OPEN LETTER

Addressing complex societal challenges in health education – A physiotherapy-led initiative embedding inclusion health in an undergraduate curriculum [version 1; peer review: 1 approved]

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Abstract

Socially marginalised groups suffer vastly poorer health outcomes compared to the general population. Inclusion health seeks to directly address the health inequities experienced by groups such as homeless people and refugees. Despite the unique healthcare needs experienced by these vulnerable groups, inclusion health features very little in health education curricula.

This letter has been written by a group of clinicians, academics, clinical education specialists and students with a common interest in inclusion health. In the absence of established guidance on how best to incorporate the broad topic of inclusion health in undergraduate education, we have developed a two-pronged approach within physiotherapy. We are writing to highlight the following initiatives; firstly, the provision of a dedicated undergraduate clinical placement devoted to the area of inclusion health. Secondly, we have also initiated a step-wise process of introducing the topic of inclusion health into the formal undergraduate curriculum.

This letter demonstrates the need to implement strategies to incorporate inclusion health into the curriculum and the approaches described are applicable to diverse health professions and settings.

Keywords

Inclusion health, homeless, homelessness, education, clinical placement, curriculum
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Introduction
Inclusion health is an approach that aims to address the extreme health inequalities experienced by socially excluded people (Luchenski et al., 2018). Social exclusion such as that experienced by the homeless, Travellers and Aboriginal people, people with substance disorders, sex workers and prisoners, are associated with extreme levels of morbidity and mortality. Socially excluded people frequently have experienced multiple adverse events in childhood and adulthood (Fitzpatrick et al., 2012). Socially excluded populations have a mortality rate eight times higher than the average for men, and nearly 12 times higher for women (Aldridge et al., 2018).

In Ireland, a shortage of public housing has led to homelessness becoming a national crisis. Homelessness has predominantly affected people who have already experienced social exclusion and adversity since childhood, and compounds the effect of social exclusion on health. Since 2013, the number of homeless adults in Dublin has doubled (Focus Ireland). Homeless individuals are particularly vulnerable to dramatically poor mental and physical health, including younger onset of chronic disease, multi-morbidity and a reduced life expectancy (Fazel et al., 2014). Median age at death for homeless people in Dublin is devastatingly low at 44 years for males and 36 years for females (Ivers et al., 2019).

Unsurprisingly, given high rates of physical and mental ill-health, homelessness is associated with increased usage of unscheduled health care. A recent study in a homeless population (Bowen et al., 2019) showed an emergency department visit rate 60 times that compared to the general population. Centrally located Dublin hospitals of St. James’s Hospital Dublin and the Mater Hospital have seen a proliferation of homeless patients admitted and readmitted frequently. Despite representing just 0.4% of the catchment population of St James’s, homeless people account for almost 10% of emergency department attendances and inpatient stays (Ní Cheallaigh et al., 2017). In other areas country wide with high levels of deprivation, health care professionals will see homeless patients presenting across multiple services.

Homeless and other socially excluded people represent a distinct and significant population (Stovall et al., 2016), and require cultural and structural competency to address their healthcare needs (Beach et al., 2005; Metzl & Hansen, 2014). In order to address the complex health needs of homeless individuals, health care providers need an understanding of the forces that determine health outcomes at individual and societal levels. For example, clinician awareness of low levels of functional literacy in homeless adults and of the physical challenges presented by mandatory periods outside hostels during the daytime may result in an improved ability to provide information which can be implemented by a homeless patient.

The curricula of higher education instituted need to reflect these changing requirements for healthcare delivery (Dean et al., 2009; McMahon et al., 2016). Exposure of undergraduate students to patients from socially excluded groups is necessary so that graduates can become empathetic advocates and effective and innovative clinicians to help drive better health outcomes for vulnerable groups. Formal integration of the topic of inclusion health in medical and allied health undergraduate curricula is often lacking and/or unmeasured (Stovall et al., 2016). We suggest a formal approach should be taken and this letter will describe the development of an inclusion health placement and a step wise method of introducing this topic into the undergraduate curriculum which we have initiated in our setting.

Inclusion health clinical placement
St James’s Hospital has developed an integrated, interdisciplinary inclusion health team, with an initial focus on homeless adults. The team had reported a high incidence of frailty in homeless adults in the catchment area (de Paul, 2017), and had noted a high rate of need for physiotherapy in homeless inpatients referred to the service. Ongoing collaboration with the clinical and academic physiotherapy department led to the development of an inclusion health placement for undergraduate physiotherapy students.

We report the design and roll out of a dedicated four-week inclusion health placement delivered to 3rd year undergraduate physiotherapy students of Trinity College Dublin in Jun-July 2019 on a pilot basis. The clinical placement was based in St. James’s Hospital and linked to community-based health and social care services for homeless adults.

Students were supervised by two clinical tutors who were senior clinicians with a dedicated role in clinical education. The main client group were homeless in-patients of St. James’s Hospital who were referred due to diverse physical and mobility limitations. Students assessed and treated this group, facilitated by the clinical tutor. Another facet of the placement was the design, set-up and delivery, of a student led exercise class in a residential hostel for homeless adults in the local area. Students also attended GP-led clinics for refugees in direct provision and a dedicated clinic for Roma people in an observational capacity.

We found there were additional considerations to setting up a clinical experience within the inclusion health area, which are applicable to future placements/clinical exposures. These are shown in Table 1. The ‘student voice’ - physiotherapy student post-placement reflections and guidance specifically for future students embarking on an inclusion health placement are presented in Table 2.

This inclusion health placement demonstrated bi-directional positivity – of the students towards this placement and client group and of homeless clients towards meaningful engagement and cooperation with student physiotherapists. Students reported this was a valuable learning opportunity. We are planning to run this placement again in the next academic year 2019–2020 with an increased focus on other socially excluded groups such as refugees and travellers.
Curricular changes

Inclusion health is a complex topic which overlaps with mental and physical disease, as well as substance abuse and structural factors underlying the effect of social exclusion on health. An additional challenge to introducing it into the formal undergraduate curriculum is the lack of best practice guidelines (Department of Health and Social Care, 2016) or set of competencies. As demonstrated in Figure. 1, our approach is to introduce this topic in a step-wise fashion.

In the academic year 2018–2019, we commenced with group-based student led presentations on the topic of inclusion health, entitled “Inclusion health and physiotherapy in the homeless community” and “Role of physiotherapy in people who are asylum seekers/refugees, including special considerations post torture”. Students were given the topic as well and signposted to key resource materials and subtopics to consider for inclusion in their presentations. In 2019–2020, the topic of inclusion health will be formally integrated into a pre-existing learning module.

### Table 1. Key success factors for an inclusion health placement.

<table>
<thead>
<tr>
<th>Key consideration</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct comprehensive orientation</td>
<td>This will maximise student confidence and preparedness, to optimise the learning experience</td>
</tr>
<tr>
<td>Allow additional time for placement planning</td>
<td>A comprehensive placement will consist of clinical exposure to off-site clinics and services to ensure breadth of inclusion health area is covered. Take time to build relationships with other staff and services in the area so students can be facilitated on placement</td>
</tr>
<tr>
<td>Consider interpersonal skills of students</td>
<td>Strong communication skills, a flexible open approach, and the ability to cope with the potentially unpredictable nature of the placement at times are needed</td>
</tr>
<tr>
<td>Peer placement recommended</td>
<td>A peer placement is recommended with two students placed together enabling students to undertake assessments and treatments together. Having two students together is also useful due to a number of reasons including high prevalence of physical disabilities necessitating &gt;1 therapists to safely conduct assessments and treatments, and ability to debrief after encounters</td>
</tr>
<tr>
<td>Modify assessment</td>
<td>It is recommended that placement be graded on a pass/fail basis rather than a numerical grade as not all areas may be applicable to the standardised method of clinical assessment</td>
</tr>
<tr>
<td>Ensure sufficient support available for students</td>
<td>Due to the complexity of the area ensure there is sufficient support from senior clinicians/dedicated clinical education specialists</td>
</tr>
<tr>
<td>Arrange additional training</td>
<td>As the incidence of infectious diseases may be higher in inclusion health patients (for example higher incidence of HIV and Hepatitis C), infection control measures will need to be reiterated prior to commencing placement. Although the actual risk of injury is low, violence and aggression training prior to placement is recommended, mainly to learn de-escalation skills</td>
</tr>
</tbody>
</table>

### Table 2. Advice from students, ‘the student voice’.

<table>
<thead>
<tr>
<th>Key advice</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be empathetic &amp; have an open mind</td>
<td>Have an awareness of the complex nature and difficult background of some of these patients and their co-morbidities. Speak to the nursing staff to ascertain if it is the appropriate time for treatment as patient’s mood and health status may fluctuate and will give you an indication of whether a patient is likely to engage with treatment at that time.</td>
</tr>
<tr>
<td>Communication skills are very important</td>
<td>Take time to build a rapport with your patient first. Assessment or treatment may need to be very brief, just talking to a patient &amp; giving them advice may be the only treatment you will provide.</td>
</tr>
<tr>
<td>Know when not to intervene (patient unwell or not willing to engage, patient not listening to your advice)</td>
<td>If a patient is not on the ward or unavailable, try to get back later that day. If a patient becomes agitated or refuses to listen to your advice, it is best that you step back and try revisit the topic another day.</td>
</tr>
<tr>
<td>Plan in advance use a flexible approach</td>
<td>Have a plan before seeing a patient as to what you would like to get out of the session, but bear in mind that what you plan might not be what the patient would like to do. Ask the patient what they would like to get out the session/ what their priority is.</td>
</tr>
<tr>
<td>Speak to your senior clinician/practice tutor if you feel uncomfortable or unsure about a situation</td>
<td>Know that you should never feel out of your comfort zone when completing this placement. Speak to your senior clinician or practice tutor. Your peer is also someone you can speak to &amp; reflect with about patients you have seen together.</td>
</tr>
<tr>
<td>You are in a safe learning environment. Generally, this patient cohort is approachable &amp; happy to interact with students</td>
<td>From our experience, patients generally engaged well with assessments and treatments delivered by physiotherapy students &amp; felt they were listened to. This patient cohort has multiple physical needs &amp; were very receptive to input from therapies to help them.</td>
</tr>
</tbody>
</table>
(a specialist rehabilitation module, delivered in 3rd year) and to the curriculum document. Evaluation of inclusion health learning outcomes will take place in formal summative assessments. In addition to the student-led presentation, there will be scheduled lectures on inclusion health, including homeless, traveller and refugee/asylum seeker health. In 2020–2021 an inter-professional learning activity, which is under development, will include 2–3 diverse allied health professional students and will complement the suite of learning activities.

Conclusion
Clinical practicum and curricula should be realigned to meet the needs of the 21st century of which the health of socially excluded groups is a pressing need. This letter describes a unique initiative to incorporating the topic of inclusion health in an undergraduate physiotherapy programme via development of a 4-week elective clinical placement and integration into the formal undergraduate curriculum.

Delivery of a universal basic level of knowledge and formal integration of inclusion health into the undergraduate curriculum as described in this letter would ensure all students are exposed to this topic with the aim to equip all future graduates with the skills and knowledge base to work with this vulnerable and complex group to optimise health outcomes.

For deeper understanding a dedicated clinical practicum or clinical placement would be recommended. Due to the nature of the area it would not be feasible to offer this opportunity to all students. Notwithstanding this, a dedicated inclusion health placement is likely to engage students as agents of change in the health care delivery system who can be communication catalysts and agents of change for the future. Sharing this experiential learning with other students, professionals, educators and health care institutes may enhance future engagement with these marginalised groups.

We suggest the approach of a dedicated clinical exposure and formal integration into the curriculum could be rolled out to other health care students and applied pragmatically to other settings based on local needs and expertise.

Data availability
Underlying data
No data are associated with this article.

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Patrick O' Donnell
Graduate Entry Medical School, University of Limerick, Limerick, Ireland

This is a well written and timely description of a novel initiative developed to introduce trainee healthcare professionals to concepts and situations that are sometimes considered challenging. It highlights well the Irish context and the gravity of problems we have where social exclusion and health care concerned.

Suggestions:
- Consider person-centred language throughout e.g. people who are homeless, people who are socially excluded http://www.homelesshouston.org/homelessness-101-person-centered-language/
- The line "Homeless and other socially excluded people represent a distinct and significant population" could be altered - this gives the impression they are quite a homogenous group when we know this is not the case.
- Consider referencing Allport's contact hypothesis when describing purposes of the placement https://www.sciencedirect.com/topics/psychology/contact-hypothesis.
- For Table 1 the 'key considerations' - it is unclear to me if these are your findings or if they have been gleaned from existing literature.
- Table 1 - the term 'peer placement' is confusing.
- Table 1 - in the 'reason' column, can these be referenced to add weight?
- Table 2 - very nice to include this.

Is the rationale for the Open Letter provided in sufficient detail?
Yes

Does the article adequately reference differing views and opinions?
Yes

Are all factual statements correct, and are statements and arguments made adequately supported by citations?
Yes

Is the Open Letter written in accessible language?
Yes

Where applicable, are recommendations and next steps explained clearly for others to follow?
Yes

Competing Interests: I have given some advice to medical trainees & students conducting research with Dr Cliona Ni Cheallaigh.

Reviewer Expertise: Primary care, inclusion health.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 25 Sep 2019

Julie Broderick, Trinity College Dublin, the University of Dublin, Dublin, Ireland

Dear Dr. O'Donnell,
We would like to thank you for your very insightful and valuable comments. We will certainly take those comments on board and very much appreciate your time in reviewing this article.
Kind Regards,
Julie Broderick and co-authors

Competing Interests: Nil