National Institute of Health Sciences

Research Bulletin

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Abstracts

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Prevention of Venous Thromboembolism - An Audit and Re-Evaluation of Thromboprophylaxis Prescription in University Hospital Limerick

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INTRODUCTION

The rate of venous thromboembolism (VTE) is often underestimated amongst hospital inpatients. Given the significant risk factors that come with a hospital admission, VTE prophylaxis should be a matter of priority.

OBJECTIVE

A number of previous audits were conducted on the rate of prophylaxis in University Hospital Limerick (UHL). The audit that follows is a re-evaluation of thromboprophylaxis prescribing among a similar cohort in 2020.

METHODOLOGY

A cross-sectional study of 147 medical inpatients was performed. Exclusion criteria were applied to leave 100 patients. The Padua Prediction Score Risk Assessment Tool was used to stratify patients into risk categories.

RESULTS

Twenty nine patients were not prescribed prophylaxis. Eleven of those were in the high risk category. Seventy two percent of high risk patients were prescribed prophylaxis, however 100% of high risk patients were prescribed prophylaxis when the VTE prompt sections were completed. Only 67% of moderate risk patients were prescribed prophylaxis.

CONCLUSION

Since the implementation of the VTE prompt in 2008, the rates of thromboprophylaxis have remained high over a consistent period, particularly with high risk patients. It is essential to assess patients on admission and to ensure adequate prophylaxis is prescribed, particularly in moderate risk patients. We would also urge that the prompt section of the proforma is completed in order to ensure continuity of care.

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Body Composition Assessment in Adults with Cystic Fibrosis - Comparison of Bioelectrical Impedance Analysis with Dual-Energy X-Ray Absorptiometry

O'Sullivan, D.,[1]
Murphy, N.,[1]
Casserly B.,[2]
Harnett, P.,[2]
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INTRODUCTION

Low lean body mass (LBM), present in all body weights and body mass indexes (BMI),[1] is a powerful and independent predictor of poorer prognosis.[2] Patients with cystic fibrosis (CF) have less fat free mass (FFM) compared with controls where FFM is associated with decreased inspiratory muscle strength[3] and more severe lung disease.[4]

Both dual-energy X-ray absorptiometry (DXA) and bioelectrical impedance analysis (BIA) measure body mass at molecular level.

OBJECTIVE

The aim of this research is to compare two methods of body composition assessment, BIA with DXA, in adults with CF at University Hospital Limerick to see if equivalent, reliable and accurate in practice obtaining a study sample that is representative of our adult CF population.

METHODOLOGY

DXA scanning (GE Lunar iDXA™) was carried out according to standardised procedures recommended by the manufacturer. BIA was undertaken with a seca medical Body Composition Analyzer® (mBCA) 515/514 (seca gmbh & co. kg, Hamburg, Germany).

We measured Fat Mass (kg), %Fat Mass, FFM (kg), %FFM and Appendicular Skeletal Muscle (ASM) in 36 adults with CF from both methods, in addition to, phase angle collected from BIA. Pearson correlations along with scatter plots were completed to assess strength of the relationships between continuous variables and Bland-Altman plots were used to investigate the level of agreement between both methods.

RESULTS

Phase angle from BIA method correlated with BMI, weight and FEV1 significantly. Correlations between DXA and BIA measurements are significant. The Bland Altman demonstrated a good level of agreement between the two methods for all variables except ASM (kg) and ASM Index DXA (kg/m^2).

CONCLUSIONS

Body composition measurement in CF should be undertaken using reliable and accurate methods. There are few studies in CF adults comparing different methods to ascertain which are sufficiently reliable and accurate to be used in clinical practice.[5] If non-invasive quick methods for measuring body composition in adults with CF are to be useful in the assessment of nutritional status in clinical practice it is important to ascertain how well methods such as BIA compares with a widely used reference method such as DXA. Potentially BIA could be a cost-effective non-invasive method of monitoring lean mass changes over time in our CF adult population leading to earlier detection and intervention, as well as a motivational tool to improve treatment compliance.

We suggest that DXA can be replaced by BIA to measure FM, %FM, FFM and %FFM in our CF adults in a clinical setting.

REFERENCES

Available on request.

Acknowledgement

The authors wish to acknowledge the assistance of the following for their contribution to this research:

- Áine Costelloe and Tina Sheehy, DXA Unit, Clinical Age Assessment Unit, University Hospital Limerick
- Emer Lehane, Department of Dietetics, University Hospital Limerick

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Survey of Idiopathic Pulmonary Fibrosis Patients who Participated in Online Group Exercise Classes to Facilitate Physical Activity during Covid-19 Pandemic

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Ryan, P.,[1]
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INTRODUCTION

During the Covid-19 pandemic, respiratory patients were cocooning at home with limited access to group exercise classes. In particular, Idiopathic Pulmonary Fibrosis (IPF) patients are fearful of undertaking exercise independently. To prevent deconditioning of this cohort, virtually run exercise classes were organised as part of a collaboration between University Hospital Limerick (UHL) and the Irish Lung Fibrosis Association (ILFA). Physiotherapist-led weekly online exercise classes commenced in May 2020 using the Zoom® platform. Participants were provided with safety advice and information in advance of joining the classes. Participants were invited to complete an online survey in May 2021 to assess the impact of the virtual classes and attitudes towards physical activity.

METHODOLOGY

Research Question – To examine if IPF patients' attitudes towards exercises changed post-intervention with supervised online exercise classes. An online survey was emailed to patients who participated in the online exercise class to explore if the physical activity benefitted their illness during the pandemic.

RESULTS

Demographics of Participants:

- 53 participants responded to the survey (83% were aged over 61 years)
- All respondents were diagnosed with IPF (51% were male)
- 6% were lung-transplant recipients
- 36% were using oxygen all the time or most of the time.
- 12% of patients were diagnosed in the last year, 22% between 1 and 2 years ago, 26% between 2 and 3 years ago and 24% between 3 and 5 years ago

Previous Experience of Pulmonary Rehabilitation:

- Only 11% of respondents were on a public waiting list for either face to face or virtual pulmonary rehabilitation
- 66% had never attended a face to face pulmonary rehabilitation course that was run at a local hospital/community setting
- 34% had attended an organised pulmonary rehabilitation course. In this cohort, 59% had to travel >10km to attend a pulmonary rehabilitation face to face class (maximum distance >50km, mean distance 28km)
- 89% travelled by car to their pulmonary rehabilitation course

Physical and Mental Benefits:

- "The great benefits I gained from attending the class i.e. energy levels, feeling much better and people remarking the change in my mood and outlook."
- "This regular weekly class makes it more likely to exercise more often. The combination of weights and cardio exercises means overall exercise. It is done in a safe environment with a professional physiotherapist in a hospital setting."
- "The classes have been very helpful with my confidence and well-being."
- "Good for the body, mind and soul - thank you."

Results: Feedback from Participants:

- A rating of 'excellent' was awarded by 72% of respondents for help in overcoming any anxiety about exercising online
- 64% reported being more active as a result of the online exercise classes
- 68% reported being less fearful about doing exercise since starting the online classes

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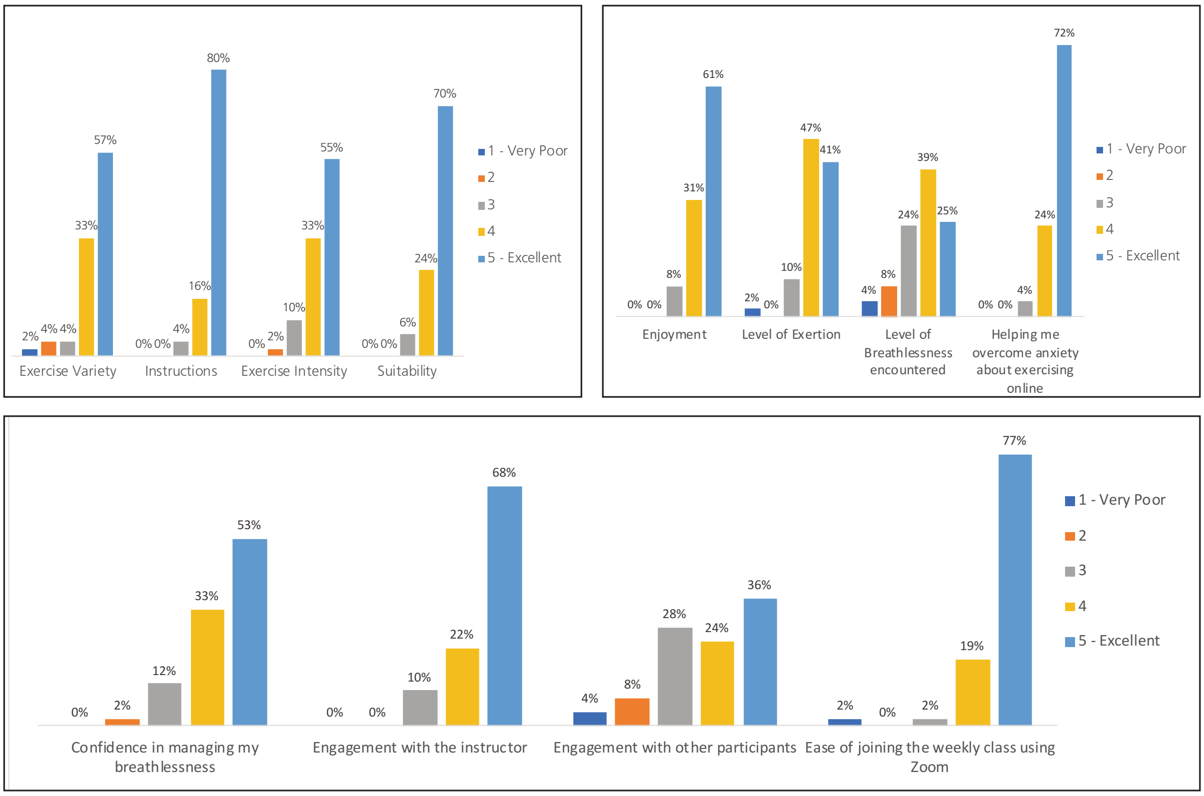
Figures 1, 2 & 3 - Results



Patient Evaluations:

- "Inclusive and I feel part of a wider community."
- "Interaction with fellow patients. Feeling of isolation and being alone has gone."
- "I feel enormous support from online classes so much so that I no longer take either my anti-anxiety or anti-depressant medication."
- "Sense of improvement over time."
- "I find it excellent and really look forward to my Monday class. It's a great way to start the week. I haven't missed a week since I started and would love to have the opportunity of attending extra weekly classes if it were possible. Fingers crossed."

CONCLUSION

Online weekly exercise classes are feasible for IPF patients. This ongoing activity has provided substantial physical and emotional benefits to IPF patients during the Covid-19 pandemic. Patients reported being less fearful of exercise as a result of the exercise classes. The survey highlights the lack of pulmonary rehabilitation availability to IPF patients.

PRESENTED

As a poster presentation at the Irish Thoracic Society (ITS) Conference (Online) on November 19th, 2021.

Acknowledgements

Special thanks to Petra Grehan (Senior Physiotherapist, Heart and Lung Transplant Unit, Mater Misericordiae University Hospital, Dublin) who kindly led some of the classes, to all the team in University Hospital Limerick and within the Irish Lung Fibrosis Association (ILFA) who gave freely of their time to benefit this patient group, and to the patients who joined the classes.

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Prevalence of Antibodies to SARS-CoV-2 Following Natural Infection and Vaccination in Irish Hospital Healthcare Workers - Changing Epidemiology as the Pandemic Progresses

Allen, N.,[1]
Brady, M.,[2,3]
Ní Riain, U.,[4]
Conlon, N.,[5,6]
Domegan, L.,[3]
Carrión Martín, A.I.,[7]
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**On behalf of the PRECISE Study (Prevalence of Covid-19 in Irish Healthcare Workers) Steering Group*

ABSTRACT

In October 2020, SARS-CoV-2 seroprevalence among hospital healthcare workers (HCW) of two Irish hospitals was 15 and 4.1% respectively. We compare seroprevalence in the same HCW population 6 months later and assess changes in risk factors for seropositivity with progression of the pandemic and serological response to vaccination.

All staff of both hospitals (n=9,038) were invited to participate in an online questionnaire and SARS-CoV-2 antibody testing in April 2021. We measured anti-nucleocapsid and anti-spike antibodies. Frequencies and percentages for positive SARS-CoV-2 antibodies were calculated and adjusted relative risks for participant characteristics were calculated using multivariable regression analysis. Five thousand and eighty five HCW participated.

Seroprevalence increased to 21 and 13%, respectively; 26% of infections were previously undiagnosed. Black ethnicity (aRR 1.7, 95% CI 1.3–2.2, p<0.001), lower level of education (aRR 1.4 for secondary level education, 95% CI 1.1–1.8, p=0.002), living with other HCW (aRR 1.2, 95% CI 1.0–1.4, p=0.007) were significantly associated with seropositivity. Having direct patient contact also carried a significant risk, being a healthcare assistant (aRR 1.8, 95% CI 1.3-2.3, p<0.001), being a nurse (aRR 1.4, 95% CI 1.0-1.8, p=0.022), daily contact with COVID-19 patients (aRR 1.4, 95% CI 1.1-1.7, p=0.002), daily contact with patients without suspected or confirmed COVID-19 (aRR 1.3, 95% CI 1.1–1.5, p= 0.013). Breakthrough infection occurred in 23/4,111(0.6%) of fully vaccinated participants; all had anti-S antibodies.

The increase in seroprevalence reflects the magnitude of the third wave of the pandemic in Ireland. Genomic sequencing is needed to apportion risk to the workplace vs. the household/community. Concerted efforts are needed to mitigate risk factors due to ethnicity and lower level of education, even at this stage of the pandemic. The undiagnosed and breakthrough infections call for ongoing infection prevention and control measures and testing of HCW in the setting of close contact. Vaccinated HCW with confirmed infection should be actively assessed, including SARS-CoV-2 whole genome sequencing (WGS), serology testing and assessment of host determinants, to advance understanding of the reasons for breakthrough infection.

FUNDING

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SOURCE

Prevalence of Antibodies to SARS-CoV-2 Following Natural Infection and Vaccination in Irish Hospital Healthcare Workers: Changing Epidemiology as the Pandemic Progresses, Frontiers in Medicine

https://www.frontiersin.org/article/10.3389/fmed.2021.758118
doi=10.3389/fmed.2021.758118

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Molecular Epidemiology of an Extended Multiple-Species OXA-48 CPE Outbreak in a Hospital Ward in Ireland, 2018-2019

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ABSTRACT

The objective was the molecular epidemiological description of an OXA-48 CPE outbreak affecting a tertiary-care hospital ward in Ireland over an extended period (2018-2019).

Microbiological testing and whole-genome sequencing (WGS) were performed on all 56 positive OXA-48 outbreak case isolates.

In total, 7 different species were identified: *Enterobacter hormaechei* (n=35, 62.5%), *Escherichia coli* (n=12, 21.4%), *Klebsiella pneumoniae* (n=5, 8.9%), *Klebsiella oxytoca* (n= 1,1.8%), *Klebsiella michiganensis* (n=1,1.8%), *Citrobacter freundii* (n=1,1.8%), and *Serratia marcesens* (n=1,1.8%). *E. hormaechei* ST78 was the most common genotype (n=14, 25%). Two major pOXA-48 plasmid types were identified throughout the outbreak, 'types' 1 and 2, and 5 major *E. hormaechei* clonal groupings were identified: ST78, ST108, ST1126, ST135, and ST66. Within each of the ST108, ST1126, ST135 and ST66 groups, the pOXA-48 harboured within each isolate were the same. Within ST78, 9 isolates contained the pOXA48 'type 2' plasmid and 5 contained the 'type 1' plasmid. Environmental specimens were taken from different outbreak ward locations: handwash basins, sink and shower drains, and taps. Of 394 environmental specimens, OXA-48 CPE was isolated from 26 (6.6%).

This prolonged outbreak of OXA-48 CPE was confined to one ward, but it exemplifies the complexity and difficulty in the control of these organisms. With multiple species and genotypes involved, they may be better described as 'plasmid outbreaks.' WGS provided insights into this diversity and potential transmission among cases, though its usefulness would be enhanced by analysis as close as possible to real time so that interventions can be implemented as soon as data are available.

PRESENTED

As an oral presentation at the:

- Faculty of Public Health Summer Scientific Meeting (Online) on May 26th, 2021 by Dr. Lisa Domegan and Dr. Carina Brehony.
- Irish Society of Clinical Microbiology (ISCM) Spring Meeting (Online) on March 26th, 2021 by Dr. Lisa Domegan and Dr. Carina Brehony.
- European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), (Online) on November 27th, 2020 by Dr. Carina Brehony and Dr. Lisa Domegan.

SOURCE

Antimicrobial Stewardship & Healthcare Epidemiology 2021;1(1):e54.
https://doi.org/10.1017/ash.2021.206

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Sensory Descriptors which Identify Neuropathic Pain Mechanisms in Low Back Pain - A Systematic Review

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ABSTRACT

Descriptors provided by patients with neuropathic low back pain (NLBP) with or without spinally referred leg pain are frequently used by clinicians to help to identify the predominant pain mechanisms. Indeed, many neuropathic screening tools are primarily based on subjective descriptors to determine the presence of neuropathic pain.

There is a need to systematically review and analyse the existing evidence to determine the validity of such descriptors in this cohort.

Ten databases were systematically searched. The review adhered to PRISMA and CRD guidelines and included a risk of bias assessment using QUADAS-2. Studies were included if they contained symptom descriptors from a group of NLBP patients þ/_ leg pain. Studies had to include a reference test to identity neuropathic pain from other pain mechanisms.

Eight studies of 3,099 NLBP patients were included. Allodynia and numbness were found to discriminate between NLBP and nociceptive lower back pain (LBP) in four studies. Autonomic dysfunction, (changes in the colour or appearance of the skin), was also found to discriminate between the groups in two studies. Dysesthesia identified NLBP in 5/7 respectively. Results from studies were equivocal regarding pain described as hot/burning cold and paroxysmal pain in people with NLBP.

Subjectively reported allodynia and numbness would suggest a neuropathic pain mechanism in LBP. Dysesthesia would raise the suspicion of NLBP. More research is needed to determine if descriptors suggesting autonomic dysfunction can identify NLBP. There is poor consensus on whether other descriptors can identify NLBP.

SOURCE

Current Medical Research and Opinion 2020;36(10):1695-1706.
https://doi.org/10.1080/03007995.2020.1790349

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Follow-Up of Survivors of Critical Illness Related to Covid-19 Infection - A Pilot Study

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INTRODUCTION

Recent improvements in Intensive Care Unit (ICU) patient care have seen a significant increase in the number of patients surviving critical illness. However, surviving an ICU admission is not without its cost and patients face a wide variety of challenges after discharge. Post-intensive care syndrome (PICS) refers to new or worsening physical, mental and neurocognitive disorders that negatively affect quality of life in survivors of critical illness.[1] Post-ICU follow-up clinics have emerged over the past decade in which intensivists provide continuity of care in an outpatient setting for survivors of critical illness. Current evidence suggests that this is a promising strategy to improve outcomes among survivors of critical illness.

OBJECTIVE

Our study aimed to establish whether patients who had been admitted to the ICU in University Hospital Limerick (UHL) with Covid-19 pneumonia had persisting deficits in physical, functional and cognitive domains after their critical care admission. Secondly, we aimed to establish whether an ICU-initiated multidisciplinary follow-up programme would be a feasible intervention for patients to address ongoing needs. Finally, our study aimed to provide insight into the human experience of survivorship of critical illness.

METHODOLOGY

We conducted a qualitative pilot study of patients that were admitted to the ICU in UHL during the period from March 2020 to March 2021 with severe Covid-19 infection. Twenty one patients met the criteria for inclusion and were invited to attend a post-ICU follow-up consultation. Sixteen patients in total attended and were analysed. A structured interview approach was used to collect patient-reported outcomes assessing physical, functional psychological and cognitive domains. Mental health status was assessed using the Hospital Anxiety and Depression scale (HADs). Patients were given the opportunity to discuss their ICU experience and provide feedback to ICU professionals.

RESULTS

The mean patient age was 57.4 years and 66.6% were male. Eighty six point six per cent of patients were of Irish nationality. The most common pre-existent comorbidities were hypertension (33.3%) and obesity (26.6%). The median ICU length of stay was 19 days (5-50). The median SOFA score on ICU admission was 4 (3-9). Fifty three point three per cent of patients required Mechanical Ventilation (MV) and 33.3% needed Non-Invasive Ventilation. The median duration of MV was 10 days (1-36). Eighty per cent of patients reported that they had not returned to their usual pre-morbid activity level. Ninety three point three per cent of patients reported at least one physical impairment; the most common complaints being breathlessness (60%), muscle weakness (53%), fatigue (53%) and pain (33.3%). Only 45% of patients had returned to full time employment. A total of 80% of patients reported psychiatric impairment with anxiety being the most commonly reported symptom at 46.6% followed by depression affecting 40% of patients. Forty per cent of patients had an abnormal HADs. Impairments in memory were common with 46.6% reporting difficulties in short-term memory and recall. All patients strongly agreed on the need for a post-ICU follow-up clinic. Eighty per cent of patients felt that an ICU diary would be beneficial to their recovery and 64% of patients expressed interest in visiting the ICU. It is estimated that 50% of ICU survivors will suffer some component of PICS after discharge.[2] Post-intensive care disabilities are associated with frequent hospitalisation, increased family caregiver burden and increased healthcare expenditure.[3,4,5] Guidelines recommend that all critical care survivors should be reviewed 2-3 months after discharge.[6,7] Despite this only 30% of ICUs in the UK and 2 ICUs in Ireland currently provide outpatient follow-up.[8] A systematic review on the effects of ICU follow-up interventions on patient outcomes showed fewer depression symptoms, better mental health-related quality of life and fewer PTSD symptoms.[9]

CONCLUSIONS

The results of our study illustrate the presence of significant physical, psychological and cognitive symptoms experienced by Covid-19 ICU survivors up to 1 year post-discharge. All patients really valued the proposal of an ICU follow-up service, especially the continuity of care, receiving information, expert reassurance and the possibility of giving feedback to the ICU staff. The results from our study data present a strong argument in favour of the need for a comprehensive follow-up service post-ICU admission to address the complex sequelae of critical illness. It is hoped that the results of our study will create a human connection for hospital administrators in an effort to generate interest, funding and support for ICU follow-up clinics. We strongly anticipate that such an intervention will lead to better outcomes and improve the overall quality of care for patients surviving a critical care admission.

REFERENCES

Available on request.

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A Retrospective Clinical Audit Investigating the Occurrence of Osteomyelitis on Contrast-Enhanced MRI Foot Examinations

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INTRODUCTION

Osteomyelitis is an infection of the bone caused by fungi or bacteria.[1] If left untreated osteomyelitis can proliferate and ultimately restrict or stop blood flow to the foot. In serious cases this can result in amputation, hence prompt and accurate diagnosis is imperative. A contrast-enhanced MRI foot examination has emerged as the gold standard for imaging of osteomyelitis due to its excellent anatomical detail, high sensitivity in the detection of early infection and lack of ionizing radiation.[2] However, this method requires significant MRI scanning time with the protocol in this local site lasting ~20 minutes.

OBJECTIVE

In a large teaching hospital where MRI slots are already oversubscribed it is necessary to question the effectiveness of this examination, even though it has been labelled the gold standard. As such this retrospective audit was conducted to quantify the osteomyelitis diagnosis positivity rate when using contrast-enhanced MRI foot examinations.

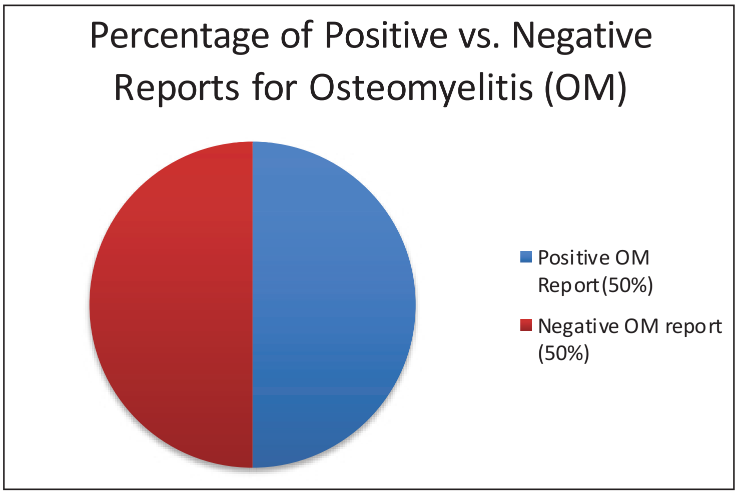
METHODOLOGY

The principal methodology used for this investigation was a retrospective audit using existing patient information stored on the National Integrated Medical Imaging System (NIMIS). Applicable case information was taken from NIMIS and all information saved on a password-protected computer with all patient identification information removed to protect patient confidentiality.

Inclusion criteria included reports of both male and female patients who received an MRI foot with contrast within the last 12 months, between January 2021 and January 2022, within University Hospital Limerick.

RESULTS

NIMIS records showed that over the last twelve months a total of 97 patients presented for contrast - enhanced MRI foot examinations. Eighty six of these patients were scanned using the osteomyelitis protocol. Of the 86 patients scanned for osteomyelitis, using MRI foot with contrast, 43 of them had a positive result.



CONCLUSION

The results of this audit show that one in every two MRI foot with contrast cases reported have a positive diagnosis for osteomyelitis. This is a substantial positivity rate and highlights that although each case requires significant MRI scanning time, a contrast-enhanced MRI foot examination should remain as the gold standard for imaging.

This audit could be used as part of a service evaluation in creating a clearer protocol when ordering these scans.

REFERENCES

Available on request.

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Our Experience with Outpatient Initiation of Propranolol in the Treatment of Complicated Infantile Haemangiomas

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INTRODUCTION

Infantile haemangioma (IH) is a benign vascular tumour[1], with a prevalence of approximately 4-5%.[2] The majority of IHs demonstrate complete involution by age 4 without treatment.[3,4] Treatment is indicated for complicated IH including ulceration, functional impairment and facial disfigurement.[3] Propranolol was discovered serendipitously in 2008[5] as an effective treatment for complicated IH, and is now first line. Early intervention (by age 1 month) for complicated IH is recommended to optimise treatment efficacy.[2,3] A dedicated IH clinic was established in our department in 2018. An audit from 2015-2019 demonstrated that a dedicated clinic improved regional access and resulted in earlier treatment initiation.[6] The majority of patients had treatment initiated in the inpatient setting. Due to emerging evidence that outpatient initiation of propranolol is safe, updated international guidelines[3,7] have specified criteria for outpatient initiation. During the Covid-19 pandemic, the importance of moving towards outpatient initiation was reinforced.[8] A change to outpatient propranolol initiation was introduced in our department.

OBJECTIVE

The aims of our audit were to evaluate patients referred to our IH clinic, and to assess our compliance with guidelines on the use of propranolol.

METHODOLOGY

All patients commenced on propranolol following referral to our IH clinic from January 2019 to September 2021 were identified from our database and data collected from charts.

RESULTS

Twenty-eight patients were identified. The majority of referrals were received from General Practitioners (GPs) (50%,n=14), followed by Emergency Department (14%,n=4), Neonatology (18%,n=5), Paediatrics (14%,n=4) and Ophthalmology (4%,n=1). The mean age of onset of IH was 11 days (range=0-56, SD±14). The mean age at the time of referral was 89 days (n=26, SD±78) for proliferative IH, and 895 days (n=2, SD±108) for mature IH. The mean duration from referral to dermatology review was 8.6 days (SD±9) for proliferative IH, and 27 days (SD±14) for mature IH.

The haemangiomas were sub-classified: 26 proliferative (93%), 2 mature (7%); 27 focal, 1 segmental; 18 superficial (64%), 4 deep (14%), and 6 mixed (21%).

The mean number of haemangiomas per patient was 3.8 (SD±8.3). Anatomical locations included: facial (36%,n=19), neck (4%,n=1), limbs (7%,n=2), trunk (11%,n=3) and anogenital (7%,n=2).

The indications for propranolol were most commonly facial disfigurement (50%,n=14), followed by ulceration (29%,n=8) (see Figure 1), vital structure involvement (21%,n=6), high burden of haemangiomas (7%,n=2), and segmental haemangioma (4%,n=1).

Figure 1 - Ulcerated Infantile Haemangioma

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Prior to commencing treatment, 11 cases (39%) required further investigation, including echocardiogram (7%,n=2), ultrasound (21%,n=6), magnetic resonance angiogram (4%, n=1), chest x-ray (4%,n=1), thyroid function tests (11%,n=3) and electrocardiogram (4%, n=1). Propranolol was initiated in the outpatient setting for 64% of patients (n=18), representing a 21 fold increase in outpatient initiation, in comparison to the previous audit where 3.6% (n=1/28) commenced treatment as outpatients. Nine patients commenced propranolol as an inpatient – criteria for admission were consistent with the British Society of Paediatrics guidelines in 88% of cases (n=8), with one admission due to parent preference. One patient commenced propranolol on the day ward due to borderline weight. Patients who commenced outpatient treatment followed a local protocol (adapted from guidelines[7]), with a starting target dose of 1.25mg/kg orally twice daily.

The mean age for commencing treatment with propranolol was 135 days (SD±88) for proliferative IH, and 894 days for mature IH (SD±89.8). The mean starting dose was 1.3mg/kg/day for inpatients (range 1-2.5mg/kg/day, SD±0.66) representing 78% (n=7) compliance with guidelines,[7] and 2.4mg/kg/day for outpatients (range 2-2.5mg/kg/day, SD±0.16), representing 89% compliance (n=16) with guidelines.[7]

The mean peak dose was 2.25mg/kg/day (range=1.98-2.5mg/kg/day, SD±0.24), representing 86%, (n=24) compliance with guidelines.

During the audit period, 15 patients completed their treatment course. All patients responded to propranolol, with 80% (n=12) showing more than 50% response, and 27% (n=4) having a complete response. Eleven patients (39%) had some residual changes (erythema, bulk or fibrofatty tissue).

Few adverse effects were reported (n=5,18%), and no adverse effect resulted in treatment cessation: 2 patients developed hypotension, 1 patient developed night terrors, 1 patient had temporary deterioration of ulceration, and 1 patient developed transient wheeze. Rebound growth was reported in 2 cases after treatment cessation.

CONCLUSIONS

This completed audit cycle of IH treated with propranolol highlights excellent compliance with propranolol dosing. The majority of patients treated with propranolol (n=18,64%) were deemed suitable for outpatient treatment initiation, in line with guidelines, and a significant change from our last audit where the majority of patients (n=27/28, 96%) were admitted to commence propranolol. Outpatient initiation is now vital since the Covid-19 pandemic has encouraged us to move away from inpatient management, and where inpatient beds are in demand. In addition, outpatient initiation represents significant cost saving, and is more convenient for parents. This audit also confirmed the safety and efficacy of propranolol. Future goals include GP education on the indications for propranolol, and the importance of early referral. In conclusion, we report treatment of 28 patients over 2 years with IH, 16 of whom were safely initiated as outpatients, consistent with guidelines. The main focus should now be on primary care education.

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Available on request.

PRESENTED

- As both an oral and poster presentation (Online) at the Irish Paediatric Association Conference on December 3rd, 2021 by Dr. Berbie Byrne.
- As a poster presentation at the Irish Association of Dermatology Spring Meeting in Dublin on May 6th, 2022 by Dr. Paula Finnegan.
- As a poster presentation at the European Academy of Dermatology and Venereology Symposium (Online) in Ljubljana, Slovenia on May 13th, 2022 by Dr. Paula Finnegan.
- As a poster presentation at the British Society of Paediatric and Adolescent Dermatology Annual Meeting in London on November 4th, 2022 by Dr. Paula Finnegan.

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Testing the Performance of Risk Prediction Models to Determine Progression to Referable Diabetic Retinopathy in an Irish Type 2 Diabetes Cohort

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Scanlon, P.H.,[4]
Lois, N.[5]

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Gloucestershire Retinal Research Group, Cheltenham, UK[3]
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Ophthalmology, Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast, Northern Ireland, UK[5]

ABSTRACT

The increasing use of patient data to better focus resources in healthcare provision has driven the need to identify which predictive factors influence the progression to referable diabetic retinopathy (RDR) amongst all those diagnosed with diabetes. The risk of a person with type 2 diabetes (T2D) progressing to referable diabetic retinopathy (RDR) and potentially vision-threatening DR (VTDR) between two consecutive ophthalmic screening evaluations, depends on interaction between multiple predictive risk factors. Using recently generated primary care data it has been possible to identify the factors associated with disease progression to a referable status in people with T2D in Ireland.

Improved systemic disease management on a population-wide basis has provoked a re-evaluation of the need to undertake screening episodes for all people annually. Proposed personalised screening intervals may be introduced safely with the desired effect of reducing needless screening episodes, minimising costs to the national government and the individual person with diabetes.

In anticipation of the introduction of a risk-based scheduling of retinopathy screening, we evaluated the accuracy of prediction of four prediction models- three developed in England and one in Iceland, using real-world secondary data from a population of people with T2D in Ireland. In seeking to evaluate the accuracy of the risk prediction models for disease progression relevant values in our dataset were substituted into the Icelandic and Gloucester equations. This entailed taking a linear combination of the published coefficients from the Icelandic model and the corresponding variables in our dataset at the last systemic visit before the index screening. The key constraining criterion being that patients had to have at least three retinal screening episodes, two of which are needed to determine the risk group; index and index-1 (with or without use of systemic data) and a third to determine the outcome. (Figure 1)

Figure 1a - Patient A and Patient B appear as examples. RDR= Referable Diabetic Retinopathy Index

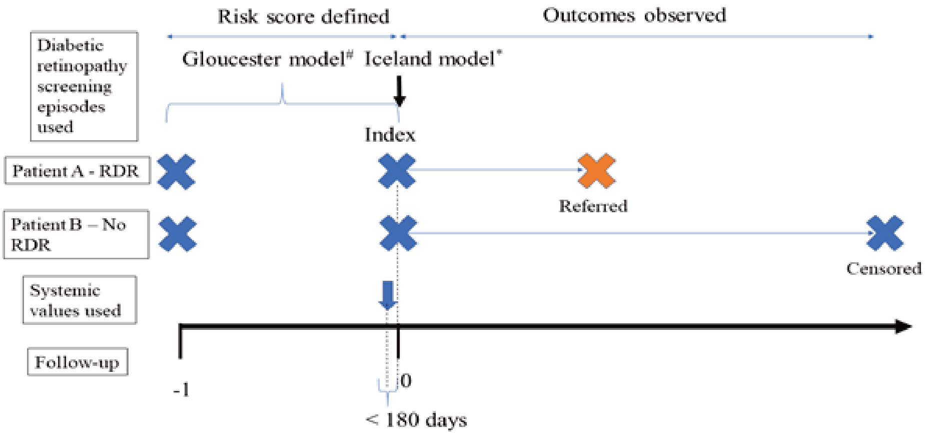
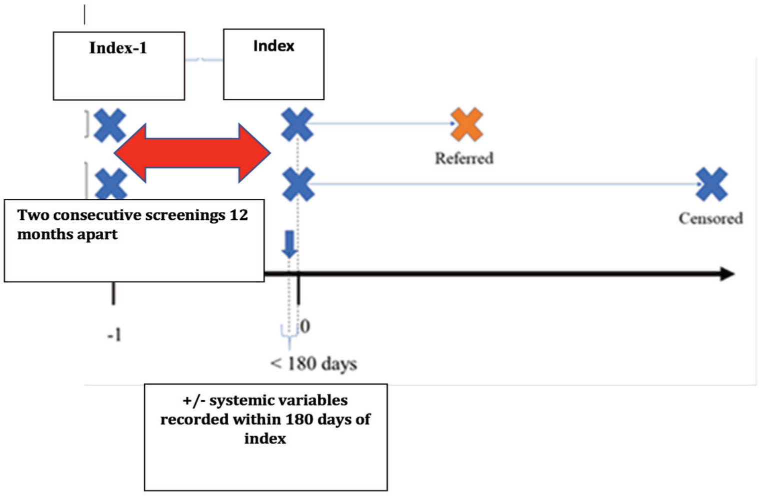


Figure 1b- Gloucester model which required two annual retinal assessments preceding the time to event analysis (index and index-1). Gloucester model of two consecutive screening episodes +/- HbA1c and total cholesterol. For those models using systemic variables; in this study, values of systemic variables were obtained at the visit immediately before the index-screening (within 180 days prior to this visit).



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Whilst for the remaining Gloucester model and the Icelandic model only the second screening was required for the prediction. We refer to the second recorded retinal screening episode as the "index" screening, after which, follow-up commenced for all models. The linear combination was exponentiated and multiplied by the baseline survival probability to give the survival probability S(t). The individual hazard at time t was approximated by risk $(\Delta t/\text{disease free at } t)=1-S(t+\Delta t)/S(t)$ where $\Delta t=1$ month. For the Gloucester models to be applied to our data, individual risk scores were calculated by taking a linear combination of the published coefficients drawn from the Gloucester group's health technology assessment published in 2015 and the corresponding variables in the Irish dataset, as recorded at the last systemic visit before the index screening.

Classification accuracy assessment involves first using a classification model to make a prediction for each example in the test dataset. The predictions are then compared to the known outcomes for those examples in the test set. Accuracy is then calculated as the proportion of examples in the test set that were predicted correctly, divided by all predictions that were made on the test set.

Icelandic and Gloucester models performed similarly in terms of discrimination at two years post index screening (Figure 1b), with an AUC of 0.72 (95% CI: 0.61, 0.81) for the Icelandic model, 0.69 (95% CI: 0.61, 0.77) for the Gloucester model that derives its risk score solely on two consecutive screening episodes; 0.74 (95% CI: 0.64, 0.85) for the Gloucester model that includes two screening episodes outcomes but also, HbA1c and total cholesterol; and 0.76 (0.65, 0.85) for the model that includes retinopathy grading results from one screening episode, HbA1c, total cholesterol and duration of diabetes. The cohort was followed for a median of 3 years (range 0.4-6.4 years).

Using data from a longitudinal cohort of people with Type 2 diabetes established in Ireland we found the risk prediction models tested, developed in Iceland and Gloucester, had an acceptable performance, with an AUC of ~ 0.70 or above, indicating there would be a >70% probability that a randomly selected subject from the screening cohort who developed RDR would have been allocated to the higher risk score category and as a result their screening interval would have been annual or less.

PRESENTED

As a poster presentation at the European Association Study Diabetes Eye Complications Subgroup 2021 in Odense, Denmark from October 28th to 30th, 2021.

SOURCE

British Journal of Ophthalmology 2022;106:1051-1056.
http://doi.org/10.1136/bjophthalmol-2020-318570

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Pilot Study of Virtual Physiotherapy Pulmonary Rehabilitation for Paediatric Patients with Chronic Respiratory Disease

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INTRODUCTION

Paediatric patients with Primary Ciliary Dyskinesia, tracheomalacia and other chronic respiratory disease have limited access to physiotherapy services in the HSE Mid-West catchment area as access to non-Cystic Fibrosis respiratory physiotherapy services in Limerick remain very limited or absent.[1] These patients have been on long-term waiting lists for access to physiotherapy services. This study provided access to a physiotherapy-led virtual exercise intervention for this population using the Attend Anywhere® platform.

OBJECTIVE

The aim of this study was to investigate the effect of a 5 week physiotherapy-led virtual pulmonary rehabilitation intervention for paediatric patients with chronic respiratory disease.

METHODOLOGY

A total of 6 paediatric patients with chronic respiratory disease who were on a long-term waiting list to receive physiotherapy services were invited to participate in this study. Three participants were recruited for this study. Participants and their parents were supplied with a detailed information leaflet outlining the virtual exercise intervention prior to participation in this study. All participants and their parents provided written informed consent to participate in this study.

Virtual exercise sessions were delivered via Attend Anywhere® with age appropriate exercise intervention including aerobic and body weight resistance exercises for 30 minutes, two days per week over a 5 week period.

Pre-intervention and post-intervention outcome measures are as follows:

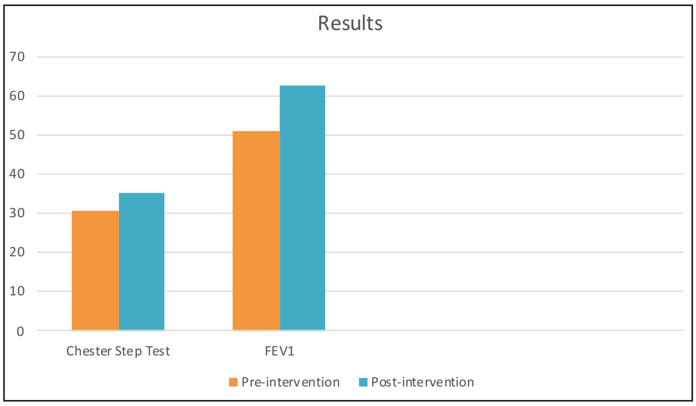
- Chester Step Test - A measure of maximal oxygen consumption (VO2 max)[2]
- Pulmonary Function Test - A measure of forced expiratory volume in the first second (FEV1)[3,4]

RESULTS

One subject failed to attend any of the virtual intervention sessions. One other subject discontinued intervention due to difficulty with commitments. One subject completed the intervention, results are outlined below:

FEV1: pre-intervention- 50.9%, 0.58L (predicted 1.15L, lower end normal 0.91L)
FEV1: post-intervention- 62.6%, 0.79L (predicted 1.26L, lower end normal 0.99L)
Chester Step Test: pre-intervention VO2 max- 30.74 ml/kg/min
Chester Step Test: post-intervention VO2 max- 35.33 ml/kg/min
See Table 1.

Table 1 - Results



CONCLUSION

A virtual pulmonary exercise intervention for a paediatric patient with a chronic respiratory disease resulted in an improvement in FEV1 (11.7%) and an improvement in maximal oxygen consumption (VO2 max increased by 4.59 ml/kg/min).

REFERENCES

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Capturing the Conversation - Staff Perspectives on the Transition from Campus Based Residential Care to Community Living for Adults with Intellectual Disability

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Disability Services, Health Service Executive, North West, Sligo

INTRODUCTION

Supporting individuals with intellectual disability to live in community settings and to live a life of their choosing is central to the ethos of service delivery in HSE Sligo, Leitrim and West Cavan. To deliver upon this, services have had to move from the more traditional or insular model of campus based congregated living to a model that shows an acceptance of the rights of persons with intellectual disability to live an 'ordinary life in an ordinary place'.

The 2011 national policy 'Time to Move on from Congregated Settings'[1] championed community living for persons with intellectual disabilities and set targets for the transition and closure of such congregated settings (a process known as decongregation). National and international literature indicates that the move to community living has been associated with improved quality of life for persons with intellectual disability, affording individuals greater autonomy and choice in their lives.[2,3]

OBJECTIVE

The current study aimed to evaluate learning from the decongregation process at a local level, seeking to capture the experience and ascertain if the findings at local level were in keeping with the wider research evidence. The following report details outcomes from the initial phase of data collection, examining staff perspectives on decongregation. Subsequent phases related to service user and family perspectives are ongoing and will be reported on completion.

METHODOLOGY

A semi-structured interview was completed with 14 staff members working within 13 community homes in Sligo. The 48 residents within these homes had previously resided in congregated settings and had transitioned to their homes in the community within the previous three years. All staff interviewed had experience of working with the service users in both congregated and community settings. The interview asked staff for their perspective on the successes, barriers and challenges to the decongregation process. All interviews were conducted by the lead author and transcribed and analysed using qualitative content analysis to identify broad themes.

RESULTS

In line with national and international findings, staff noted that decongregation has generally been experienced positively with improvements in accommodation, staffing and resources within homes in the community identified. This has led to increased choice for service users and the provision of more individualised services. Staff noted positive impacts on the emotional well-being, physical health and participation of service users. While many staff indicated they had been anxious about the move, they reported their anxieties had been unfounded and, in general, service users settled into their new homes quickly and easily. The role of in-service planning, service user and family involvement was noted as being important. Positive staff attitudes and a team working culture were also central to the success of the community home.

Staff roles within community homes were more varied with staff becoming involved in cooking, cleaning and transport duties, previously the remit of other staff in congregated settings. Staff also noted issues of adapting to accessing medical, social and recreational services within their community.

Reported barriers to community living included access difficulties related to motorised wheelchairs, the impact of the Covid-19 pandemic on opportunities and the availability of staff to drive the house transport. Individual staff attitudes and comfort levels regarding risk and safety were also noted as potential barriers. While some staff reported a willingness to try new activities and adopt a positive risk-taking approach, others adopted a risk adverse stance that was perceived to limit the scope of community participation. Staff felt well supported by management and they could access a range of health and social care professionals. However, due to availability constraints, the use of the multidisciplinary team (MDT) was often problem focused or within narrow parameters related to safeguarding and restricted practices.

In conclusion, the study showed that while decongregation was a largely positive experience, there is a need to strengthen community living through supporting staff teams in decision-making and increasing their confidence in community access. Developing staff cultures that are firmly based in human rights approaches will ensure quality of service provision in the future. The multidisciplinary team will be integral to this work. The additional service user and family phases of this evaluation will provide further insight into the decongregation process at a wider systemic level.

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REFERENCES

Available on request.

PRESENTED

- To Community Healthcare Organisation Governance Meeting via Teleconference on April 5th, 2020.
- To Directors of Nursing and Persons in Charge Meeting via Teleconference on March 30th, 2022.
- In person presentation to Head of Disability Services at Cloonamahon Learning Disability Services on March 1st, 2022.

All presentations were made by Dr. Karen Lockhart, Senior Clinical Psychologist.

FUNDING

This service evaluation was made possible through the funding of the position of Senior Psychologist through the Service Reform Fund of Genio.

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"I'm his Voice and I have to be"- Maternal Experience of Transition of their Son with Intellectual Disability and Autism Spectrum Disorder into Adulthood

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ABSTRACT

This study explored and described the lived experience of Irish mothers of sons with Intellectual Disability (ID) and Autism Spectrum Disorder (ASD) regarding the transition from child to adult services. It is accepted that this can be a difficult time for people with ID and ASD, and for their parents.

A key purpose of this study was to use a qualitative methodology, namely Interpretative Phenomenological Analysis (IPA), to give voice to the mothers who participated.

Six mothers of males aged 15-24 were interviewed.

Four superordinate themes emerged from the process of IPA: (1) The Central Role of the Mother in Transition; (2) Meeting his Needs; (3) When I'm not There; (4) When I'm not Here.

The emergent themes are discussed in relation to the research questions and existing literature. Recommendations are made regarding policy, clinical practice and future research. In particular, future studies should seek to include male parent/guardians of young people with ID and ASD.

PRESENTED

As an oral presentation at the Psychological Society of Ireland Annual Conference (Online) on November 11th, 2021 by Dr. Johnny Watters and Dr. Jonathan Egan.

SOURCE

The Bulletin of the Faculty for People with Intellectual Disabilities. 19(1):40-49. British Psychological Society.

http://hdl.handle.net/10147/629084

https://www.researchgate.net/publication/350819751_I'm_his_voice_and_I_have_to_be_Maternal_experience_of_transition_of_their_son_with_ID_and_ASD_into_adulthood_Item_Type_Article?_sg%5B1%5D=jlsDRWr0XRrmDxb2Qi-URh5Tdte5yiDhTJWUaOGOSUdY3qr102InUCde9cVlVMuARLErW6i9ng

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“My Role as a Parent, to me, it has Narrowed” - The Impact of Early Inflammatory Arthritis on Parenting Roles - A Qualitative Study

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ABSTRACT

The purpose of this study was to explore the impact of early inflammatory arthritis on participation in parenting roles.

Twenty-four individuals (20 female) aged between 32 and 62 years with early inflammatory arthritis (<2 years duration) and who were parents of dependent children (≤21 years) were interviewed. A qualitative description study design was used, and thematic analysis methodologies were employed in the data analysis.

Parenting roles were significantly impacted in early disease and extensive parenting restrictions were identified regardless of age and gender. Physical symptoms hampered “everyday mammy activities.” Parent-child interactions were altered by the emotional impact of early arthritis including low mood and irritability. Participants emphasised remorse at the negative impact of their arthritis on their children’s childhood. Parent-role identity and parents’ perception of how they were viewed by their children were negatively impacted by early disease with considerable self-imposed pressure to shield children from the consequences of arthritis. A forced ‘role switch’ requiring relinquishing of some parenting tasks was identified as an unwanted burden associated with inflammatory arthritis.

Inflammatory arthritis has a negative impact on parenting which is present from disease onset. Understanding factors which influence parenting with arthritis is important to identify appropriate healthcare interventions.

PRESENTED

- As an oral presentation at the Irish Rheumatology Health Professional Society Conference (Online) on September 17th, 2021 by Dr. Yvonne Codd.
- As an oral presentation at the Lancet Summit: ‘Sex and Gender in Rheumatology’ (Online) on September 22nd, 2022 by Dr. Yvonne Codd.

SOURCE

- Disability and Rehabilitation Journal. January 2022.
  doi/10.1080/09638288.2022.2025928
- Conference proceedings were published in The Lancet Rheumatology Journal. 4 (Suppl 1):57.
  https://doi.org/10.1016/S2665-9913(22)00286-7

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Nurses’ Perspectives in a Care of the Elderly Ward to a New Initiative “Lets Get Up, Get Dressed, Get Moving”

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INTRODUCTION

The population of the Republic of Ireland who are aged 65+ is expected to double to 1.56 million by 2051.[1] Older adults often present with a diverse range of health needs that require hospitalisation which can cause increased pressure on health systems.[2] Implications of ageing and prolonged hospitalisation may result in loss of muscle mass and strength.[3] Increased risk of falls, loss of mobility and functional decline have also been associated with deconditioning.[4] Previous research highlighted that 35% of patients over 70 years experienced functional decline whilst in hospital compared to their baseline pre-admission.[5] Reforms are required to address this issue. One such reform is the implementation of mobility programmes, e.g. “End PJ Paralysis”, and “Sit up, Get Dressed, Get Moving.”

METHODOLOGY

The aim of the current research was to ascertain nurses’ perspectives of the new “Let’s Get Up, Get Dressed, Get Moving” initiative. Three virtual focus groups were facilitated with a total of twenty three (n=23) nurses, advanced nurse practitioners and nursing managers. All participants worked in a care of the elderly ward and had experience of the initiative. Ethical approval for this study was granted by both the REC in LYIT and the HSE. Thematic analysis guided by Braun and Clarke’s (2006) model guided data analysis.

RESULTS

Strengths and limitations of this initiative

Most participants felt that the initiative was pivotal in not only reducing functional decline by encouraging patients to become mobile and therefore maintain their level of mobility from admission; it was also crucial in reducing vulnerability. It was noted that wearing pyjamas is a very private experience for some people and can leave patients feeling exposed. Participants also felt that the initiative promotes mobility by addressing underlying fears of falling and works to increase confidence after a fall.

> *“It’s amazing to see the progress in the patient’s progress especially if you have been off for a few days, you can really see the improvement.”*
>
> *“I think it’s great for people who have had a fall as I feel the physio really does try to regain their confidence mobility-wise.”*

Most felt that the initiative would benefit from increased staffing. Considering the demands of the acute setting, when extra staff are working, there is more time to give additional attention to patients. Also, staff on evening shifts and night duty found it difficult when undressing the patient as there were less staff and less time to perform these tasks. Access to clothing was also noted. Staff felt that some families may find it difficult to have laundry washed regularly.

> *“When there are extra staff on you can see the difference.”*
>
> *“Some patients don’t have families nearby and having their laundry done can be an issue.”*

Change in the functional capacity and morale

Staff felt that the initiative was positive in terms of promoting functional ability and orientating patients to the time of day, particularly dementia patients. Most participants mentioned that they could see an improvement in the mood and self-esteem of their patients.

> *“It orientates the dementia patient to the time of day. The feeling of day clothes is completely different to the feeling of night clothes for the patients.”*

Implications on patients’ discharge

Staff noted that patients did not generally tend to functionally decline during this period. It was also noted that when the patient was mobilising well, they were able to go back to their own home, instead of waiting on a community hospital bed.

> *“This initiative is a method of rehabilitation, their length of stay decreases, and it encourages the patient to get back to their baseline.”*

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CONCLUSION

Preventing deconditioning and promoting mobility are factors in aiding patient autonomy. The risks of deconditioning during hospital admission have been well documented. Deconditioning has been recognised as a significant problem in the acute healthcare setting. The "Let's Get Up, Get Dressed, Get Moving" initiative is a simple, and beneficial approach aimed at reducing these risks. While the medical benefits have long been understood, the actual execution of these initiatives can be taxing. Therefore, it was important to evaluate the nurses' perspectives as they are frontline workers responsible for direct provision of caring for older patients.

The research findings indicate lack of time and staff shortages as limitations, however, there are many positives associated with the initiative that far outweighed the issues raised in the focus groups. Benefits included promoting the functional abilities of the patient, improvements in discharge, as well as enhanced patient mood and increased motivation.

REFERENCES

Available on request.

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An Investigation of Preschool Language Delay and Reading Skill at Age Nine Years in an Irish Childhood Cohort

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INTRODUCTION

Language delay is associated with increased risk of reading difficulties. However, the relationship between the type of language delay and reading difficulties remains unclear and has not been studied in an Irish population to date.

OBJECTIVE

The aim of this study was to investigate the relationship between language delay and reading competency in a cohort of children aged 3-9 years living in Ireland.

METHODOLOGY

This study included 6,933 participants from the longitudinal ‘Growing Up in Ireland’ infant cohort. Language ability was measured at ages 3 and 5 years. Participants were categorised according to a profile of language development. Reading ability for each group was examined at age 9 years. Multivariable logistic regression explored the relationship between preschool language delay and reading competency at age 9 years, controlling for confounders.

RESULTS

Four patterns of language development were identified: 93.2% had typical language development, 1.6% had a persisting language delay, 0.9% had a late onset delay, and 4.3% had a resolving delay. Language delay in the preschool years was significantly associated with increased risk of reading delay at age 9 years. Those with a persisting delay were most at risk of reading delay compared to those with typical language development (AOR:8.73; 94% CI:4.35-17.50; p<0.001).

CONCLUSION

Language delay in the preschool years was associated with increased risk of reading difficulties at age 9 years. Early identification and appropriate management of children with preschool language delay has important implications for literacy and learning outcomes.

PRESENTED

- As an oral presentation at the ‘Growing Up in Ireland’ (GUI) 12th Annual Research Conference (Online) on October 22nd, 2020 by Fiona Craven.
- As a poster presentation at the Structured Population and Health services Research Education (SPHeRE) Network 7th Annual Conference (Online) on February 23rd 2021, by Fiona Craven.

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First-Dose AstraZeneca Covid-19 Vaccination Adverse Effects in Medical Students - A Cross-Sectional Study

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INTRODUCTION

The Oxford, AstraZeneca ChAdOx1 Covid-19 vaccine (AZD1222) is a replication-defective chimpanzee adenovirus-vectored vaccine expressing the full length SARS-CoV-2 glycoprotein gene.[1] There were many concerns surrounding the safety and efficacy of the Oxford, AstraZeneca Covid-19 vaccine in the general population.

OBJECTIVE

The aim of this study is to investigate the prevalence and severity of common adverse effects experienced following the first dose of the Oxford, AstraZeneca Covid-19 vaccine in medical students and the resulting degree of functional impairment.

METHODOLOGY

This is a cross-sectional study on medical students with convenience sampling using an internet-based survey platform where the side effect profiles experienced during the period immediately after the first vaccination were anonymously collected from medical students.

RESULTS

The prevalence and subjective severity of the following side effects (in order of decreasing prevalence) were reported: fatigue, injection site discomfort, muscle or joint pain, headache, sweating, sleepiness, fever, reduced appetite, dizziness, insomnia, nausea, lymphadenopathy, vomiting, diarrhoea, paraesthesia, rash, facial swelling, and anaphylaxis.

Of all the participants, 97.7% (86/88) experienced at least one side effect. Of those participants who experienced side effects, 89.5% (77/86) had their symptoms resolved within 48 hours. Following the single dose, 87.5% (77/88) of the participants had some degree of functional impairment and 60.2% (53/88) had to cancel or reschedule plans because of the side effects. The side effects were reported to be more severe than expected by 75% (66/88) of the participants.

Table 1- Impact on Social Functioning and Duration of Symptoms following First Dose of AstraZeneca Vaccination

Impact on participants' ability to engage in work, school or other commitments	**Percentage who responded**	**Number who responded**
No effect	12.5%	11
Mildly Impaired	21.6%	19
Moderately Impaired	40.9%	36
Severely Impaired	25%	22
Impact on previously made plans		
Participants had to cancel/reschedule plans due to side effects	60.2%	53
Participants did not have to cancel/reschedule plans due to side effects	39.8%	35
Duration of symptoms		
< 1 hours	1.1%	1
1-6 hours	3.4%	3
6-12 hours	13.6%	12
12-24 hours	35.2%	31
24-48 hours	34.1%	30
> 48 hours	10.2%	11

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CONCLUSIONS

Greater transparency regarding the frequency and severity of common side effects following the first dose of the Oxford, AstraZeneca Covid-19 vaccine should be encouraged to allow informed planning and thus prevent social and occupational disruption. Because 75% of participants responded that the side effects were more severe than expected, hesitancy and distrust in further vaccinations may occur. A public health threat is vaccine hesitancy, which is a delay in acceptance or refusal of vaccines despite the availability of vaccination services.[2] Vaccine hesitancy is multifactorial and revolves around fear of adverse events and uncertainty in whether the benefits of vaccination outweigh the risks.[3] Further studies are required to determine how vaccine side effect severities influence future vaccine rates.

Data Availability Statement

The data used to support the findings of this study are available from the author upon request.

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of Interest Statement

The authors declare that there are no financial or other conflicts of interest. The views presented are those of the authors only. No funding was obtained for the completion of the study.

Ethical Approval Statement

Ethical approval to perform this study was sought from and approved by the Mayo University Hospital Research Ethics Committee.

Patient Consent Statement

All participants were required to provide informed consent in order to take part in this study. Prior to being given access to the questionnaire, all participants declared that (a) they understood the aim of the study and (b) that the data obtained would be used anonymously in research, (c) that they volunteered to take part in the study, and (d) that they were free to withdraw from the study at any time.

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Grunnér, M.,[1]
Sheehan, O.[2]

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INTRODUCTION

The Covid-19 pandemic brought disruption on a global scale. Internationally, government enforced restrictions such as travel bans, quarantining measures, the closure of non-essential retail services, work from home initiatives and social distancing measures have changed human behaviour as we know it. In Ireland, lockdown restrictions were amongst the most restrictive and enduring in the world. The cumulative impact of lockdown restrictions is slowly becoming apparent as well as their effects on both mental and physical health. To date, much of the emerging research pertaining to the impact of lockdown has focused on older adults.[1] Such research is particularly important for the planning and delivery of older persons' health and social services now and in the future.

What is less clear however, is the impact of lockdown restrictions on the 'young-old', the future users of older persons' services in Ireland.

OBJECTIVE

This study aimed to explore the impact of the Covid-19 pandemic on the physical, emotional and social well-being of adults aged 60-70 years old, as well as exercise behaviours and healthcare utilisation during this time. As we look forward to life after the pandemic, the study also aimed to gain insight into the impact of vaccination on health-related behaviours.

METHODOLOGY

Convenience sampling was employed, via a vaccination clinic. Attendees aged 60-70 years completed a self-reported questionnaire which covered three broad themes: 1) physical and social well-being, 2) behaviours towards exercise and 3) community participation pre and post-vaccination. Participants were also screened for frailty, sarcopenia and loneliness using the Prisma-7, Sarc-F and UCLA loneliness scale. All participants were offered a 'Let's Get Moving Again' booklet after survey completion. Study data was anonymised and subsequently analysed with specific emphasis on the identification of themes pertaining to the impact of lockdown restrictions and life after vaccination. Descriptive statistics were used to deduce meaning from the data.

RESULTS

Seventy five surveys were included for analysis.

Participant Demographics

Fifty four participants identified as female and 21 identified as male. The mean age was 63 years. Ten per cent reported to have attended a hospital and 5% reported a fall in the year previous. Polypharmacy was detected in 11% of cases. Most participants lived with a spouse or family (78%) although a small number (19%) lived alone. Over a quarter (28%) of participants had been cocooning during the Covid-19 pandemic.

Physical and Social Well-Being

Although the majority of respondents (84%) reported no deterioration in overall health status, over a quarter reported worsened energy levels (27%), sleep (25%) and stress (28%).

Healthcare Useage

A staggering 36% of participants avoided attending their GP during the pandemic, a further 13% avoiding seeking medical attention in Accident and Emergency Departments and 11% reported cancelling a routine medical appointment.

Behaviours Towards Exercise

Most participants were aware of the benefits of exercise in lockdown (85%), with many citing media as a primary source of information (59%). Walking appeared to be the preferred activity with 77% of participants walking outside "3 or more times weekly." Some participated in online exercise classes (15%), however most did not (85%). When asked why not, nearly half (46%) reported they were "not interested" and one quarter (24%) were unaware of opportunities for online exercise.

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Community Participation Post-Vaccination

Participants demonstrated a high desire for community reintegration post-vaccination.

Frailty, Sarcopenia and Loneliness

There was a low prevalence of frailty (9%) sarcopenia (6%). However, almost one third of participants reported loneliness (29%). Sarcopenia was positively associated with loneliness (p=0.0005).

Discussion

It would appear that the Covid-19 pandemic has affected Irelands 'young-old' in a unique way. It is interesting to note that whilst over a quarter of participants reported worsened sleep, energy and stress levels, most reported no deterioration in overall health status. There are two probable scenarios that explain these findings - either the decrements perceived in sleep, energy and stress levels were not profound enough to impact total health or there is an apparent disconnect between what is perceived as physical health, mental health and total health. Considering the dominance of the biomedical lens throughout the life span of those aged 60-70 years, one would have to presume the latter. Another interesting point to note is that respondents to this study demonstrated little interest in virtual exercise classes, but a high desire for community reintegration post-vaccination. It is therefore reasonable to assume that opportunities to increase daily activity levels through socialisation are likely to be key to the physical and social recovery of this age group in the post-pandemic era.

CONCLUSION

This study has thrown light on the impact of the Covid-19 pandemic on Ireland's 'young-old'. Results should serve to assist in the prediction of health and social care needs for this age group. As Ireland opens up again, it is imperative that public health campaigns which encourage safe physical activity are sustained. The use of media to deliver this message is key.

REFERENCES

Available on request.

PRESENTED

- As an oral presentation at the Irish Society of Physiotherapists Annual Conference (Online) on October 14th, 2021 by Claire Jones and Ruth Madigan.
- As a poster presentation at the Irish Gerontological Society Annual Scientific Meeting (Online) on November 18th, 2021 by Michelle Gyenes.

FUNDING

No funding was sought for the completion of this study.

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To Examine the Knowledge, Attitudes, Participation and Experiences of Lesbian and Bisexual Women, Trans Men, Non-Binary and Intersex People with a Cervix in Cervical Screening in Ireland

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CervicalCheck, National Screening Service
LINC Cork (Lesbians in Cork)[3]
Community Consultants[4]

INTRODUCTION

CervicalCheck, the Irish national cervical screening programme, has been in operation since the September 1st, 2008 and offers free cervical screening to 1.3 million people living in Ireland. The aim of the programme is to reduce the number of people who develop cervical cancer by providing population-based human papillomavirus (HPV) screening to the eligible population. Although overall population coverage has ranged from 75-80% since the programme began, the programme is committed to improving equitable access across marginalised groups. In 2021, CervicalCheck undertook a study to examine the knowledge, attitudes, participation and experiences of lesbian and bisexual women, trans men, non-binary and intersex people with a cervix in cervical screening in Ireland.

METHODOLOGY

A comprehensive literature review was conducted. An online survey was piloted and developed, paying particular attention to language and acceptability. Approximately 418 people who identify as LGBT+ took part in the survey, which was carried out using an online platform between October 2020 and March 2021. This was followed up with three focus groups held in Cork, Dublin and Galway (27 participants) and four stakeholder interviews. A Steering Group was set up to guide this study and included representatives from the NSS, LINC, LGBT+ community and CervicalCheck, in addition to the research partner.

RESULTS

In terms of identity, 59% identified as lesbian, 27% as bisexual and the remaining 14% identified as non-binary, trans, pansexual, queer or other. The majority of people who responded to the survey were aged 25-35 (48%). The study found that the LGBT+ community face a number of barriers to participating in cervical screening, including:

- heteronormative assumptions being made by healthcare professionals
- being asked heterosexual questions
- fear of the test procedure
- embarrassment
- bad experience of cervical screening in the past

Over 62% of respondents do not state their gender/sexual identity when engaging with their healthcare professional in cervical screening. While many in our study reported positive experiences of cervical screening, only 66.5% said they attend screening regularly, which compares to 80% uptake by the general population. Of more concern is the following: over 10% had their test more than five years ago, over 10% were never invited and over 6% were invited but did not attend.

The research also explored the factors that would encourage respondents to attend screening. These included; LGBT+ friendly practices, being able to book appointments online, being sent reminders by text, specialist LGBT+ clinics, and more flexible GP surgery opening hours.

An LGBT+ friendly service - is one with inclusive posters, images of LGBT+ people, and the use of more inclusive language. “You will feel welcome, safe and free to be out if you see yourself in these settings,” one stakeholder said. It would also include staff training on good practice in providing services to the LGBT+ community; policies on inclusion and equality; and identity captured on GP databases and sign-up forms.

Positively, over 85% of those surveyed will definitely or probably attend their next cervical screening test, and over 90% would recommend screening to a friend/relative, all of which is very encouraging. When asked about self-sampling, a large portion of people (47%) would be interested in this service, should it became available in Ireland and another group of respondents would consider it.

CONCLUSIONS

The LGBT+ community have expressed a need to feel welcomed, safe and free to be out in clinical settings. The clinical environment should be inclusive. Sample takers need practical tools and resources to be inclusive of LGBT+ people. Gender neutral language and a clearer understanding of the barriers to screening will improve participation and communication with the community.

One LINC member commented “a positive experience with your sample taker can help you focus on taking care of your body. And if you can see yourself represented in the information being given out about female health, you’ll be more likely to consider it’s for you."

The LGBT+ Cervical Screening Study can be found at: https://www.screeningservice.ie/publications/LGBT+Cervical-Screening-Study-Report.pdf

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The Study to Investigate Covid-19 Infection in People Living in Ireland (SCOPI) - A Seroprevalence Study, June to July 2020

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Colgan, A.M.,[1]
Thornton, L.,[1]
Connell, J.,[2]
Roux, T.,[1]
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Methodology Division, Central Statistics Office, Cork[3]
Department of Clinical Immunology, Beaumont Hospital and Royal College of Surgeons in Ireland, Dublin[4]
Irish College of General Practitioners, Dublin[5]
Department of Public Health, Health Service Executive South, Cork[6]
Office of the Chief Medical Officer, Department of Health, Dublin[7]
Office of the Chief Operations Officer, Health Service Executive, Dublin[8]

ABSTRACT

Robust data on SARS-CoV-2 population seroprevalence supplement surveillance data in providing evidence for public health action.

The project aimed to conduct a SARS-CoV-2 population-based seroprevalence survey in Ireland.

Using a cross-sectional study design, we selected population samples from individuals aged between 12 and 69 years in counties Dublin and Sligo using the Health Service Executive Primary Care Reimbursement Service database as a sampling frame. Samples were selected with probability proportional to the general population age–sex distribution, and by simple random sampling within age–sex strata. Antibodies to SARS-CoV-2 were detected using the Abbott Architect SARS-CoV-2 IgG Assay and confirmed using the Wantai Assay. We estimated the population SARS-CoV-2 seroprevalence weighted for age, sex and geographic area.

Participation rates were 30% (913/3,043) and 44% (820/1,863) in Dublin and Sligo. Thirty-three specimens had detectable SARS-CoV-2 antibodies (1.9%). We estimated weighted seroprevalences of 3.12% (95% confidence interval (CI): 2.05-4.53) and 0.58% (95% CI: 0.18-1.38) for Dublin and Sligo, and 1.69% (95% CI: 1.13-2.41) nationally. This equates to an estimated 59,482 (95% CI: 39,772-85,176) people aged 12–69 years nationally having had infection with SARS-CoV-2, 3.0 (95% CI: 2.0-4.3) times higher than confirmed notifications. Ten participants reported a previous laboratory-confirmed SARS-CoV-2 infection; eight of these were antibody-positive. Twenty-five antibody-positive participants had not reported previous laboratory-confirmed infection.

The majority of people in Ireland are unlikely to have been infected with SARS-CoV-2 by June-July 2020. Non-pharmaceutical public health measures remained key pending widespread availability of vaccination, and effective treatments.

PRESENTED

As an oral presentation

- Online at the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) on November 26th, 2020 by Dr. Patricia Garvey
- At the Royal College of Physicians (RCPI) Faculty of Public Health Medicine Winter Scientific Meeting (Online) on December 8th, 2020 by Dr. Laura Heavey.

FUNDING

The study was funded by the HSE. It was designed and co-ordinated by the HSE Health Protection Surveillance Centre (HPSC). All laboratory testing and interpretation was carried out by UCD National Virus Reference Laboratory (NVRL). The work was overseen and supported by a steering group.

SOURCE

Euro Surveill. 2021 Dec; 26(48):2001741.
https://doi.org/10.2807/1560-7917.ES.2021.26.48.2001741

Preliminary report of the results of the Study to Investigate COVID-19 Infection in People Living in Ireland (SCOPI): A national seroprevalence study, June-July 2020
https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/scopi/

Novel Method of Engaging with Vulnerable, Settled Communities in the Midlands during Covid-19

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ABSTRACT

The Midlands of Ireland have seen a disproportionally high incidence of Covid-19 when compared to the rest of Ireland.[1] In early March 2021, Offaly and Longford had the highest and second highest incidence rates nationally.[2] Furthermore, between December 10th, 2020 and March 18th, 2021, 44 outbreaks (with an associated 527 cases) within Traveller communities in the Midlands were notified to the Department of Public Health Medicine.[3] Irish Travellers in particular have been burdened significantly by such outbreaks, having a higher risk of both infection and severe disease relative to the general population.[4]

A novel method of engaging with these communities, to facilitate testing and to allow for community health promotion, was proposed by the Midlands Department of Public Health, in collaboration with the Traveller Health Unit and Safetynet Primary Care, a medical charity with funding from HSE Social Inclusion. The process consisted of a two-step plan: an initial pop-up Covid-19 testing programme in March/April 2021 followed by several pop-up vaccination clinics across multiple sites in the Midlands in June/July 2021.

The project's initial aim was to offer testing to populations living in residential areas with high Covid-19 transmission and a high proportion of vulnerable groups, especially Irish Travellers. This would provide an opportunity for health promotion and to provide supplies to assist with health protection in households. A longer-term aim was to pave the way for strong vaccine demand in these vulnerable populations, by growing trust in the service and the partnership. A pop-up testing site was used to facilitate testing at the chosen locations. These testing sites, held in open and visible outdoor spaces, were supplied/staffed by Safetynet. Anyone who attended was offered a free Covid-19 PCR test with an additional rapid antigen test if symptomatic. Public Health doctors engaged with all attendees to answer questions and provide advice, with emphasis on methods to prevent Covid-19 transmission within Traveller communities as outlined through the relevant HPSC guidance[5]. All those attending were offered an information video from the HSE on the vaccine, both for the general public[6,7] and the Traveller community.[8] Finally, individuals received a hygiene pack, with face masks, wipes and hand sanitiser. Targeted advertisement, using door to door visits and flyers, was conducted at residential sites the day prior, with special emphasis on reaching vulnerable populations.

Following the success of the testing in March/April, a follow-up meeting on Covid-19 vaccines was hosted in May 2021 by the Midlands Department of Public Health and the HSE Midlands Traveller Health Unit (MTHU). Information gained from the pop-up testing programme was discussed and the outline of the pop-up vaccination programme agreed upon. Marketed in the target population in a similar way to our testing clinics, the vaccination clinic sites were sourced by the MTHU free of charge from a wide range of community premises that were easily accessed and trusted by the vulnerable groups. The Department of Public Health co-led the exercise with the MTHU and provided clinical support and governance. The MTHU also provided administrative and logistical support, and liaised closely with the Traveller Primary Health Care Projects to generate demand and to co-ordinate bookings. Safetynet supported these efforts by providing additional vaccinators and administrative staff. The clinics would provide a first dose of the Pfizer Covid-19 vaccine, register this on the national CoVax digital platform, and then let the system generate appointments for second doses in the local Community Vaccination Centres.

Between March 3rd, 2021 and April 30th, 2021 six separate sites were chosen based on local incidence rates and presence of a settled, vulnerable population. A table summarising results is presented below (Table 1).

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Table 1 - Summary of Testing Data from Six Chosen Sites within the Midlands

	Ardnacassa Estate, Co. Longford	**Birr, Co. Offaly**	**Grange, Mullingar, Co. Westmeath**	**Edenderry, Co. Offaly**	**Arden View, Tullamore, Co. Offaly**	**Portlaoise, Co. Laois**
Date:	16/03/2021	26/03/2021	02/04/2021	09/04/2021	23/04/2021	30/04/2021
Residents Tested:	50	238	63	147	43	35
Number of Positive Cases:	1	1	0	0	0	0
Incidence Rate:	2%	0.42%	0%	0%	0%	0%
Number of Vulnerable Population Identified:	22	0	4	8	0	8
Ethnic Breakdown:	x22 White Irish Traveller x10 White Irish x9 Black African x2 White Polish x2 Other White x5 Undocumented	x229 White Irish x4 White Polish x4 Other White x1 Undocumented	x54 White Irish x4 White Irish Traveller x1 White British x4 Undocumented	x130 White Irish x8 Brazilian x3 Polish x6 Other White	x42 White Irish x1 Indian Irish	x21 White Irish x8 White Irish Traveller x4 White European x1 Brazilian x1 South African
Number of Covid-Vaccine Videos Sent:	37	40	32	72	15	25
Number of IPC Packs Distributed:	42	182	51	109	36	28
Public Health Q&A Offered (including vaccine advice)?	Yes	Yes	Yes	Yes	Yes	Yes

Between June 6th, 2021 and July 20th, 2021 thirteen clinics were hosted resulting in 890 first-dose Pfizer vaccinations being delivered to vulnerable populations. A table summarising results is presented below (Table 2).

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Table 2 - Summary of Totals Vaccinated from Pop-Up Clinics within the Midlands

Date	Clinic Site	County	Traveller	Roma	Foreign Nationals	Community Staff	Homeless	Other	Total Vaccinated
08/06/21	1. Tullamore Men's Shed	Co. Offaly	40	0	0	4	4	0	48
09/06/21	2. Tullamore Men's Shed	Co. Offaly	47	0	0	2	4	1	54
15/06/21	3. Tullamore Men's Shed	Co. Offaly	82	0	1	5	0	1	89
16/06/21	4. Longford Family Centre	Co. Longford	79	3	3	6	1	0	92
22/06/21	5. Mullingar Grange Resource Centre	Co. Westmeath	95	0	1	4	0	2	102
23/06/21	6. Athlone Job Club Community Resources	Co. Westmeath	18	0	0	0	8	4	30
30/06/21	7. Mullingar Grange Resource Centre	Co. Westmeath	57	2	1	8	1	4	73
06/07/21	8. Athlone Accommodation Centre	Co. Westmeath	20	0	66	17	1	8	112
07/07/21	9. Temple Accommodation Centre	Co. Westmeath	0	0	23	6	0	1	30
13/07/21	10. Montague Direct Provision Centre	Co. Laois	22	0	48	2	0	1	73
14/07/21	11. Tullamore Men's Shed	Co. Offaly	49	0	18	30	2	5	104
20/07/21	12. Longford Family Centre	Co. Westmeath	12	5	23	0	0	0	40
20/07/21	13. Mullingar Grange Resource Centre	Co. Westmeath	43	0	0	0	0	0	43
			529	**10**	**184**	**84**	**21**	**27**	**890**

Of the 576 tests from the six sites, only 2 Covid-19 cases (0.35% incidence rate) were identified. While the effectiveness of the process to identify positive Covid-19 cases was limited, it offered a unique opportunity for Public Health to build a relationship of trust with settled vulnerable populations. The vaccination model itself worked very well. Using paper registration forms and subsequently transferring information onto the CoVax electronic system reduced stress and ensured that there were no computer delays/errors during the clinics. The CoVax system picked up our clients and generated second dose appointments. Demand seeded more demand, with positive word of mouth from the initial clinics leading to the need for additional clinics. This was testament to the high quality, culturally appropriate and person-centred service provided.

We feel the grassroot foundation of trust established and originally documented during our testing efforts in March/April 2021 contributed significantly to the strong vaccine uptake in June/July 2021. This has ultimately allowed us to successfully provide both testing and vaccination services to populations that may otherwise not have availed of either.

REFERENCES

Available on request.

SOURCE

Irish Medical Journal. 114(10):499.

https://imj.ie/novel-method-of-engaging-with-vulnerable-settled-communities-during-covid-19/

A Community-Health Partnership Response to Mitigate the Impact of the Covid-19 Pandemic on Travellers and Roma in Ireland

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Pavee Point Traveller and Roma Centre, Dublin[3]
Offaly Traveller Movement, Tullamore, Co. Offaly[4]

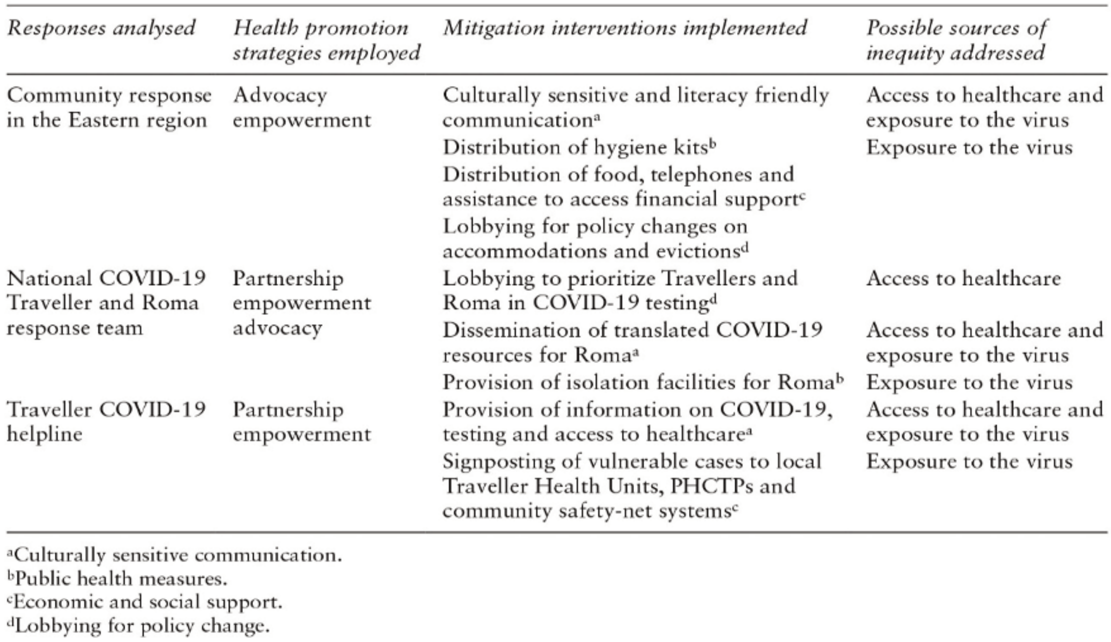
ABSTRACT

Irish Travellers and Roma are two ethnic minorities experiencing high levels of health inequities. These communities are at greater risk of developing Covid-19 and of suffering more severe symptoms due to poor living environments and higher rates of comorbidities.

This study explores the strategies adopted by community-health partnerships and NGOs to minimise the potential widening of Travellers' and Romas' health inequities during the initial response to the Covid-19 pandemic in Ireland.

A descriptive qualitative approach was employed to provide a detailed account of three different community and partnership-led responses. Data were gathered from multiple sources and through first-hand participation in the Covid-19 responses. Data were analysed using thematic analysis. This study found that the main pandemic mitigation interventions implemented were public health measures, culturally sensitive communications, lobbying for policy change and economic and social support (see Table1).

Table1- Strategies and Interventions Employed to Minimise the Widening of Traveller and Roma Health Inequities in Ireland



Responses analysed	*Health promotion strategies employed*	*Mitigation interventions implemented*	*Possible sources of inequity addressed*
Community response in the Eastern region	Advocacy empowerment	Culturally sensitive and literacy friendly communication[a]	Access to healthcare and exposure to the virus
		Distribution of hygiene kits[b]	Exposure to the virus
		Distribution of food, telephones and assistance to access financial support[c]	
		Lobbying for policy changes on accommodations and evictions[d]	
National COVID-19 Traveller and Roma response team	Partnership empowerment advocacy	Lobbying to prioritize Travellers and Roma in COVID-19 testing[d]	Access to healthcare
		Dissemination of translated COVID-19 resources for Roma[a]	Access to healthcare and exposure to the virus
		Provision of isolation facilities for Roma[b]	Exposure to the virus
Traveller COVID-19 helpline	Partnership empowerment	Provision of information on COVID-19, testing and access to healthcare[a]	Access to healthcare and exposure to the virus
		Signposting of vulnerable cases to local Traveller Health Units, PHCTPs and community safety-net systems[c]	Exposure to the virus

[a]Culturally sensitive communication.
[b]Public health measures.
[c]Economic and social support.
[d]Lobbying for policy change.

These interventions, supported by the health promotion strategies of partnership, advocacy and empowerment, have proven to be extremely important to reduce potential inequities in exposure to the virus and in access to healthcare.

The findings suggest that community-health partnerships between minority groups' organisations and healthcare professionals represent a viable approach to mitigate the disproportionate effects of a pandemic on Travellers and Roma.

PRESENTED

All presentations were given by Jacopo Villani.

- As an oral presentation to a webinar entitled 'Health Promotion Perspectives on the Covid-19 Pandemic' (Online) organised by the journal Global Health Promotion on July 22nd, 2021.
- Awarded the HSE Lenus Open Access Research Award 2021 under the category Covid-19.
- As an oral presentation at the 24th International Union for Health Promotion and Education (IUHPE) World Conference on Health Promotion (Online) in Montreal, Canada on May 17th, 2022.

SOURCE

Global Health Promotion. 2021 June;28(2):46-55. doi:10.1177/1757975921994075

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A Qualitative Study of the Perceptions of Mental Health among the Traveller Community in Ireland

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ABSTRACT

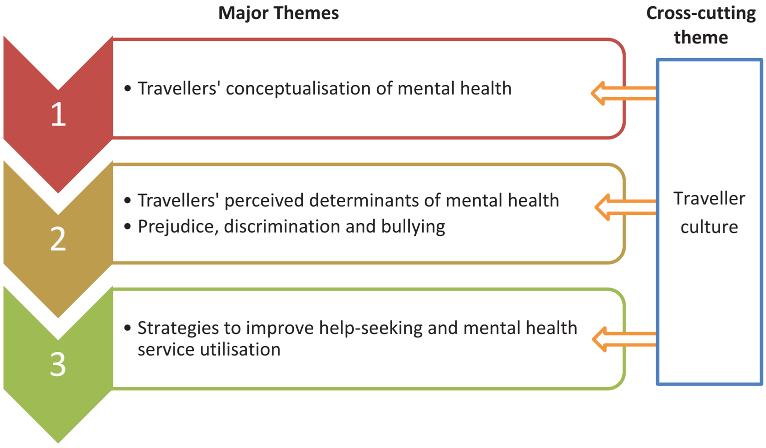
Irish Travellers are a minority ethnic group who experience a high prevalence of mental health problems and a rate of suicide six times higher compared to the general Irish population.

This study explores Travellers' perceptions of mental health and its determinants. It also identifies the most relevant factors for promoting positive mental health and well-being among this socially excluded group.

A descriptive qualitative approach was employed to explore participants' perceptions of mental health and mental health needs. Four focus groups were conducted with a total of 25 adult members of the Travelling community.

Inductive thematic analysis was undertaken to identify and interpret the main themes emerging from the participants' responses (see Figure1).

Figure 1 - Classification of themes



Travellers conceptualise mental health mostly in negative terms and showed a lack of appreciation of the concept of positive mental health. Travellers showed a strong awareness of the social determinants of mental health identifying employment, better education, suitable accommodation, a reduction of discrimination and improved trust and social cohesion as important determinants that need to be addressed to improve their mental health status. The centrality of cultural identity and social-emotional skills emerged as key factors in promoting positive mental health among Travellers.

The findings suggest that Travellers' mental health is multidimensional and requires a socio-ecological approach that addresses the wider determinants of health. Community mental health promotion initiatives should focus on reducing discrimination, enhancing social and emotional well-being and self-esteem, improvement of living conditions, reduced mental health stigma, and the promotion of Traveller culture and positive self-identity.

PRESENTED

As an oral presentation by Jacopo Villani at the:

- 11th International Union for Health Promotion and Education (IUHPE) European Conference on Health Promotion in Girona, Spain (Online) on June 15th, 2021.
- National Suicide Resource Foundation Virtual Seminar on Suicide, Self-Harm and Mental Health on October 8th, 2020.
- Global Health Exchange Conference 2019 in Dublin on September 12th, 2019.

Acknowledgements

We would like to extend our gratitude to the members of the Irish Travelling Community who participated in this study and shared their stories and ideas and to all the Traveller Community Health Workers who facilitated this study. We would also like to acknowledge the support of the Research Steering Group, and would like to thank Mary Syron, Caroline Canny, Dr. David Evans, Dr. Aileen Kitching, Kathleen Sweeney, Martin Ward and Gail Murray.

SOURCE

Health Promotion International. 2021 October;36(5):1450-1462.
https://doi.org/10.1093/heapro/daab009

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Inpatient Physiotherapy Heart Failure Service - Audit and Making Improvements

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INTRODUCTION

Heart failure is a very common condition with about 90,000 people living with heart failure in Ireland today.[1] Heart failure is one of the most common causes of hospitalisation in patients over 65 years of age.[2] Within University Hospital Limerick (UHL), there are approximately 225 inpatient admissions related to an exacerbation of heart failure each year (extrapolated from a 6 monthly review conducted between August 2021 and January 2022). Physiotherapy plays an important role in the management of heart failure.

OBJECTIVE

An audit, completed in September 2021, which evaluated current physiotherapy management of heart failure patients at ward level suggested multiple areas for improvement. The areas for improvement included; all heart failure patients receiving exercise advice and interventions on discharge, referral to Primary, Community and Continuing Care and cardiac rehab and to establish a pathway between heart failure Clinical Nurse Specialist (CNS) and physiotherapists. A quality improvement plan (outlined below) was put in place and a re-audit took place in February/March 2022.

METHODOLOGY

The objectives of the quality improvement project (QIP) included; establishing a pathway with heart failure CNS, developing a patient education booklet, modifying an existing inpatient assessment checklist and educating medical inpatient physiotherapists on the implementation of said improvements.

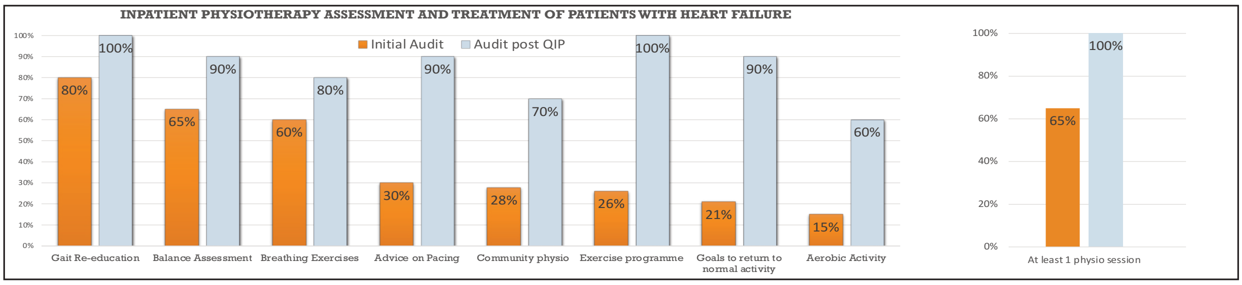
A meeting was set up with the heart failure CNS where it was established that there was no capacity to see cardiac inpatients but that the role of physiotherapy would be to notify heart failure CNS with the aim of a quicker clinical review post-discharge.

A patient-friendly heart failure education booklet was developed using resources from the Irish and American Heart Foundations. A checklist was modified to guide the management of heart failure patients modelled against the HSE National Model of Care.

An education session was held with medical staff grade physiotherapists on how to complete the heart failure checklist which was then used as the re-auditing tool. A re-audit then took place of 10 medical charts across 11 medical wards within UHL.

RESULTS

Figure 1 - Results of Initial Audit and Audit Post-Implementation of Quality Improvement Project



Results of the initial audit and re-audit can be seen above. On re-audit one patient refused a balance assessment. One patient was referred to the booklet and one patient didn't find the information helpful for breathing exercises. One patient was referred to the booklet for pacing. Three patients declined referral to community physiotherapy. One patient didn't want to discuss their goals. For aerobic activity, reasons for non-compliances included lack of available equipment and severe exacerbations making aerobic exercise unsuitable.

CONCLUSIONS

The re-audit that took place in February/March 2022 showed improvements in all aspects of inpatient physiotherapy assessment and treatment of heart failure patients following the implementation of a QIP. To continue to improve physiotherapy treatment and management of heart failure patients, it is important to provide appropriate in-service training to all incoming medical rotation staff grade physiotherapists regarding the use of the checklist to reach the HSE National Model of Care and the provision of heart failure education booklet for patients. Future plans will be to continue to provide quality care to all inpatient heart failure patients and to perform a re-audit in the future in order to maintain the best quality of care for patients.

REFERENCES

Available on request.

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Review of Enteral Feeding Practices for Adult Inpatients Post-Stroke in University Hospital Limerick

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INTRODUCTION

The National Stroke Programme (NSP) developed the Recommendations for the Management of Nutrition and Hydration in Patients with Stroke[1] to optimise nutritional interventions in stroke patients. Annual audit of implementation of the NSP guidance document should take place at a local level to inform ongoing training needs.[1]

METHODOLOGY

A retrospective review of medical charts was undertaken on all stroke patients referred to dietetics for enteral feeding between January 1st, 2021 and October 31st, 2021.

A data collection tool was designed and piloted.

Data was analysed using Microsoft Excel.

Inclusion Criteria: 16 out of a total of 19 eligible patients were included in the study. Exclusion criteria: Patients whose medical charts were unavailable.

RESULTS

A total of 16 patients were included; 3 were transfers to University Hospital Limerick (UHL) and 13 were new admissions. Fifty four per cent of new admissions did not have documentation of time of nasogastric (NG) tube insertion/chest x-ray (CXR) report.

Swallow assessments occurred within 4 hours in 89% of new admissions. The average interval between swallow screen and NG tube insertion was 29.5 hours. The mean amount of time between admission and commencing NG feeding was 40.8 hours with 56% commencing feeding within 48 hours (range 3.5-75 hours).

The average time taken from NG tube insertion to commencing feeding was 17.1 hours. Of these 17.1 hours, 6.1 were due to time taken to order chest X-ray/document results and 11 were due to delays after confirmation of NG tube position.

All patients were referred to dietetics, with 12.5% being referred within 24 hours of admission and 50% were referred within 24 hours of NG tube insertion. All patients were seen by dietetics within one working day of referral.

The average number of NG tube reinsertions was 3 and the average for those who had a percutaneous endoscopic gastrostomy (PEG) placed was 7. Of the 52 NG tube reinsertions, 14 had clear documentation of time of reinsertion/CXR report. The average number of hours feeding lost due to reinsertion was 7.2.

CONCLUSIONS

The majority of newly-admitted stroke patients (56%) achieved the NSP recommendation[1] to commence NG feeding within 48 hours in patients that are nil by mouth (NPO). The average time taken for NG feeding commencement after admission was 40.8 hours, which shows a slight improvement in recent years. In an equivalent audit in 2016 of UHL enteral feeding practices 46% commenced NG feeding within 48 hours and 53 hours was the average time taken.

However, the results of this audit show a wide variation in time taken to commence feeding with some beginning within 4 hours and others taking more than 3 days. Best practice[1] is that swallow screening assessments occur within 4 hours of admission and this was achieved in all except one of the patients, meaning the reasons for delays in commencing feeding lie elsewhere.

The largest delay in commencing NG feeding was the time taken for NG tube to be inserted after a patient was made NPO (21 hours). It then took 6 hours for chest X-ray/documentation of results in the healthcare record and it took a further 11 hours for feeding to commence. Furthermore, the average number of hours feeding lost due to delays in NG tube reinsertion was 7.2 and the average number of NG tube reinsertions was 3. The average number of reinsertions in patients who had a PEG inserted within the timeframe of this audit was 7, meaning that on average, patients missed >2 days of feeding by the time their PEG was inserted. These findings would suggest that further attention should be directed towards exploration of alternative methods of confirming NG tube positions that may reduce both time delays and cost.

It is recommended[1] that an immediate referral to a dedicated stroke dietitian be made when a stroke patient is for NG feeding. Just over 10% of the patients were referred to dietetics within 24 hours of admission and only 50% were referred within 24 hours of NG tube insertion. In two cases it took >48 hours post-NG tube insertion for a referral to be sent. As a result of delayed referral, patients remain on out of hours feeding protocols which are a stopgap measure and provide suboptimal nutrition.

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A reason for this delay in referral may be that doctors believe these patients will be automatically picked up by dietetics as they are by other allied healthcare professionals on the stroke ward. At present there is no dedicated stroke dietitian in UHL and staffing levels are significantly below the national recommendation[2] of a minimum of 0.71 Senior Whole Time Equivalent (WTE) dietitian/10 acute beds and 0.5-1 WTE per 20 non-acute/rehab beds. Blanket referrals for new stroke patients are not possible until staffing levels improve and patients' nutrition will continue to be compromised as it was in this audit.

REFERENCES

Available on request.

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‘The Right Advice, in the Right Way and at the Right Time’ - An Innovative Multidisciplinary Approach to Address Client-Identified Participation Needs in Early Inflammatory Arthritis

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ABSTRACT

Inflammatory arthritis (IA) is a complex life-long disease with negative consequences on occupational performance and significant impact on meaningful life roles. International guidelines for the clinical management of IA consistently recommend early intervention and a multidisciplinary team (MDT) approach as the optimum method to address the medical, symptom and broader life impacts, however, barriers to timely access to the MDT is a common issue in clinical practice.

Limited research has explored how clinical services support broader life impacts and participation restrictions associated with early disease as part of routine healthcare. Four rheumatology services in Ireland have recently reconfigured to provide an MDT-led early arthritis service which operates in parallel to traditional medical clinics. Staffed by nurses, occupational therapists, and physiotherapists this service provides assessment and management to clients with a new diagnosis of IA along a model of care within four to six weeks of diagnosis with mechanisms to follow the client over their first year of diagnosis. The objective of this research was to explore how a novel MDT-led early arthritis service addresses client-identified participation restrictions associated with early IA.

A qualitative description (QD) study was used to explore the perspectives of service providers and service users of this MDT-led early arthritis service. Data were gathered using one-off focus groups with service providers, and individual interviews with service users. All staff (n=15) currently working in these services participated in the focus groups. Forty-three service users with IA participated in individual interviews (males n=12: females n=31); diagnosis duration ranged from 5 to 24 months. QD principles and thematic analysis were used in data analysis. Extensive limitations in everyday activity and restriction in participation in meaningful, age-appropriate life roles in early IA were outlined by service users and service providers.

Participants described how the MDT-led model provided automatic and immediate access to services focused on identification and management of occupation-based participation restrictions early in the disease. Participants described how the model used a flexible approach that ensured ease of early access to a full MDT, prolonged support from the MDT, and a person-centred approach incorporating social prescribing and self-management principles. Service users emphasised the strength of the MDT approach of providing ‘the right advice, in the right way and at the right time’ as the most influential feature that assisted them to address participation restrictions and support positive health outcomes. This was accomplished by the service providers acting in a co-ordinated and interdisciplinary manner with a clear remit to address participation restrictions alongside the traditional symptom management approach. Findings highlight the feasibility of the MDT-led early arthritis model as an approach to address participation-based restrictions as part of routine healthcare that delivers on the rheumatology guidelines and was positively regarded by both service users and service providers.

Findings provide important insights into the role of an innovative early MDT intervention approach in addressing client-identified participation needs in early IA. This model maps onto the Irish rheumatology model of care,[1] ‘right place, right time’ approach but importantly includes a ‘right way’ approach which is identified as influential in the effective delivery of client-focused and client-centred care.

REFERENCES

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PRESENTED

- As an oral presentation at the Association of Occupational Therapists of Ireland (AOTI) Annual Conference which was held online on October 9th, 2020.
- As a poster presentation at the 21st Annual European Congress of Rheumatology (EULAR) which was held online from June 2nd to 4th, 2021.

SOURCE

Annals of the Rheumatic Diseases, EULAR – 21st Annual European Congress of Rheumatology, Virtual, June 2nd to 4th, 2021. 80,(Suppl 1),2021, 291.

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A Single Centre Cross-Sectional Qualitative Analysis of Interphysician Clinical Handover in the Emergency Department

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INTRODUCTION

Clinical handover is a process whereby both patient information and clinical accountability are transferred from one healthcare provider to another.[1] It occurs multiple times per day across the Irish health service, including between prehospital and hospital staff, between staff within a department at shift changes, between hospital departments (such as the emergency department and the ward, or the operating theatre and the intensive care unit), between hospitals and primary care facilities, within community settings, and between staff and patients. Each handover has associated risk, with the World Health Organisation stating that poorly performed handovers 'can cause serious breakdown in the continuity of care, inappropriate treatment, and potential harm to the patient.'[2]

Handovers in the emergency department (ED) setting occur more frequently than in other hospital areas and are more associated with risk due to the specific nature of the environment, characterised by high patient volume, complexity and acuity, unpredictable workload, interruptions, and staffing shortages.[3,4] Satisfaction with handover adequacy in the ED varies between staff groupings, with nurse staff satisfaction rates exceeding those of their physician colleagues.[5] The underlying causes of these differences have not been fully explored, impairing efforts to improve handover-related patient safety.[6]

OBJECTIVE

This study aimed firstly to analyse experience with the current process of handover between emergency medicine (EM) physicians, related errors and their impact on patient safety, and secondly to explore potential improvements.

METHODOLOGY

A single centre cross-sectional qualitative analysis was carried out at the adult emergency department of a large suburban academic teaching hospital in Dublin, Ireland in January 2020. All EM physician staff members of all grades (n=30) were invited to complete an online questionnaire (SurveyMonkey®) covering the study aims.

Readability, face and content validity were tested through circulation of the survey instrument to a pilot group of experts prior to wider dissemination. Evaluation apprehension was addressed through guaranteed respondent anonymity. A single reminder was sent to all participants two weeks after the initial invitation to reduce non-response bias.

RESULTS

A response rate of 67% was achieved. Thirty five percent of participants received sufficient information during clinical handover to take over patient care safely, with 55% reporting clear care planning.

Five challenges associated with clinical handover were described: lack of written documentation or a clear plan from the original doctor; reluctance of colleagues to accept a handover; deviation from the proposed plan as handed over; inappropriate detail during the handover process; and a lack of standardisation.

Seventy five percent of respondents were aware of adverse events associated with clinical handover, with a mean of eight adverse events noted per respondent. Five themes were identified: serious pathologies missed or handed over as more minor conditions; delays as the handed-over plan was not implemented (i.e. tests not actually booked); delays waiting for results of investigations; adverse events due to the receiving physician not reviewing the patient personally; and a lack of clarity over transfer of clinical responsibilities.

Sixty seven percent of respondents suggested that the nursing shift leader should be present during physician handover, with 50% advocating a joint nursing-physician handover. Fifty six percent believed that handover should be electronically recorded with 94% agreeing that a checklist would be beneficial. Eighty three percent of respondents preferred handover to occur at the patient bedside rather than at a central workstation.

CONCLUSION

This study provides further evidence of the specific challenges and risks associated with poorly performed clinical handover between EM physicians in the ED setting. It outlines clear areas for improvements to the handover process which could be implemented relatively easily, thereby addressing some of the identified patient safety concerns.

REFERENCES

Available on request.

PRESENTED

- As an oral presentation at the European Society for Emergency Medicine Congress in Lisbon on October 29th, 2021 by Dr. Thomas Mac Mahon.
- As a poster presentation at the Irish Association for Emergency Medicine Annual Scientific Meeting (Online) on October 15th, 2021 by Dr. Thomas Mac Mahon.

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Physiotherapy and the Acute Fracture Unit - Analysing 1,000 Fracture Clinic Attendances Referred to Physiotherapy

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INTRODUCTION

The Acute Fracture Unit (AFU) officially opened at University Hospital Limerick (UHL) on March 12th, 2020. It involves the management of acute fractures and orthopaedic conditions by a specialist orthopaedic consultant and multidisciplinary team. Physiotherapists play a vital role in the AFU, restoring patients' function to pre-injury levels and triaging patients for community physiotherapy follow-up.[1] Recent research suggests there may be scope for physiotherapists to expand their roles in AFUs.[2] Physiotherapy-led orthopaedic triage clinics have demonstrated equal or better patient outcomes and satisfaction when compared with consultant led clinics.[2] Within the first twelve months of the AFU, physiotherapy received 4,639 referrals.

To date, limited information has been recorded detailing the nature of these referrals. Knowledge of this information would help provide recommendations for in-service physiotherapy training, service provision and future research areas.

OBJECTIVE

Therefore, the primary objectives of this retrospective data evaluation were to determine:

- The most common joints treated by physiotherapy in the AFU at UHL.
- The breakdown of injuries being reviewed by physiotherapy i.e. conservative vs. surgical management, fractures vs. soft tissue injuries (STIs).
- The number of STI patients returning for an orthopaedic review following treatment from physiotherapy in the AFU.

METHODOLOGY

The primary author designed a new statistics recording sheet for the purpose of this retrospective data evaluation. Four physiotherapists (two staff grade and two senior physiotherapists) were involved in the data collection process which began on October 1st, 2020. Following a patient's informed consent, the physiotherapist completed the statistics sheet to capture patient details such as their sex, age, injury description (fracture vs. soft tissue), injury management (surgical vs. conservative), physiotherapy follow-up location and whether they were attending for another AFU orthopaedic review. On January 15th, 2021, 1,000 patient attendances were recorded and these patients' details were manually transferred to a Microsoft excel spreadsheet. The information was coded using a number system where possible, to allow ease of interpretation and analysis.

RESULTS

Analysis of the 1,000 fracture clinic attendances revealed 52% of patients attending the AFU were females while 48% were males. The mean age of attendee was 52.9 years (SD +/- 4.4), with patients ≥30 years of age accounting for 73% of total physiotherapy referrals. The five most common joints treated by physiotherapy were the ankle (22.5%), shoulder (15.3%), wrist (14.9%), knee (11.1%) and spine (10.3%). Fracture injuries accounted for 75% of all injuries, while STIs accounted for the remaining 25%. A total of 75% of all recorded injuries were conservatively managed with 25% requiring surgical intervention. Specific to STIs, 80% were conservatively managed, with 40% of these returning to the AFU for a further orthopaedic review. Analysis on follow-up locations revealed 19% of patients were discharged from physiotherapy, 27% were referred to Limerick Primary Community and Continuing Care (PCCC) centres, 14% remained under UHL physiotherapy services, while Clare PCCC (21%) and Tipperary PCCC (16%) also received a high volume of referrals.

CONCLUSION

This retrospective data evaluation provides novel information regarding the nature of referrals received by physiotherapy services operating in AFU settings. To improve service provision, orthopaedic physiotherapy in-service training should prioritise the five most common joints treated by physiotherapy. As 25% of patients attending UHL's AFU had an STI, it appears there may be a role for physiotherapists to expand their scope of practice to run an STI management clinic within the AFU. However, future studies should collate more specific information on the STIs attending the AFU and which injuries are taking the most physiotherapy sessions to rehabilitate.

REFERENCES

Available on request.

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Introducing Advanced Paramedics into the Rural General Practice Team in Ireland - General Practitioners' Attitudes

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ABSTRACT

Rural General Practice in Ireland may be unsustainable into the future. The health needs of an ageing, growing population are becoming more complex as people are now living longer with chronic disease and comorbidity, placing greater demand on General Practice.[2-6] General Practitioner (GP) numbers are not sufficient to meet the current and predicted increase in service demand.[7-9] Healthcare workforce shortage is a global problem especially in rural areas. Other jurisdictions have successfully redistributed tasks among allied healthcare workers, including paramedics to reduce the burden on limited doctor availability.[15-21] However, this has not been fully explored within an Irish context.

The aim of this study was to explore GPs' attitudes and opinions with regard to integrating advanced paramedics (APs) into rural general practice in Ireland.

A sequential explanatory mixed methodology was adopted. A questionnaire was designed and distributed to a purposeful sample of GPs attending a rural conference followed by semi-structured interviews. Data was recorded and transcribed verbatim and thematically analysed.

In total n=27 GPs responded to the survey and n=13 GPs were interviewed. The majority of GPs were familiar with APs and were receptive to the concept of closely collaborating with APs within a variety of settings including out of hours services, home visits, nursing homes and even roles within the general practice surgery.

This research found that GP and AP clinical practice dovetail within many facets of primary care and emergency care. GPs recognise that current rural models are unsustainable, and they realise the potential of integrating APs into the general practice team to help support and sustain the future of rural general practice services in Ireland. These interviews provided an exclusive, detailed insight into the world of general practice in Ireland that has not been previously documented in this way.

REFERENCES

Available on request.

PRESENTED

All presentations were made by Fintan Feerick.

- As a poster presentation at the All-Ireland Conference on Integrated Care in the O'Reilly Hall, University College Dublin on March 10th, 2022.
- As an oral presentation at the World Rural Health Conference (WONCA 2022) at the University of Limerick on June 18th, 2022.
- As both a poster and an oral presentation at the 23rd Annual Multidiscplinary Research Conference in Sligo University Hospital on November 24th and 25th, 2022.

SOURCE

BMC Primary Care. (2022) 23:130.
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Fostering Collective Approaches in Supporting Perinatal Mental Healthcare Access for Migrant Women - A Participatory Health Research Study

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ABSTRACT

Perinatal mental health is a growing public health concern. The mounting evidence examining the prevalence of perinatal mental illness, identifies specific vulnerabilities and risk factors among migrant women.[1,2] Untreated perinatal mental illness can have devastating effects for the woman, her child and the family. Consequently, there is a renewed emphasis on the importance of identifying perinatal mental illness early and intervening promptly to support and provide care that meets the needs of the woman. However, migrant women experience a range of difficulties when accessing healthcare services.[3] There are also growing international reports of unmet perinatal mental healthcare for migrant women.[4,5] Collectively this evidence calls for further guidance on supports and services required to meet the needs of migrant women experiencing perinatal mental illness. In the absence of a universally accepted definition of 'migrant', a broad definition of 'migrant' from the International Organization for Migration (IOM) is adopted for this project. IOM defines a migrant as 'any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of the person's legal status, whether the movement is voluntary or involuntary, what the causes for the movement are and what the length of the stay is'.[6]

In keeping with a participatory health research approach, three online key convenings informed by world café philosophies were facilitated between August and September 2021. Participants from a diverse range of backgrounds and experiences participated (n=52), including migrant women, NGOs/networks/community groups who advocate for migrant communities and healthcare professionals across a range of sectors. Thematic analysis guided data analysis which generated two themes: **Building Capability and Capacity** and **Empowering Migrant Women.**

The findings re-affirmed the commitment of healthcare professionals and NGOs/community groups to providing quality services in meeting the needs of migrant women experiencing perinatal mental illness. However, these services work in silos, with limited opportunities for multi-agency working. Findings also suggest a need for greater opportunities for personalised care pathways that link women and their families to appropriate perinatal mental healthcare services and to NGO/community organisations that support migrant communities. The main conclusions lie in the provision of whole-system approaches in collectively, collaboratively and proactively planning strategies that address the many factors that affect access to healthcare services for migrant women experiencing perinatal mental illness. We need to work collectively in creating greater awareness of perinatal mental health among migrant women, offer guidance on the range of services available and reduce some of the fears and stigmas around perinatal mental illness.

REFERENCES

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PRESENTED

As an oral presentation at the Trinity Health and Education International Research Conference (Online) on March 10th, 2022 by Dr. Kathleen Markey.

FUNDING

This research has received funding from The Irish Research Council, New Foundations 2021.

SOURCE

International Journal of Environmental Research and Public Health.19(3):1124. https://doi.org/10.3390/ijerph19031124

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Women's Experiences of Prison-Based Mental Healthcare - A Systematic Review of Qualitative Literature

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ABSTRACT

The rate of female committals to prison has grown rapidly in recent years. Women in prison are likely to have trauma histories and difficulties with their mental health. This systematic review aims to synthesise the findings of qualitative literature in order to gain a deeper understanding of the experiences of women in the context of prison-based mental healthcare.

A systematic search of five academic databases CINAHL, ASSIA, PsycINFO, EMBASE and Medline was completed in December 2020. The study's search strategy identified 4,615 citations and 7 studies were included for review. Thomas and Harden's[1] framework for thematic synthesis was used to analyse data. Quality appraisal was conducted using the Joanna Briggs Institute Checklist for Qualitative Research.[2]

Four analytic themes were identified that detail women's experiences of prison-based mental healthcare: the type of services accessed and challenges encountered; a reduction in capacity to self-manage mental well-being; the erosion of privacy and dignity and; strained relationships with prison staff. There is a paucity of research conducted with women in the context of prison-based mental healthcare. The findings suggest that there is a need for greater mental health support, including the need to enhance relationships between women and prison staff in order to promote positive mental health.

This is the first systematic review conducted on the experiences of women in the context of prison-based mental healthcare.

REFERENCES

Available on request.

PRESENTED

As an oral presentation at the Trinity Health Education (THE) Online Conference on March 9th, 2022 by Ann-Marie Bright.

FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

SOURCE

Bright, A., Higgins, A., and Grealish, A. (2022) Women's experiences of prison-based mental healthcare: a systematic review of qualitative literature. International Journal of Prisoner Health
https://www.emerald.com/insight/content/doi/10.1108/IJPH-09-2021-0091/full/html

Mental Health Nurses' Confidence in Applying Pharmacology Knowledge - A Survey

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ABSTRACT

Nurses play a vital role in medication management and their pharmacology knowledge is essential to administer medication safely, educate the clients and detect adverse effects at an early stage.[1,2] Medication administration is a major part of nursing interventions in the mental health settings.[3] Mental health nurses are responsible for the safe administration of medications[4] and they need to be confident and knowledgeable on all aspects of medication administration, including a thorough understanding of all aspects of pharmacological principles.[5] The literature highlights gaps on how nurses apply pharmacology knowledge to medication management, particularly in relation to knowledge of the mechanism of action and clearance of the drugs[6,7] and emphasises the need for an increased focus on confidence, knowledge and skills regarding medications.[8,9,10]

The study aimed to explore mental health nurses' confidence, knowledge and skills in applying their pharmacological knowledge to medication management.

A paper-based survey questionnaire was distributed to 209 mental health nurses including 17 final year internship nurses working with direct patient care in Ireland. A total of 129 nurses completed the questionnaire with a response rate of 61.7%. SPSS (Statistical Package for the Social Sciences Version 24) was used to analyse the data. Descriptive statistics were computed for basic and demographic and clinical variables, as well as the total scores of the survey. Ethical approval was granted by the Ethics committee at Dublin City University and permission was obtained from the Director of Nursing to conduct the study.

The mean and standard deviation of mental health nurses' confidence, knowledge and skills in applying their pharmacology knowledge were 48.26 and 7.890. The vast majority of mental health nurses have understood why a medication was given (79%), are confident in finding the resources about medications (77.5%), know the correct dosage of medications they administer (77.1%), monitored the effects of medications they administer (76%), are aware of the type of adverse effects to look for when they administer medications (75.8%), considered the pharmacology principles in their practice (75.4%) and the formulation suitable for each client (73.8%) and know the predictable side effects of medications they administer (71.1%). Sixty six point seven per cent of nurses feel confident in educating clients about their medications and 62.7% recognise the situations when a medication was not given safely. Nurses were less confident in their knowledge of pharmacodynamics about their knowledge of the mechanism of action (43.8%) and the pharmacokinetics of drug clearance (39.8%).

There is no significant difference between the nurses' educational qualifications and years of experience with their confidence, knowledge and skills in applying pharmacology knowledge to medication management. The findings suggest that there is a need for a more comprehensive review of mental health nurses' undergraduate education and in continuing education in relation to pharmacology aimed at helping patients with medication adherence support, advice and education. Mental health nurses need to improve their knowledge of pharmacology in relation to the mechanism of action and clearance of commonly used medications in order for nurses to more effectively support patients to manage their medications.

Table 1 - Knowledge and Skills in Medication Management

	Statement	**Seldom n=(%)**	**Sometimes n=(%)**	**Usually n=(%)**	**Often n=(%)**	**Always n=(%)**
1.	I am confident in finding resources about medications	2 (1.6)	1 (0.8)	26 (20.2)	38 (29.5)	62 (48.1)
2.	I know the correct dosage of the medications I give	1 (0.8)	1 (0.8)	27 (20.9)	33 (25.6)	65 (50.4)
3.	I considered the formulation suitable for each client	3 (2.3)	1 (0.8)	29 (22.5)	36 (27.9)	57 (44.2)
4.	I understood why a medication was given	1 (0.8)	0 (0.0)	26 (20.2)	28 (21.7)	74 (57.4)
5.	I monitored the effects of medications I give	2 (1.6)	2 (1.6)	26 (20.2)	32 (24.8)	63 (48.8)
6.	I recognised situations when a medication was not given safely	5 (3.9)	7 (5.4)	35 (27.1)	34 (26.4)	45 (34.9)
7.	I considered pharmacology principles in my practice	2 (1.6)	5 (3.9)	24 (18.6)	40 (31.0)	55 (42.6)
8.	I know what type of adverse effects to look for with the medications I give	1 (0.8)	0 (0.0)	30 (23.3)	50 (38.8)	47 (36.4)
9.	I feel confident educating clients about their medications	0 (0.0)	1 (0.8)	42 (32.6)	46 (35.7)	40 (31.0)
10.	I know the predictable side effects of the medications I give	1 (0.8)	0 (0.0)	36 (27.6)	48 (37.2)	43 (33.3)
11.	I understand the mechanism of action of the medications I give	2 (1.6)	15 (11.6)	55 (42.6)	32 (24.8)	24 (18.6)
12.	I consider how the medication was cleared from the body	7 (5.4)	25 (19.4)	45 (34.9)	33 (24.6)	18 (14.0)

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the Trinity Health and Education International Research Conference 2022 (THEconf2022) from March 8th to 10th, 2022 (Online).

SOURCE

British Journal of Mental Health Nursing. 9(4):1-9. https://doi.org/10.12968/bjmh.2019.0031

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The First Wave of Covid-19 in Ireland - Experience of Migrant Indians

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INTRODUCTION

During the early part of the Covid-19 pandemic, studies from the UK and other parts of the world reported higher incidences of Covid-19 among ethnic minorities. In Ireland, the spread of the disease during Covid-19 was mostly limited to healthcare settings where a large number of doctors and nurses of Indian origin were employed during the first wave of Covid-19. Hence, the authors were interested in exploring the experience of Covid-19 among the Indian population living in Ireland.

METHODOLOGY

A qualitative descriptive study with phenomenological underpinnings was carried out. Fifteen nurses of Indian origin, who were Covid-19 positive in the previous three months participated via telephone interviews. Digitally recorded interviews were transcribed manually and then analysed using Calaizzi's framework.[1]

RESULTS

Participants extensively spoke about the physical, psycho-social and emotional issues associated with lockdown, quarantine and stigma associated with Covid-19. Findings showed post-covid complications, fear, hopelessness/helplessness, post-traumatic symptoms, impact of social isolation, stigma, lack of extended family support, impact of living conditions and workplace concerns. Table 1 shows themes and sub-themes elicited from the analysis.

Table 1 - Themes and Sub-Themes

Themes	**Sub-Themes**
Physical Problems	Covid-19 Symptoms Post-Covid Complications
Emotional/Psychological Problems	Fear/Scared/Worried/Sad Helplessness/Hopelessness Symptoms Similar to Post-Traumatic Stress (PTS) Post-Covid Emotions
Social Problems	1. Impact of Social Isolation • *Effect on Daily Living* • *Childminding Issues* • *Emotionally Challenging* • *Home Isolation vs. HSE Isolation Facility* 2. Stigma • *Culture specific* 3. Lack of Support and Home Schooling • *Lack of Extended Family Support* • *Whole Family Covid-19 Positive* • *Home Schooling* 4. Living Conditions • Shared Space vs. Good Living Conditions 5. Workplace-Related • *Working Conditions* • *Public vs. Private sector* • *Financial Concerns*

Findings suggest a lack of information on Covid-19, the newness of the disease and the fear associated with it had a major impact on how participants responded to this illness. A common fear that all participants reported was the 'fear of dying in another country' with no family around. Furthermore, they reported their families in India also experiencing the same fear.

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Almost all participants reported contracting Covid-19 at work. Some had good support from their workplace with regular monitoring over the phone and information sent by email regarding support available at the time. However, many of the participants identified a lack of support received from their employer. Some participants experienced salary deductions or having to take annual leave when they were sick. This added financial concerns. Other participants were asked to return to work when they were continuing to experience symptoms. This impacted on some participants expressing a desire to return home to India.

Almost all participants had a negative view on the employee assistance programme provided by the HSE as a support system for healthcare workers. They believed that such a support service is of no use when they cannot express freely in their own language. Even though all participants were fluent in English, they felt it was easier to communicate in their native language when one is ill. Some felt it too tiring to ask for help when they were going through a lot of physical issues. There were suggestions that a phone call from such a service would have been beneficial without the participants having to look for help.

CONCLUSION

Covid-19 has had a profound impact on the migrant Indian healthcare population who participated in this study. Post-Covid complications may have further impacts on their mental and physical well-being which warrants further study. If the experience of this sample is representative of the experiences of the migrant Indian population working in Ireland, there may be an implication for service delivery in the future. This warrants health services adopting new ways of supporting this and other migrant cohorts working in the health services.

PRESENTED

As an oral presentation at the Trinity Health and Education International Research Conference in Trinity College Dublin on March 10th, 2021 by Dr. Shobha Rani.

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Covid-19 Impact on Waiting Lists - Using Health Service Discrete Event Simulation to Inform Scheduled Care Recovery Planning in Ireland

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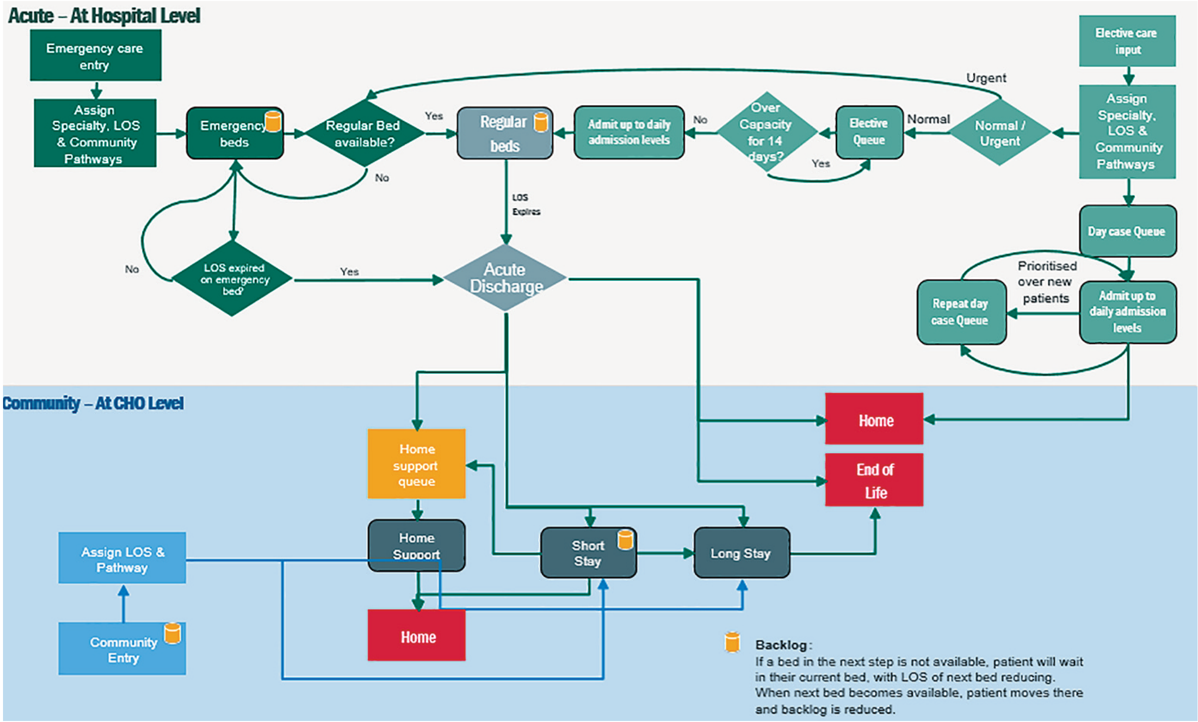
INTRODUCTION

Ensuring people have timely and appropriate access to elective care is an ongoing challenge for health services. Having faced into the Covid-19 pandemic in 2020 from an already challenged position, delivery of scheduled care in Ireland has decreased over the last two years, waiting list volumes have increased and there is already evidence of increased experience of unmet healthcare need across the population, with greatest risk of impact falling on poorest groups. Using scheduled care as an example, we describe the novel and increasingly popular application of discrete-event-simulation through the HSE Integrated Service Model (ISM) to support better healthcare decision-making at this crucible moment.

METHODOLOGY

The ISM is a simulation of patient pathways across hospital and community services, built using available health service data combined with assumptions, which are data-driven and expert validated. The patient pathways modelled within the ISM are illustrated in Figure 1, and can be described in terms of ingress, throughput and egress.

Figure 1 - Overview of Simulated Patient Pathways in ISM



Data and knowledge on demographic and non-demographic factors build demand scenarios, which are applied to the simulation to forecast healthcare system performance across key indicators. The demand scenarios include a Low and High Covid-19 scenario, reflecting levels of Covid-19 in the population; and a 'Recoil Spring' scenario reflecting the potential manifestation of pent-up demand for elective care.

We examine a whole service performance response to the three demand scenarios across the indicators of bed occupancy, emergency department trolleys and elective care waiting lists. We also examine waiting list response to the demand scenarios (including breaches of maximum wait times) across scheduled care inpatient, day case and GI scopes.

Interventions

Simulation modelling provides a safe way to test and explore different 'what-if's'. The effect of changing capacity or processes may be seen as a virtual experiment without putting healthcare operations at risk. We have prepared a set of potential interventions and compared the effect of these on health service performance, with a focus on waiting list volumes, against projected performance without intervention ('Low Covid' demand scenario). These interventions include additional capacity, increased throughput and/or changes to the rules around prioritisation of some cohorts of patients over others.

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By testing interventions through the ISM we can evaluate the impact of each intervention not only on a single objective (for example adherence to maximum wait time targets), but also on the suite of core Key Performance Indicators (KPIs) - bed occupancy, patients on emergency beds, total volumes on waiting lists. This should help mitigate against unintended consequences of changes considered from a single dimension only.

RESULTS

Under the least adverse Low Covid scenario, we anticipate a slight improvement in bed occupancy and numbers of patients waiting for admission on emergency beds across 2022, however we anticipate an increase in scheduled care waiting lists across 2022.

Under the High Covid scenario, we anticipate a resurgence of bed occupancy and counts of patients waiting for admission on emergency beds coinciding with a future wave of Covid-19 cases, with a more severe increase in scheduled care waiting lists across 2022.

Under the most adverse Recoil Spring scenario, we anticipate severe increases in inpatient and day case waiting lists across 2022.

The set of interventions built for testing were developed with reference to background literature, review of the 2022 Waiting List Action Plan and consultation with experts in HSE Acute Strategy, HSE Acute Operations and the ISM Governance Group. Results were presented comparing key metrics for each intervention against the ‘no intervention’ equivalent. Combinations of interventions were also tested – for example combining additional funding with changes in scheduling protocols.

CONCLUSIONS

This innovative application of health intelligence combining health service epidemiology, discrete-event simulation methods and public health expertise offers significant utility to health service improvement in Ireland.

This case study has demonstrated the value which discrete event simulation modelling can offer scheduled care planning and management. A key benefit of the ISM for decision support is assessment of the impact of interventions. In the case of scheduled care, a challenge to leveraging this benefit was timely particularly with the negative impact of Covid-19 on scheduled care. Many of the interventions are implemented in the absence of constraints which may exist within the organisation, hospital sites and/or specialised clinical requirements. For example, resourcing, management and/or clinical governance constraints may prevent the running of day case activity on a 6 day per week basis in some sites and impact the ability to deliver the modelled intervention to its fullest extent.

While the significance of the challenge ahead to recover scheduled care is clear, its scale is uncertain. Future Covid-19 activity is unknown and there is a risk of a continuing impact of acute hospital capacity for scheduled care. Nevertheless, ISM can better inform and support HSE decision-making across the strategic, operational and clinical domains to reduce elective care waiting lists in the short and medium-term.

PRESENTED

Both presentations were made by Ian Darbey.

- At the European Decision Sciences Institute (EDSI) Annual Conference in Dublin City University on May 31st, 2022.
- At the Royal College of Physicians, Faculty of Public Health Medicine in Kildare St., Dublin 2 on May 25th, 2022.

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National Antimicrobial Point Prevalence Survey in HSE Mental Health Facilities

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Shah, M.,[2]
Sheehan, P.,[3]
Gallagher, O.,[4]
Foran, R.,[5]
Fagan, S.,[6]
Donnelly, M.,[7]
Devine, C.,[4]
Love, B.[8]

Community Healthcare Cavan, Donegal, Leitrim, Monaghan, Sligo[1]
Cork/Kerry Community Healthcare[2]
South-East Community Healthcare[3]
Community Healthcare East[4]
Dublin South, Kildare and West Wicklow Community Healthcare[5]
Midlands Louth, Meath Community Healthcare Organisation[6]
Dublin North City and County Community Healthcare[7]
HSE Community Healthcare: Quality and Patient Safety[8]

ABSTRACT

In 2021-'22, prevalence and quality of antimicrobial use in HSE mental health facilities was assessed by community antimicrobial pharmacists (AMPs) to provide a benchmark of antimicrobial use against which future antimicrobial stewardship initiatives can be measured. Antimicrobial use in mental health inpatient and residential settings has not been extensively examined in Ireland, however, the Healthcare-Associated Infection and Antimicrobial Use in Long-Term Care Facilities (HALT study) 2016 found that long-term care facilities for residents with psychiatric conditions had an antimicrobial prevalence rate of 7.7%. This was higher than the European average of 4.9%. Mental health facilities are an area of interest for antimicrobial stewardship due to an ageing population, nature of congregated care settings and specialties such as psychiatry of later life. Furthermore, antimicrobials have several drug–drug interactions with psychotropic drugs that can lead to adverse events or treatment failure.

A Point Prevalence Survey (PPS) of antimicrobial use was conducted in a sample of adult HSE mental health facilities from November 2021 to January 2022 in seven of nine HSE Community Healthcare Organisations (CHOs). The survey included 60% (n=33) of all approved centres, 15% (n=16) of all 24-hour staffed residences and 25% (n=2) of continuing care units. Data collection forms, survey protocol and data entry tools were aligned to a PPS in HSE older persons residential care facilities conducted in 2020/2021. Residents' medication charts were reviewed by the AMP regarding systemic antimicrobials prescribed within the previous 30 days in addition to medical notes, and laboratory results (where available). Adherence to HSE National community antimicrobial prescribing guidelines was assessed. Information was obtained from the person in charge regarding systems and structures to support antimicrobial stewardship.

Fifty one facilities across seven CHOs were surveyed with prescribing data in relation to 1,003 individuals reviewed. Prevalence of total antimicrobial use was 6.3%, lower than the previously measured Irish prevalence for persons with psychiatric conditions in long-term care facilities1 at 7.7% but higher than the European average (4.9%). On the day of survey, 15% of persons received an antimicrobial within the previous 30 days. Fifty percent of antibiotic use was for prophylaxis (3.3% of all persons). Prophylactic antibiotic duration exceeded six months in 61% of persons, and exceeded 12 months in 55%. The majority of prophylaxis (58%) was for urinary tract infection. There was a lower proportion of 'Green' (preferred) antimicrobials versus 'Red' (reserved) antimicrobials (58% vs. 38%) when compared to prescribing in HSE older persons residential care facilities (65% vs. 30%). Co-amoxiclav ('Red' antimicrobial) was the most commonly prescribed agent for treatment of infection (31%) although this was reduced from 41% of therapeutic prescriptions in long-term mental health facilities in HALT 2016. Main findings in relation to adherence to national guidelines and systems and structures to support antimicrobial stewardship are shown in Tables 1 and 2.

Table 1 - Adherence to National Community Antimicrobial Prescribing Guidelines

Review of Adherence to National Prescribing Guidelines	% (n) Assessable Prescriptions*
Adherence with choice of agent	76% (n=28/37)
Adherence with dosing regimen	75% (n=43/57)
Adherence with duration	46% (n=18/39)

*36% of prescriptions were non-assessable due to absence of guidelines for the infection type and/or insufficient information

Table 2 - Systems and Structures to Support Antimicrobial Stewardship in Mental Health Facilities

Review of Antimicrobial Stewardship Systems and Structures	% (n) Facilities
Dipstick urinalysis performed routinely (on admission and/or at designated intervals) for persons asymptomatic of urinary tract infection	53% (n=27/51)
Facilities with no electronic access to laboratory results on site	33% (n=17/51)
Electronic health record	6% (n=3/51)
Influenza vaccine offered to at risk long-term residents	100% n=51/51)
Records of pneumococcal vaccination for long-term residents	27% (n=14/51)

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This Point Prevalence Survey identified good practice in addition to opportunities for improvement relating to optimisation of antimicrobial use in HSE mental health facilities. Key national recommendations from this survey are as follows:

- Residents on urinary antibiotic prophylaxis in excess of six months should be reviewed with a view to de-prescribing.
- Routine use of dipstick urinalysis for asymptomatic residents to support diagnosis of a urinary tract infection should cease.
- Staff should be aware of and refer to the website www.antibioticprescribing.ie for national antimicrobial prescribing guidelines for community. Referral to these guidelines is recommended for this patient cohort.
- Where an antimicrobial is considered necessary, a 'Green' agent (preferred) should be selected instead of a 'Red' agent (reserved) where possible. 'Red' agents are more associated with adverse effects, development of antimicrobial resistance and drug interactions (particularly with co-prescription of psychotropic medications).
- Prescribe the shortest effective duration for antimicrobials, for example, three days for an uncomplicated lower urinary tract infection in females and five days for lower respiratory tract infection.

REFERENCES

Available on request. Full report online at: www.antibioticprescribing.ie

PRESENTED

As an oral presentation at the:

- College of Psychiatrists of Ireland CPD webinar on Managing Physical Health in the Psychiatric Setting on February 28th, 2022 by Sarah Fagan.
- AMS InSight Annual Conference in Dublin on October 24th, 2022 by Margaret Donnelly.

As a poster presentation at the:

- National Patient Safety Office (NPSO) Conference in Dublin on October 11th, 2022 by Margaret Donnelly.
- British Society of Antimicrobial Chemotherapy (BSAC) Winter Conference in London on December 13th and 14th, 2022 by Sarah Fagan.

SOURCE:

S. Fagan, M. Donnelly, A. Clancy, M. Regan, A. M. Maher, C. Ryan, S. Armitage, M. Shah, P. Sheehan, C. Mannion, O. Gallagher, R. Foran, C. Devine, B. Love. (2022). National antimicrobial point prevalence survey in adult inpatient mental health facilities in Ireland. Journal of Antimicrobial Chemotherapy-Antimicrobial Resistance 2023;5:i1–i12.
https://doi.org/10.1093/jacamr/dlac133.021

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National Antimicrobial Point Prevalence Survey in HSE Older Persons Residential Care Facilities

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Community Healthcare West[2]
Mid-West Community Healthcare[3]
Cork/Kerry Community Healthcare[4]
South-East Community Healthcare[5]
Community Healthcare East[6]
Dublin South, Kildare and West Wicklow Community Healthcare[7]
Midlands Louth Meath Community Healthcare Organisation[8]
Dublin North City and County Community Healthcare[9]
HSE Community Healthcare: Quality and Patient Safety[10]

ABSTRACT

In 2020-'21, baseline prevalence and quality of antimicrobial use in all HSE older persons residential care facilities (RCFs) was assessed by newly appointed community antimicrobial pharmacists (AMPs) to provide a benchmark of antimicrobial use against which future antimicrobial stewardship initiatives can be measured. The Healthcare-Associated Infection and Antimicrobial Use in Long-Term Care Facilities study (HALT) 2016, found residents in Irish residential care settings were twice as likely to be on antimicrobial therapy as the European average (10% vs. 5% prevalence). Measures to improve antimicrobial prescribing practice include the National quality improvement initiative advocating prescribers in community settings to choose 'Green' (preferred) antibiotics over 'Red' (reserved) agents. In addition, regularly updated National community antibiotic prescribing guidelines and related resources are available online at www.antibioticprescribing.ie

A Point Prevalence Survey of Antimicrobial Use was conducted across all HSE older persons RCFs between October 2020 and August 2021. Data collection forms, survey protocol and data entry tools were designed with reference to the 2016 HALT study. Residents' medication charts were reviewed by an AMP regarding systemic antimicrobials prescribed within the previous 30 days in addition to medical notes, and laboratory results (where available). Adherence to HSE National community antimicrobial prescribing guidelines was assessed. Information was obtained from the person in charge regarding systems and structures to support antimicrobial stewardship.

One hundred and thirty five facilities were surveyed across all nine HSE Community Healthcare Organisations and prescribing data in relation to 4,448 residents was reviewed. Prevalence of total antimicrobial use was higher than the previously measured Irish or European average with 12% of residents on antimicrobials (Irish prevalence was 9.8% and European average prevalence was 4.9% in HALT 2016). On the day of survey 27% of residents received an antimicrobial within the previous 30 days. Half of all antibiotic use was for prophylaxis (6.3% of all residents). Prophylactic antibiotic duration exceeded six months in 66% of persons, and 12 months in 57%. The majority (78%) of all prophylaxis was for urinary tract infection (UTI). Infection of the urinary tract (51%), respiratory tract (25%) or skin/wound (16%) accounted for the majority (92%) of therapeutic antimicrobial prescriptions. There was high useage of 'Green' (preferred) antimicrobials in comparison to 'Red' (reserved) antimicrobials (65% vs. 30%). Co-amoxiclav ('Red' antimicrobial) was the most commonly prescribed agent for treatment of infection (19%) although this was reduced from 38% of therapeutic prescriptions in HALT 2016. Main findings in relation to adherence to national guidelines and systems and structures to support antimicrobial stewardship are shown in Tables 1 and 2.

Table 1 - Adherence to National Community Antimicrobial Prescribing Guidelines

Review of Adherence to National Prescribing Guidelines	% (n) Assessable Prescriptions
Adherence with choice of agent	69% (n=298/434)
Adherence with dosing regimen	72% (n=365/508)
Adherence with duration	37% (n=177/477)

Table 2- Systems and Structures to Support Antimicrobial Stewardship in Older Persons Residential Care Facilities

Review of Antimicrobial Stewardship Systems and Structures	% (n) facilities
Dipstick urinalysis performed routinely (on admission and/or at designated intervals) for persons asymptomatic of UTI	42% (n=57/135)
Electronic access to laboratory results on site	64% (n=87/135)
Electronic health record	13% (n=17/135)
Influenza vaccine offered to all long-term residents	100% (n=135/135)
Records of pneumococcal vaccination for long-term residents	39% (n=47/122)

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This Point Prevalence Survey identified good practice in addition to opportunities for improvement relating to optimisation of antimicrobial use in HSE older persons residential care facilities. Key national recommendations from this survey are as follows:

- Residents on urinary antibiotic prophylaxis in excess of six months should be reviewed with a view to de-prescribing.
- Routine use of dipstick urinalysis for asymptomatic residents to support diagnosis of a urinary tract infection should cease.
- Pneumococcal vaccination status should be determined with vaccination provided as necessary for residents aged greater than 65 years.
- Electronic access to relevant laboratory results onsite is required to support timely and well-informed decision-making and optimal use of antimicrobials.
- Staff should be aware of and refer to www.antibioticprescribing.ie which contains the national community antimicrobial prescribing guidelines.

REFERENCES

Available on request. Full report online at: www.antibioticprescribing.ie

PRESENTED

As a poster presentation at the:

- European Congress of Clinical Microbiology and Infectious Diseases in Lisbon, Portugal on April 24th, 2022 by Mala Shah.
- Infectious Disease Society of Ireland (IDSI) Annual Scientific Meeting (ePoster), on May 19th and 20th, 2022 by Aisling Clancy.
- National Patient Safety Office (NPSO) Conference in Dublin on October 11th, 2022 by Aisling Clancy.

As an oral presentation at the:

- Irish Gerontological Society Annual and Scientific Meeting in Cavan on November 4th, 2022 by Aisling Clancy.
- AMS InSight Annual Conference in Dublin on October 24th, 2022 by Mala Shah.
- British Society of Antimicrobial Chemotherapy (BSAC) Winter Conference in London on December 14th, 2022 by Mala Shah.

SOURCE

M. Shah, A. Clancy, M. Regan, A.M. Maher, S. Armitage, C. Ryan, C. Mannion, P. Sheehan, O. Gallagher, R. Foran, S. Fagan, M. Donnelly, B. Love. (2022). Improving antimicrobial use in HSE older persons residential care facilities. Journal of Antimicrobial Chemotherapy-Antimicrobial Resistance 2023;5:i1–i12. https://doi.org/10.1093/jacamr/dlac133.002

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eHealth for Neonatal Nurse Education Despite Covid-19?

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ABSTRACT

The aim of this contemporary issue paper was to challenge the premise that the term "eHealth" is relatable to patient or service users only.

It was critically explored if the term could be broadened to include neonatal nurse education interventions.

A review of current literature formed the basis for the critical discussion of the term eHealth, and why it can be associated with neonatal nurse education.

The critical discussion identified and reviewed past and current literature relating to eHealth and its origins. It portrayed the viability of the term eHealth as more than just a patient associated intervention, and why it should also be encompassed as a neonatal nurse education option.

eHealth is traditionally identifiable as a service user intervention or source of information. The term should be broadened to encompass neonatal nurse education and used as a resource that is easily accessible and user friendly. This will in turn encourage the personal and professional development of neonatal nurses and should ultimately contribute to evidence-based best practices in the clinical environment, despite the current global pandemic.

FUNDING

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Grant Number is EBPGG/2019/34.

SOURCE

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mHealth Use in Healthcare Facilities - Raising Awareness in Data Protection, Privacy and Safety

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ABSTRACT

Mobile Health (mHealth) is medical and public health practice supported by mobile devices, such as mobile phones, and other wireless devices.[1] While there are increasing opportunities for the adoption of mHealth, solutions for enhancing services and patient care are not restricted to Medical Device (MD) regulated software. In particular, during the Covid-19 pandemic, many patients and healthcare professionals embraced the possibility of using available mobile applications, thus reducing the burden on strained services. However, there are risks of using applications in hospital settings which extend beyond the control of regulatory agencies and institutional policies. When users choose non-MD apps to support their practices or treatment, they should pay attention to how personal and health data is processed, stored, and shared.

Analysing academic and grey literature published from 2010 to 2021, we used the People-Policy-Technology (PPT) framework to evaluate risks of use.[2]

There are user behaviour issues which present risks for data protection, privacy, and safety. These include use of personal devices, inappropriate use of devices or apps, use of non-MD apps in the medical context, disclosure of personal or medical data inadvertently, lack of awareness, and accessibility on policies and regulations. Many difficulties in misuse of medical software are not caused by the software itself, but rather, by the inappropriate use of the software. Users may not have enough understanding on what characterises personal and medical data, how technologies process and store them and the risks associated with use of non-MD apps for medical purposes. Additionally, users do not necessarily understand the importance of MD regulations and may not be in a position to verify their compliancy or appropriate use of them.

We discuss the current regulations and policies concerning the use of mobile devices and apps in healthcare settings. It is the responsibility of the user to verify that devices and software used for medical purposes are appropriately CE marked. Users must be aware of this despite the difficulties they find in distinguishing between regulated and non-regulated apps in applications stores. mHealth apps for use in the Irish public healthcare system must complete a Privacy Impact Assessment (PIA) to ensure compliance with privacy and GDPR. However, examination of research has indicated that PIAs are not suitable for small systems such as mHealth apps.[3]

With regard to healthcare, members of staff should respect existing codes of conduct. Patients should possibly be included in target groups in such codes. There can be difficulties in converting general, often national policies, to local policies and procedures. Training needs to be implemented to ensure that everyone is aware of their personal responsibilities.

From the technology perspective, MD software designed for monitoring patients, facilitating diagnosis or self-management of care is subject to regulations according to the defined clinical category and risk assessment. Some issues that healthcare services need to be aware of are:-

- Due to regulation requirements, the customisation of MD apps is costly
- Some mHealth solutions are excluded from Medical Device Regulations (MDR)
- Staff may intentionally use non-MD apps, thus prioritising usability over safety
- Use of private or public networks presents risks to secure transfer of data

Some apps, although they are non-MD, e.g. developed to support wellness, fitness, period trackers, can collect sensitive data from users without being transparent on how this data is managed. Lack of regulation allows this to happen. The use of data by third parties in different countries is not always clearly indicated and users do not always verify if apps developers are ethically responsible for the management of their sensitive data. Upon installation, use or updates, users grant permission, without reading detailed terms and conditions, to mobile applications to process sensitive user data, risking data protection, privacy and security. Therefore, there is an onus on the software engineer to ensure that MD software and general apps supporting mHealth are fit for purpose. It is the responsibility of designers and developers to provide users with information transparency on data collection, control for data capture, storage, and processing such as anonymisation, pseudonymisation and time limits.

It is necessary to provide users with information regarding their responsibilities in ensuring that regulations are applied, apps are compliant and that their use is fair and appropriate Challenges outlined in this paper could be addressed by policies and regulations reinforcing the need for public training, education and awareness, for users - about their choices and risks, and for designers and developers - about transparency, ethics and their responsibilities.

REFERENCES

Available on request

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PRESENTED

Presented via online streaming at the 15th International Conference on Health Informatics (HealthINF 2022) from February 9th to 11th, 2022 by Brona McEntee.

FUNDING

This research has been partially supported by the Science Foundation Ireland Grant number 13/RC/2094_P2 to Lero - the Science Foundation Ireland Research Centre for Software (www.lero.ie).

SOURCE

Motti Ader, Lilian G., Bróna MacEntee, Kristina Rutkauskaite, Nutsa Chichilidze, Dylan Kearney, Sean A. Lynch, Katie Crowley and Ita Richardson, **mHealth use in healthcare facilities: raising awareness in data protection, privacy and safety.** 15th International Conference on Health Informatics, HealthINF 2022, February 9th to11th, 2022. Online streaming.

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A Literature Review on the Impact of Tobacco, Nicotine Replacement Therapy and Breastfeeding Practices with the Subsequent Development of a Guidance Document Regarding Best Practice

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INTRODUCTION

The evidence and information regarding smoking and pregnancy is readily accessible, however the impact of smoking whilst breastfeeding or the use of Nicotine Replacement Therapy (NRT) products whilst breastfeeding is less widely discussed in published sources. The rationale for this briefing document originated with women, in the antenatal and postnatal period who wanted accurate and consistent information in the form of a fact sheet specific to smoking, breastfeeding and NRT.

Inconsistencies in advice can exist among healthcare professionals and others regarding the use of NRT products in pregnancy or when breastfeeding due to the lack of concrete evidence supporting their efficacy or safety.

OBJECTIVE

The aim of this literature review is to develop an evidence-based working document, and from this document to extract sufficient information to inform an evidence-based summary fact sheet which can be distributed by those involved in obstetric care to pregnant women, their partners, and nursing mothers who smoke. The fact sheet will ensure that health professionals can deliver consistent, accurate and safe recommendations to pregnant women who smoke.

This document will seek to provide information on the effects that nicotine can have on breast milk's quality and quantity, second-hand smoke and breastfeeding. Also, the impact of nicotine pharmacotherapy and breastfeeding, and its impact on the infant will be addressed. In addition, smoking cessation supports available to assist pregnant and breastfeeding mothers who wish to stop smoking will be reviewed.

METHODOLOGY

Authors of the review searched CINAHL Complete (Ebsco), Cochrane Library, Medline, Science Direct and Google Scholar to identify peer reviewed journals suitable for review. The search strategy contained the keywords: tobacco, tobacco smoke, cigarette, and smoking during pregnancy, infants, breastfeeding, smoking, passive smoking, and NRT. Searches were limited to studies published in Ireland, however due to the limited number; the search was extended to international studies. Full text articles that detailed maternal smoking and breastfeeding were retrieved for further analysis. Additional articles were retrieved from manual searches of bibliographies from selected papers. The literature review was completed in June 2020. Articles were deemed eligible for review if they contained a measure of maternal smoking and at least one measure of breastfeeding, pregnancy, or NRT. Studies were excluded when the relationship between maternal smoking with breastfeeding or NRT could not be determined. National guidelines such as the National Maternity Strategy 2016 - 2026[1], the National Institute for Health and Care Excellence (NICE) guidelines[2] and national surveys including Healthy Ireland Surveys[3] were also reviewed.

DISCUSSION

It is evident that breastfeeding has many benefits for both mother and infant. It can protect infants from the two primary causes of child mortality worldwide, Respiratory Diseases and Diarrhoea. Longer periods of breastfeeding are associated with a reduction in cardiovascular diseases, ovarian and breast cancer, and Type 2 diabetes in breastfeeding mothers. However, smoking whilst breastfeeding can impair many of these benefits and may have adverse effects on the infant. Midwives should implement the Making Every Contact Count (MECC) framework to utilise any opportunity during appointments to have a conversation about smoking with pregnant and breastfeeding mothers and support them in making a health behaviour change.

In addition to the impairments associated with smoking, it has been noted in this review that there was a significant relationship between the exposure to cigarette smoke and restricted growth in children. Also, there was a correlation between smoking exposure and upper respiratory ailments. Health professionals should highlight the negative consequences associated with passive smoking to maternal parents to protect their health and that of their children. Furthermore, mothers who wish to continue to smoke while breastfeeding should consider the harm reduction method of introducing protective measures for their infant's safety which include having a tobacco free home and car, by keeping the number of cigarettes smoked per day as low as possible or smoke immediately after breastfeeding to allow nicotine and other chemicals to vacate the breast milk prior to the next feed.

Moreover, it has been documented in this review that the benefits of using an appropriate NRT product such as intermittent forms of nicotine are safer options in comparison to nicotine patches, as they deliver a lower intermittent dose of nicotine and minimise risks to the infant. The practice of breastfeeding is far more favourable even when continuing to smoke, given the minimised amount of nicotine secreted into breastmilk.

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CONCLUSION

The conclusion of the authors is that making every contact count in raising the issue of tobacco with pregnant and breastfeeding women is crucial to supporting them in quitting smoking. The authors acknowledge the limitations of this review in exploring available research and their recommendation would be for further research and resources to be allocated to investigating the relationship between Tobacco, NRT and Breastfeeding.

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