babe' (which demonstrates nuanced judgements or reflexivity in the research process as described by Nadin and Cassell. 2006, and Olmos-Vega et al. 2023).

Periodically, the nurses struggled to maintain momentum but observed an upturn in amount and suitability of referrals converted into recruits, following refresher sessions with sites and clinicians. The Excess Treatment Costs (ETC) per recruit increased and reduced resistance for more costly treatments or interventions within the study plan. The eligibility criteria and protocol that framed the study, used open ended, rigorous questioning techniques that probe curiosity and satisfy lived experience to enrich the data. Connelly and Peltzer. (2016); and Varpio et al. (2021) echo the need for skilful inquiry to deepen quality and clarify understanding thereby enriching the data beyond

superficial reporting. Despite their respective future career uncertainty, the nurses relished the opportunities of being dynamically involved in research.

Conclusion:

Commencing careers as research nurses during a global pandemic has been a challenge, however the journey has facilitated additional learning and development, both professionally and personally. KR and AJ are proud of the work they have done, particularly the new skills, resilience and flexibility they learnt, and to be involved in such an important study. Some of the participants substantiate this, stating that the study has improved their quality of life due to the care and treatment provided, as well as the support from the nurses. As the end of the study approached, the nurses considered the next step in their careers and desire to remain in clinical research. The pandemic has further highlighted the importance of research to improve healthcare as the basis of evidence-based practice which is imperative in all areas of healthcare.

Key Points:

Personal characteristics for research nurses include adaptability, integrity and resilience to develop ownership and a 'solution focussed' approach. The shift in care delivery and hybrid working and the implications on communication flagged; utilising resources such as access to learning suites and collaborating with personnel through effective networking with University School of Health is recommended. The use of fixed term contracts and role insecurity merits further exploration beyond this article. The relevance of Marketing in 21st Century Nursing is also worthy of review: are these skills for educators to harness to equip the workforce for caring in a variety of sectors? For further information on clinical nursing research or clinical academic careers with links to directory see The Royal College of Nursing's (2023) Clinical Research Nursing Resource.

Reflective Questions:

1. Reflect on your own experience of nursing during the pandemic. What adjustments did you and your organisation make?
2. Weigh up the benefits and challenges of seeking a fixed term contract.
3. Describe your current level of involvement with research. Examine whether there are opportunities to get further involved in research.
4. Discuss your work governance structure with a colleague and how these interfaces with other organisations. How might you access alternative services to recruit participants for research?

Reference list:

Benner P. From Novice to Expert. American Journal of Nursing. 1982 March; 82(3): 402-407.

Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qualitative Research in Sport Exercise and Health. 2019; 11(4):589-597. Available from: https://doi.org/10.1080/2159676X.2019.1628806

Castro-Sanchez E, Russell AM, Dolman L, Wells M. What place does nurse-led research have in the COVID-19 pandemic? International Nursing Review. 2021; 68:214-218. Available from: https://onlinelibrary.wiley.com/doi:/10.1111/imr.12660

Connelly LM, Peltzer JN. Underdeveloped Themes in Qualitative Research: Relationship with Interviews and Analysis. Clinical Nurse Specialist.2019 January/February; 30(1):52-57.

Finlay L. Negotiating the Swamp: the Opportunity and Challenge of Reflexivity in Research Practice. Qualitative Research Copyright. London: © SAGE Publications. 2002 August; vol. 2(2) :209-230. Available from https://www.researchgate.net/publication/249730950

Fletcher B, Gheorghe A, Moore D, Wilson S, Damery S. Improving the recruitment activity of clinicians in randomised controlled trials: a systematic review. BMJ Open. 2012; 2 (1). Available from: http://bmjopen.bmj.com/ doi:10.1136/bmjopen-2011-000496

Fowler SB. Sustainability of nursing research during the pandemic: Reflections and directions. Res Nurs Health. 2023; 46: 188-189. Available from: Wileyonlinelibrary.com/journal nur DOI:10.1002/nur.22299

Goffman E. The presentation of self in everyday life. Puffin Books: London.1959.

Hernon O, Dalton R, Dowling M. Clinical research nurses' expectations and realities of their role: A qualitative evidence synthesis. Journal of Clinical Nursing. 2020; 29:667-683. DOI:10.1111/jocn.15128

Iles-Smith H, Jones H, Petersen C, Young L, Wells M. How research nurses and midwives are supporting Covid-19 clinical trials. Nursing Times. 2020; 116: 11: 20-22. Available from 201007-How-research-nurses-and-midwives-are-supporting-Covid-19-clinical-trials.pdf (emap.com)

ISRCTN registry. Novel management of symptoms in patients with irritable bowel syndrome. 2020; Trial ID: ISRCTN87945798. Date submitted:26/11/2019. Date registered: 14/07/2020. Available from: https://www.isrctn.com/ISRCTN87945798

Lainson K, Braun C, Clarke V. Being both narrative practitioner and academic researcher: A reflection on what thematic analysis has to offer narratively informed research. International Journal of Narrative Therapy & Community Work. 2019; 20: 3:1-14.

Lech S, O'Sullivan JL, Wellmann L, Supplieth J, Dopfmer S, Gellert P, Kulmey A, Nordheim J. Recruiting general practitioners and patients with dementia into a cluster randomised controlled trial: strategies, barriers and facilitators. BMC Medical Research Methodology. 2021; 21:16. Available from https://doi.org.10.1186/s12874-021-01255-6

McCabe M, Behrens L, Browning S, Vessey J, Williams MJ. The Clinical Research Nurse: Exploring Self-Perceptions About the Value of the Role. AJN. 2019 August; 8:24-32.

Nadin S, Cassell C. The use of a research diary as a tool for reflexive practice: Some reflections from management research. Qualitative Research in Accounting & Management. 2006;3(3):208-217.

Olmos-Vega FM, Stalmeijer RE, Varpio L, Kahlke R. A Practical guide to reflexivity in qualitative research: AMEE Guide No19. Medical Teacher. 2023; 45: 3:241-251. Available from https://doi.org/10.1080/0142159X.2022.2057287

Oxleas NHS. Improving lives Patient Experience of Remote consultations during the COVID-19 Pandemic. 2020 September. Available from https://healthinnovationnetwork.com/wp-content/uploads/2020/12/MH-Remote-Consultations-Patient-Experiences.pdf

Polit D, Beck C. Essentials of Nursing Research Appraising Evidence for Nursing Practice. 10th Edition Wolters Kluwer Health. 2021 March.

Privor-Dumm LA, Poland GA, Barratt J, Durrheim DN, Knoll MD, Vasudevan P, Jit M, Bonvehi PE, Bonanni P. A global agenda for older adult immunization in the COVID-19 era: A roadmap for action. Vaccine. 2021; 39:5240-5250. Available from: https://doi.org/10.1016/j.vaccine.2020.06.082

Rollnick WS, Miller S. Motivational interviewing: Preparing people to change addictive behaviour. The Guildford Press.1991. Available from Wileyonlinelibrary.com

Royal College of Physicians. National Early Warning Score (NEWS2) Standardising the assessment of acute-illness severity in the NHS. 2017 December. Available from https://www.england.nhs.uk>sepsis.

Singh JA, Bandewar SVS, Bukusi EA. The impact of the COVID-19 pandemic response on other health research. Bull World Health Organ. 2020; 98:625-631. Available from http://dx.doi.org/10.2471

Tinkler L, Smith V, Yiannakou Y, Robinson L. Professional identity and the Clinical Research Nurse: A qualitative study exploring issues having an impact on participant recruitment in research. Journal of Advanced Nursing. 2018; 74:318-328. DOI:10.1111/jan.13409

Varpio L, O'Brien B, Rees CE, Monrouxe L, Ajjawi R, Paradis E. The applicability of generalisability and bias to health professions education's research. Medical Education. 2021;55(2):167-173.

Wallace I, Barratt H, Harvey S, Raine R. The impact of Clinical Nurse Specialists on the decision-making process in cancer multidisciplinary team meetings: A qualitative study. European Journal of Oncology Nursing. 2019 December; Vol43. Available from https://doi.org/10.1016/j.ejon.2019.101674

Whitehouse CL, Harris C, Charlton P, Hare N. The changing paradigm of research delivery during a pandemic-a reflective account. Nurse Res.2022 June 7; 30:2:12-17. DOI:10.7748/nr. 2022.e1832