Study protocol

Version 3

Study title: The impact of the environment on engagement in therapeutic activities of service users in an acute mental health unit

Background to the study

This research originated after two successful collaborative studies between an occupational therapy faculty at a university and the occupational therapy team at an acute mental health unit. Those studies looked at service users' perspective on the occupational therapy services they were receiving and how it contributed to their recovery. The studies found that service users' participation in occupational therapy provided them with something meaningful to do, relieved from a "tiny sort of world" (W. Bryant et al., 2016, p. 609) of the ward and illness and that recovery on the acute ward to them was not all about medication and monitoring (Wendy Bryant et al., 2015; W. Bryant et al., 2016). A recommendation arose that future research should look at how the environment influences service user's engagement in similar settings. A different acute mental health unit within the same NHS Trust agreed to collaborate with the university faculty to take this idea forward and constituted an advisory group to oversee the study. This idea was converted into a PhD funded position at the University of Essex, hence this proposal. This study has been developed in collaboration with faculties and a student from University of Essex (UoE), Colchester and staff from Central and North West London NHS Foundation Trust (CNWL) specifically, Gordon Hospital – Vauxhall. The flowchart, Appendix XI depicts the stakeholders involved.

For the outline of this proposal, the acute mental health care is introduced with factors influencing service users' participation. The environment is looked at from the concept of therapeutic landscape and studies that have been done in mental health in this regard. The aims and research questions for this study are identified leading to the research methods and data collection process with the measures to be used. The study participants, service users' involvement, recruitment processes and ethical considerations are discussed. Potential benefits and risks of the study to participants and myself are explored. Finally, the analysis and dissemination of the findings are touched on.

Introduction

The care of service users' experiencing psychiatric emergencies (Crisp, Smith, & Nicholson, 2016) continue to occur in dedicated acute inpatients wards despite emphasis on community care within the National Health Services (NHS); and the setting up of services like crisis resolution and home treatment (CRHT) to support them in their homes. The acute mental health care services continue to be relevant service within the overall framework for mental health care in the United Kingdom (UK). Its' unique characteristics of having service users mostly unwell at the point of admission, providing short stay on the wards and emphasis on managing service users' risks and violence using medication, sometimes lead to little opportunity for service users to engage in therapeutic activities that also contributes to their recovery (Bowers, 2005; W. Bryant et al., 2016; Gilburt, Rose, & Slade, 2008; Ikiugu, Nissen, Bellar, Maassen, & Van Peursem, 2017; Mullen, 2009; Sims, 2014).

The Care Quality Commission (CQC) survey in 2009 reported that, thirty-five to fifty-four percent (34% - 54%) of people admitted on the acute mental health wards complained that, there were few activities to engage in on the ward during their stay. Service users engaging in less activity while on admission may be due to the severity of their illness and needing more support to engage in activity (Bowers, 2005; Medalia, Dorn, & Watras-Gans, 2000). Csipke et al. (2014) however, found that service users' ability to engage in activities was not related to the severity of their illness. This finding emerged from a study that looked at the state of care in the acute mental health wards fifty years after deinstitutionalization. The dynamics of the environment of the acute mental health care have also been cited as contributing to the limited engagement of service users in activities (Curtis et al., 2013). From an occupational therapy perspective, a profession concerned with what people do and how it contributes to their health, a transactional relationship has been established between the person, the environment and occupation (Kielhofner, 2008; Law, 2002). Thus, an effect on one of these elements influences the other two.

Literature review

The environment of the acute mental health units are of concern to service providers and new hospitals have been built to replace some old facilities (Curtis, Gesler, Fabian, Francis, & Priebe, 2007; Curtis et al., 2013). Staff working in acute mental health facilities spend lot of time within that environment and for most, especially in older facilities, the environment was designed and built many years before they started working in them. This, not withstanding, they have to provide care and support to promote recovery of their service users irrespective of limitations and challenges. Purpose-built new facilities may also come with their own challenges as to how they impact on service provision. Despite the focus on the physical infrastructure used for provision of mental health services, others have studied the environment from the concept of therapeutic landscape. Williams (1999 p. 2) defined therapeutic landscape as; "those changing places, settings, situations, locales, and milieus that encompass the physical, psychological and social environment associated with treatment or healing". From this perspective, the environment is explored holistically as identified by Gesler (1992) as the natural and built, symbolic and social environment that contributes to a healing sense of place.

From the literature, researchers have explored the relevance of the environment in mental health care. Most of them are qualitative studies with small number of participants (Cohn et al., 2010; Gahnström-Strandqvist, Josephsson, & Tham, 2004; Harrison, Angarola, Forsyth, & Irvine, 2016; Rebeiro, 2001). Others have looked at the inpatient psychiatric unit to identify elements that make it therapeutic landscape; an environment believed to promote healing and recovery. These studies have explored the concept of therapeutic landscape in terms of its components. Studies reporting on the physical environment components of the therapeutic landscape constitute elements of technical safety (Curtis et al., 2013) and what needs to be included in the design (Muir-Cochrane, Oster, Grotto, Gerace, & Jones, 2013; Sheehan et al., 2013; Shepley et al., 2017). For the aspect of social environment, Fortune and Fitzgerald (2009) identified staff relationship on the acute psychiatry unit as major elements that facilitate participation on the ward. In this Australian ethnographic study, the challenges of interdisciplinary collaborations were investigated through interviews and observation of occupational therapists and nurses. Interdisciplinary respect was identified as the key elements to collaboration.

So far, a gap identified in the review is that no study has been conducted in mental health that specifically looked at the link between the environment of the acute inpatient unit, service user's participation from an occupational therapy perspective and the concept of therapeutic landscape. To explore these issues of the environment of acute mental healthcare holistically, this study will investigate from staff and service users perspective, how the environment of the acute unit support or hinders participation of service users. All these will be explored through the lens of viewing the acute mental health unit as a therapeutic landscape, a setting that promotes healing and comprises of a physical, social and symbolic environment. The following research aims and questions have been set for this study.

Aims of the study

- To explore the environment of the acute mental health unit from staff and service user perspective.
- To explore staff and service user perspective on how the ward environment affects mental health service user engagement in therapeutic activities.
- To examine the potentials of the acute mental health environment in contributing to the health and wellbeing of service users.

Research questions

- What are service user and staff views on the acute mental health care environment in terms of how it promotes engagement in therapeutic activities?
- What are service user and staff views on the relationships that exist within the acute mental health unit?
- What are service user and staff views on the environment of the acute mental health care unit in terms of how it promotes recovery and healing?
- What are service user and staff views on the acute mental health care environment in terms of how it promotes safety, privacy and dignity?

Design and Methodology

This study will be in two components in order to give opportunity to include most of the targeted population as possible and to address the aims set. Participatory Action Research (PAR) will be conducted using mixed method approach of data collection including surveys, field notes, photo-elicitation and formation of a research group to be involve in a cycle of action and reflection (Kemmis & McTaggart, 2008; Kindon, 2010; Wilding & Galvin, 2015). This is to help improve trustworthiness of the study through triangulation (Bryman, 2008).

Module one (1) of the study will involve a survey where questionnaires (Appendix I and Appendix II) will be given to staff and service users to gather their views on the environment; this is to address the first aim on exploring service users and staff views on the environment of the acute mental health unit. Matthew and Barron (2015) used survey as a method of data collection in their participatory action research on help-seeking behaviours of self-defined ritual abuse. In the study, the questionnaire included items on participant's information with closed and open ended questions. This method is convenient in reaching out to larger participants (Tacchi et al., 2008).

Module two (2) will be composed of two parts:

a) The Participatory Action Research (PAR) group. The PAR is used with the aim of production of knowledge and to take action directly useful to a group of people through research (Reason, 2004).The PAR group of clinical staff from the hospital will collaboratively work with me and a service user co-facilitator to identify an overall social issue or problem of the environment that impacts on service user's engagement in therapeutic activities. The members of this PAR group will be seen as co-researchers and that the research will be done *with* them and not *on* them (Kemmis & McTaggart, 2008).

b) Semi-structured interviews will be conducted with key staff in a range of professions and grades to obtain their in-depth views of the environment in this acute mental health unit. The staff will be selected so as to represent varied perspectives and will not have participated in the PAR group. We anticipate including one executive director, unit matron, senior therapists, and will conduct a minimum of 6 and a maximum of 10 interviews. The semi-structured interview schedule will be developed by the study team and informed by the findings and issues raised in the preceding PAR groups. The interviews will be conducted face to face preferably, but telephone will be offered as an option given the time limitations of senior staff. The interviews will be digitally recorded, and participants will be asked to give written informed consent.

Study site

Data for the study will be collected in one site in central London, specifically the Gordon Hospital, which is part of Central and North West (CNWL) NHS Foundation Trust. The Gordon Hospital is an adult acute mental health inpatient facility with three mixed gender wards namely Vincent, Ebury and Gerrard on separate floors of a six level storey building. The hospital has fifty-five (55) beds with an average of eighteen (18) beds on each ward. There is a basement where therapy services are provided for service users and a roof garden on the floor six where some group sessions are held. There is also another facility of CNWL (190 Vauxhall Bridge Road) closed by with meeting rooms where meetings for the PAR group will be held.

Inclusion criteria for recruitment

For the module one;

- All clinical staff working at the Gordon hospital will have the opportunity to participate.
- Service users with capacity to consent will have the opportunity to participate
- The service users should have been on admission for at least seven days to be settled on the ward and to have had some experiences of the environment.
- Service user's with the ability to read or understand the English language when explained to them.

The inclusion criteria for selecting staff to join the PAR group for the module two are that; they should:

- be clinical staff, registered or non-registered including doctors, mental health nurses, occupational therapists, psychologists, associate practitioners, art therapists, peer support workers (ex-service users) and support workers with active responsibility for delivering care and treatment to service users at the hospital,
- either facilitate, support or provide therapeutic activities and group sessions to service users,

- have worked at the Gordon Hospital for a minimum of three months. This is because - the study focus is on those personnel who have had experience working at the hospital and understands how the hospital operates.

Exclusion criteria for recruitment:

Module one of the study:

- Service users unable to give consent.
- Service users who cannot read or understand verbal explanation in English
- Non-clinical staff e.g. administrative staff

Module two of the study:

- Agency or bank staff
- Non-clinical staff e.g. administrative staff
- Students – including nurses, doctors, occupational therapists, psychologists.
- Hospital based social workers and pharmacists will not be recruited for this part of the study as they do not directly provide activities for service users' engagement.

Study participants and sampling

Participants for module one of this studies include all clinical staff and service users with the capacity to give consent. Information gathered from the research site, in the course of putting together the study protocol indicated that, on average, thirty service users, who had been on admission for seven days or more are discharged from the hospital each month. This study does not seek to recruit adequate powered number based on the information provided by the research site due to budget constraint. However, a maximum of twenty-five service users from the three wards will be sampled to ascertain their views through completion of the study questionnaire.

A total of forty-five (45) clinical staff, twelve from each of the three wards (12 X 3=36) and nine (9) from the therapies department are expected to complete the survey. This is based on total clinical staff of sixty personnel. A study by Sweeney et al. (2014) recorded a total of 72% response rate from the eligible inpatient ward group. This study proposes to obtain similar response rate or even better for the participants, over the period of data collection.

Module two of this study will recruit a total of between six and ten clinical staff working on any of the three wards and the therapy unit to constitute the participatory action research (PAR) group. Of these clinical staff, the criteria to be used for those who can participate in this study are those who facilitate, support or directly provide therapeutic ‘activities’ and group sessions for service users. They can be registered or non-registered and will come from the following potential groups: doctors, mental health nurses, occupational therapists, psychologists, associate practitioners, art therapists, peer support workers (ex-service users) and support workers.

Purposive sampling techniques (Boswell & Cannon, 2014) will be used to constitute the members of the PAR group taking into consideration profession, grade, gender, age and ethnicity to get a representative sample of the clinical staff. Individual interviews will also be conducted with selected senior staff from the hospital and wider organisation who are potentially key informants. This sample may include senior medics, ward managers, matron, professions’ team leads and at least one executive director.   We will aim to recruit between 6 and10 participants for this component of the study.

Service users’ involvement

Service users’ involvement in research in mental health has been found to be effective especially in studies that the lived experiences of people are explored (Makdisi et al., 2013). In this research, service users were consulted in the design of instrument to be used for data collection. Their involvement in this research had been and will also include;

- One of them in the core advisory group that oversees the study.
- Having a service user co-facilitator, with experience in conducting research to be recruited to assist with the data collection and analysis. This service user will be recruited through “The Advocacy Project” attached to the hospital. The Advocacy Project is a service user involvement group for those currently on admission and those discharged to be involved in services.
- Service users recruited as participants to complete the questionnaires to gather their views on what they think of the environment where they are receiving care.

Measures (Scales)

Instruments to be used to assist with data collection in the questionnaire are;

- A modified version of the Ward Atmosphere scale by Moss 1974 (Manual, 1974) the shortened version with 40 items will be used. This is a standardized tool that measures participants' perception of the ward environment in ten areas of; involvement, support, spontaneity, autonomy, practical orientation, personal problem orientation, anger and aggression, order and organisation, program clarity and staff control. The modifications made included; changing 'program' in some cases to 'ward' to be fit for the United Kingdom context, using 'service users' instead of 'patients' and using staff instead of nurses or doctors. Each item is followed by true or false. The scores range from zero to one and items listed as true is scored one point if marked 'true' and items listed as false is scored one point if marked as 'false' by the participant. There is a subscale score for each of the ten items.
- Satisfaction with the design and features of the hospital will be assessed using a check list of items developed by the research team for this study, and led by the author, based on the work of three previous studies (O'Connor et al., 2012; Sheehan et al., 2013; Shepley et al., 2017), that looked at elements to be included in the design of psychiatric facilities. The sixteen (16) items representing features of the physical environment of the hospital will be rated on a five point scale of one (1) representing extremely dissatisfied to five (5) being extremely satisfied.
- Activities recording schedule using service user experience of activities on the wards. This measure is replicated from a previous study (Protected Engagement Time study, IRAS reference: *213672*) and will record activities in which participants have engaged on the wards over the preceding 7 days, the frequency with which they have engaged in them, and the value they place on that activity.
- We will include two open ended questions on whether participant thinks the environment has any impact on what service users do on the ward and how the environment can be improved.

Recruitment and informed consent

The study will be presented at staff meetings in the Gordon hospital to explain what the study is about, who can participate, what participation involves, any potential risks and benefits. Proposed meetings include: ward planning meetings attended by staff and service users, ward business meetings and ward handover attended by staff, therapies review meetings attended by occupational therapists, psychologists and art therapist, meetings of specific professions (including medical staff only, OT staff only, nursing staff only etc.) and senior staff meetings.

For module one, the survey component where questionnaires will be given to clinical staff and service users, participant information sheets (PIS) (Appendix IV) and questionnaires (Appendix II) will be given to staff after the study has been presented to them. Extra copies of these will be left in an envelope on the wards for those who may not be present. Consent to participating in the study will be implied by the staff returning the completed questionnaires. For service users, ward staff will assess for those with capacity to give consent and meet the inclusion criteria. Service users will be given the PIS (Appendix III) in the first instance by ward staff. If they would like me to contact them about the study, they will be encouraged to complete the tear-off slip at the bottom and leave it in a box that I will provide on the ward. I will then meet the service user on the ward to assess their capacity to give consent to participate in the study. Service users capacity will be continuously assessed throughout their participation in the study. They will be informed if they would like assistance or support in completing the questionnaire; this can be provided by a researcher on the study with experience of using mental health services. If they require this support I will liaise with the service user researcher to arrange a convenient time for them to meet. Service users who wish to complete the questionnaire on their own will be allowed to do so.

For module two, the participatory action research component, where clinical staff will come together to engage in a cycle of action and reflection to come up with recommendations, staff interested in participating can contact me directly on the ward, by phone or by email. I will encourage staff to contact me within two weeks of presentation to them to express interest to participate. A maximum number of 10 and a minimum of 6 staff will be recruited for the group. They will be asked to attend each of the 5 PAR meetings so that the group membership is stable. If more than 10 staff express interest, I will endeavour to purposively select staff who are representative of the wider clinical staff team in terms of grade, ethnicity, gender and profession, where possible (Wilding & Galvin, 2015). Selection of staff with similar characteristics will be made by ‘drawing names from a hat’ so that the process is transparent and fair. I will meet individually with those staff who volunteered to participate but were not finally selected for membership of the group. This is to give them an opportunity to discuss any feelings which may arise from this process.

On the other hand, if too few staff volunteer to participate in the study, I will liaise with the ward managers and team leads’ to ask them to suggest staff that I can approach individually to ask if they will like to participate.

Once the recruitment for the participatory action research group is completed and the four months set for the completion of the questionnaire, an initial analysis will be conducted to identify those staff that needs to be contacted for interviews. This will also be discussed with the PAR group members to help identified these key informants.

Timescale: Broad timetable for the stages of the research

The data collection period will span approximately ten months from March 2018. The key events have been presented in the table below;

Months **Events**	Mar	Apr	May	Ju	Jul	Aug	Sep	Oct	Nov	Dec
Presentations at meetings	■	■								
Recruitment of staff and service users to module 1		■	■	■	■					
Given out of questionnaires and collection		■	■	■	■					
Recruitment of staff to form PAR group		■	■							
Workshop for PAR group			■							
PAR group meetings				Cycle 1		Cycle 2		Cycle 3		Analysis of result 4
Interviews with key informants						■	■	■	■	■
Analysis of results from Module 1					■					
Dissemination of the findings						Interim finding				Final results

What happens after participants are selected in module two?

I will create a group emailing list including staff participants, myself the service user co-facilitator. I will communicate information such as documentation and planning for meetings through email.

The first meeting of the staff participants will be scheduled for three hours within a month after recruitment. They will be asked to attend the groups in their own time, and will be reimbursed their transport cost and a nominal thank-you token. Release from clinical duties for groups of NHS staff to participate in research for a duration of this length is currently not feasible, without considerable recompense to the employing organisation to ensure the safety and treatment standards of service users are maintained at acceptable levels. The study team, who have considerable experience in conducting large scale research with staff and service users in acute mental health services in England, have carefully taken this into account.

This will be an orientation meeting for the research group, to discuss the aims and objectives of the research and what is expected of them as participants. A training on Participatory Action Research (PAR) will be provided to help them be familiar with it and also to help them effectively participate in the study. This session is proposed to be delivered by Dr Simone Coetzee, a lecturer at the University of Essex, with experience in conducting participatory action research. Participants will be given certificate of attendance, which the research team will suggest can be used to enhance their professional portfolio as evidence of Continuous Professional Development (CPD). The research group will agree on the next meeting date possibly within a month to begin the process of data collection.

How long will participants be expected to be in the study

- Completion of the questionnaire is expected to take between ten to fifteen minutes for staff and thirty to forty-five minutes for service users.
- The staff PAR group participants will be requested to be available to participate in the research over an eight months period.
- There will be five meetings of the PAR group over the eight months period, one orientation meeting and four meetings for the data collection and analysis. Meetings for the data collection will be held once in every two month.

- A maximum of four hours and minimum of two and half hours is the proposed time for staff to be present for each cycle of the PAR group meeting.
- Staff will be asked to commit between thirty minutes to one hour of their own time in advance to reflect and put together a case study or scenario related to the environment where they work, that they intend to share with the PAR group.
- Staff participants may be asked by the researcher to do twenty (20) minute presentations at ward or team meetings to share recommendations from the research and plan with the team how it can be implemented.

Data collection and analysis

For module one, I will be recruiting staff by attending their scheduled meetings to discuss the study with them, provide them with information sheet and hand out questionnaires for completion or a softcopy of the questionnaire to be email to staff who will like this option and provide their email. Participants will be given the option to complete the questionnaire and hand it back to me or agree on a time that I can come back for it.

With service users, they will be given the questionnaire after completing the tear-off slip to be contacted by the researcher to participate in the study. They will have the option of completing the questionnaire on their own or be supported by a service user researcher to complete the questionnaires. They can also request support from any other person of their choice, such as other staff member, friend or family member.

For module two of the study, after forming the research group and completing of the induction, a date will be set for the first meeting. At this meeting to be facilitated by myself and a service user co-facilitator;

- The concept and meaning of the environment will be explored. A word cloud will be used to generate key terms used. This will be repeated at the start of each cycle to monitor changes in participants' understanding of the environment.
- Findings emerging from the data from the questionnaires will be further explored by the PAR group at the first cycle meetings.
- The aims of the study will be explained and together, the group will be asked to collaboratively identify factors within the environment that facilitates or inhibits service users' engagement in therapeutic activities.

- Group members will be asked to prioritize these inhibiting factors and select the top three that they will like to work on to effect change.
- The group actions and reflections will continue to arrive at possible recommendations.
- The group members will be asked to come along with pictures of physical spaces of the hospital they will like to reflect on during the second cycle

These discussions will be audio-recorded using a voice recorder as well as field note taken by me.

The second and third meetings will follow similar patterns depending on problems identification and recommendation of actions to be taken. Other data to be gathered will include written reflections and field notes gathered by me. I will critically reflect on the various stages of the study as part of the data collection to ensure data generated aims towards answering the research questions and aims of the study (Swantz, 2008).

Clinical staff participants will be involved in simple survey responses (for example counting how many locked doors are passed through in a day's work or the number of other professionals involved in sessions with service users). Photographs of spaces where people work and other artefacts /documents related to staff working environment at the acute unit will also be used to facilitate the discussions of the PAR group. The decision to bring in such items will be dependent on the staff participants and they are to ensure that, these items have no service user identifiable information.

These processes for data collection have been outlined for the purposes of approval by a NHS research ethics committee to commence the study. However, as the study progressed, and in line with participatory action research method, the studies focus may change. When such instances occur, additional approval from the ethics committee will be sought to continue with the study. The fifth and final meeting of the PAR group will be pulling all the data together and having a look at the findings emerging from it to complete the cycle of data collection.

Data Analysis

The quantitative data generated from the survey will be analysed using Statistical Package for the Social Sciences (SPSS). For the qualitative data, the audio-recorded information from the discussions and the interviews will be transcribed verbatim. Then thematic analysis (Bryman, 2008) will be conducted by me in collaboration with the staff participants in the PAR group to identify key themes emerging from the study. There will be further analysis by me using the software Nvivo version 11 to consolidate the findings. The final analysis of the data will be to engage in a process of constant comparative analysis to generate a theory from the research (Neuman, 2006).

Potential risks and burdens for research participants and how this will be minimized

The risks associated with participating in Module one for staff completing the questionnaire is very low. Should any issues arise for them which they wish to discuss with me, they will be encouraged to do so, and if they require further support they will be encouraged to speak with their line manager or occupational health.

Although not likely, there is a risk that service users may become distressed when completing their questionnaire. Should this happen, they will be encouraged to speak with their allocated nurse on the ward or another clinician with whom they have a therapeutic relationship. If I feel that they require immediate support I will alert clinical staff to provide assistance. Service users will be assured that their care will not be affected in any way if they do not participate, or if they withdraw from the study at any point. However, if they are harmed due to someone's negligence, then they may have grounds for a legal action but they may have to pay for it. Regardless of this, if they wish to complain about any aspect of the way they had been approached or treated during the course of this study, they can first complain to my academic supervisor. If they are not fully satisfied, they can request for the contact of my sponsor from the University of Essex to escalate their concerns. The normal National Health Service (NHS) complaints mechanisms may also be available to them.

Staff will also be assured that their decisions to participate in the study will not affect their employment. There is also a small risk that staff can become distressed during the PAR groups. They will again be encouraged to seek support from their peers, manager or occupational health. The group participants can also provide support to each other in these situations. As the facilitator, I am also an experienced mental health professional and may offer support when the need arise.

These issues will be addressed by making participants aware at the beginning of the studies that such things are bound to happen. It will be stressed that their participation in the study is voluntary and that if at any point they feel burdened or distressed, they can withdraw from the study. Those who may need additional support following the group session will be advised to use existing facilities within the trust like having supervision and/or contacting occupational health department for support.

Potential benefit of the research to the participants

Service users will be reimbursed an amount of £10.00 in lieu of time spent in completing the questionnaire However, there will be no payment for staff completing the questionnaire. Staff participating in the PAR will be given a token payment of £100 per each of the five 4 hour sessions for their time, as this participation will be undertaken outside of their working hours. The rate of payment for a junior nurse to undertake a bank shift is around £130. We feel that the payment of £100, whilst less than the payment for their clinical work, might be an adequate token to repay them for their time. We will also reimburse any travel costs they incur. Indirectly, we hope the completed research may in future have a positive influence service provision. The study will also offer staff the opportunity for their voices to be heard and the process of participating may facilitate reflection and a changed perspective on their work environment. There is an indirect potential benefit from the completed research which may in future positively influence the working environment that they or staff elsewhere experience.

Potential risk for the researcher

The research setting is an adult acute mental health unit that have service users very unwell, at risk to themselves and to others. I will be giving out and collecting questionnaires on the wards and at the therapy units. I may come across incidence of violence, aggression and psychological distress from service users. The service user researchers may also be exposed to similar situations. This has been addressed by going through the Central and North West London induction for all staff prior to working on the wards, which include a section on how to safely breakaway. The service user researcher will be required to undertake this mandatory induction when recruited.

The service researchers and I will be supervised and supported by the ward staff on each visit for data collection. We will also go through a safety induction on each visit for data collection to be aware of any risk and be familiar with how to raise alarm on the unit. Sessions to complete questionnaires with service users will be conducted in safe spaces within the unit and other staff will be made aware of our where-about on the unit all the time.

It is also anticipated that, a service user, who may not meet the inclusion criteria to participate in the study may express interest to be involve in the study to get the £10.00 or there may be more service users on the wards willing to participate once the targeted number of twenty-five service users has been reached. When these occur, it will be clearly explained to them why they cannot participate in the study.

Ethical consideration

This study will seek ethical clearance from the University of Essex Research Ethics Committee and approval from Health Research Authority of the National Health Services, UK. The participants will be provided with information sheet about the study for both modules and a consent form for module two to sign once they agree to participate in the study. They will be assured of confidentiality of any information provided and that their participation is voluntary and can withdraw from the study at any time. The staff participants will also be advised to adhere to the trust policy to protect the safety and dignity of service users during the group discussions.

Data storage

The personal data for service users will comprise gender, age, ethnicity and whether detained under the Mental Health Act. For staff, personal data will comprise gender, age, ethnicity, profession, grade and duration of employment. Access to these data will be restricted to my two academic supervisors and me. Personal data (list linking names of participants to study numbers) will be stored for the duration of the study only and will be kept in a locked filing cabinet or in a passworded file on one of the

University of Essex computer accessible only by me. Personal data will not at any point be kept on laptops. Non-essential data will be removed from laptops as soon as it is transferred to an office computer. Audio recorded data and other confidential information gathered from staffs and service user including completed questionnaire will be kept securely by me at the University of Essex during the period of research and handed over to my academic supervisor upon completion of the project. All information gathered will be treated in accordance with United Kingdom Data protection Act 1998.

Dissemination of the findings

Findings from this study will be shared with members of staff at the Gordon hospital through presentations and at management meetings at the Central and North West London NHS Trust. The PAR group collaboratively will design a leaflet to communicate the findings from this research. It is proposed that, the study will also be presented at conferences and eventually be published in peer reviewed journals.

REFERENCES

Boswell, C., & Cannon, S. (2014). *Introduction to nursing research*: Jones & Bartlett Publishers.

Bowers, L. (2005). Reasons for admission and their implications for the nature of acute inpatient psychiatric nursing. *J Psychiatr Ment Health Nurs, 12*(2), 231-236.

Bryant, W., Andrews, C., Birken, M., Davidson, B., Gajoram, G., & Nicholson-Jones, D. (2015). " You know people can get better." Experiences of occupational therapy in an acute mental health unit through the camera lens.

Bryant, W., Cordingley, K., Sims, K., Dokal-Marandi, J., Pritchard, H., Stannard, V., & Adamako, E. (2016). Collaborative research exploring mental health service user perspectives on acute inpatient occupational therapy. *British Journal of Occupational Therapy, 79*(10), 607-613. doi: 10.1177/0308022616650899

Bryman, A. (2008). *Social research methods*: Oxford university press.

Cohn, E. S., Lew, C., Hanauer, K., Honaker, D., Roley, S. S., & Delany, J. V. (2010). Occupational therapy's perspective on the use of environments and contexts to support health and participation in occupations. *American Journal of Occupational Therapy, 64*(6), S57-S69.

Crisp, N., Smith, G., & Nicholson, K. (2016). Old Problems, New Solutions–Improving Acute Psychiatric Care for Adults in England (The Commission on Acute Adult Psychiatric Care, 2016).

Csipke, E., Flach, C., McCrone, P., Rose, D., Tilley, J., Wykes, T., & Craig, T. (2014). Inpatient care 50 years after the process of deinstitutionalisation. *Social psychiatry and psychiatric epidemiology, 49*(4), 665-671.

Curtis, S., Gesler, W., Fabian, K., Francis, S., & Priebe, S. (2007). Therapeutic landscapes in hospital design: a qualitative assessment by staff and service users of the design of a new mental health inpatient unit. *Environment and Planning C: Government and Policy, 25*(4), 591-610.

Curtis, S., Gesler, W., Wood, V., Spencer, I., Mason, J., Close, H., & Reilly, J. (2013). Compassionate containment? Balancing technical safety and therapy in the design of psychiatric wards. *Soc Sci Med, 97*, 201-209.

Fortune, T., & Fitzgerald, M. H. (2009). The challenge of interdisciplinary collaboration in acute psychiatry: Impacts on the occupational milieu. *Australian Occupational Therapy Journal, 56*(2), 81-88.

Gahnström-Strandqvist, K., Josephsson, S., & Tham, K. (2004). Stories of clients with mental illness: The structure of occupational therapists' interactions. *OTJR: Occupation, participation and health, 24*(4), 134-143.

Gesler, W. M. (1992). Therapeutic landscapes: medical issues in light of the new cultural geography. *Soc Sci Med, 34*(7), 735-746.

Gilburt, H., Rose, D., & Slade, M. (2008). The importance of relationships in mental health care: A qualitative study of service users' experiences of psychiatric hospital admission in the UK. *BMC Health Services Research, 8*(1), 92.

Harrison, M., Angarola, R., Forsyth, K., & Irvine, L. (2016). Defining the environment to support occupational therapy intervention in mental health practice. *British Journal of Occupational Therapy, 79*(1), 57-59.

Ikiugu, M. N., Nissen, R. M., Bellar, C., Maassen, A., & Van Peursem, K. (2017). Clinical Effectiveness of Occupational Therapy in Mental Health: A Meta-Analysis. *American Journal of Occupational Therapy, 71*(5), 7105100020p7105100021-7105100020p7105100010.

Kemmis, S., & McTaggart, R. (2008). Strategies of qualitative inquiry. *Strategies of Qualitative Inquiry, 3*, 271-330.

Kielhofner, G. (2008). *Model of human occupation: Theory and application*: Lippincott Williams & Wilkins.

Kindon, S. (2010). Participatory action research approaches and methods : connecting people, participation and place (3rd ed.): Oxford University Press.

Law, M. (2002). Participation in the occupations of everyday life. *American Journal of Occupational Therapy, 56*(6), 640-649.

Makdisi, L., Blank, A., Bryant, W., Andrews, C., Franco, L., & Parsonage, J. (2013). Facilitators and barriers to living with psychosis: an exploratory collaborative study of the perspectives of mental health service users. *British Journal of Occupational Therapy, 76*(9), 418-426.

Manual, M. R. W. A. S. (1974). Palo Alto (Calif): Consulting Psychologists Press.

Matthew, L., & Barron, I. G. (2015). Participatory action research on help-seeking behaviors of self-defined ritual abuse survivors: a brief report. *Journal of child sexual abuse, 24*(4), 429-443.

Medalia, A., Dorn, H., & Watras-Gans, S. (2000). Treating problem-solving deficits on an acute care psychiatric inpatient unit. *Psychiatry research, 97*(1), 79-88.

Muir-Cochrane, E., Oster, C., Grotto, J., Gerace, A., & Jones, J. (2013). The inpatient psychiatric unit as both a safe and unsafe place: Implications for absconding. *Int J Ment Health Nurs, 22*(4), 304-312. doi: 10.1111/j.1447-0349.2012.00873.x

Mullen, A. (2009). Mental health nurses establishing psychosocial interventions within acute inpatient settings. *Int J Ment Health Nurs, 18*(2), 83-90.

Neuman, L. W. (2006). Social research methods: Qualitative and quantitative approaches.

O'Connor, M., O'Brien, A., Bloomer, M., Morphett, J., Peters, L., Hall, H., . . . Munro, I. (2012). The environment of inpatient healthcare delivery and its influence on the outcome of care. *HERD: Health Environments Research & Design Journal, 6*(1), 104-116.

Rebeiro, K. L. (2001). Enabling occupation: The importance of an affirming environment. *Canadian Journal of Occupational Therapy, 68*(2), 80-89.

Sheehan, B., Burton, E., Wood, S., Stride, C., Henderson, E., & Wearn, E. (2013). Evaluating the built environment in inpatient psychiatric wards. *Psychiatric Services, 64*(8), 789-795.

Shepley, M. M., Watson, A., Pitts, F., Garrity, A., Spelman, E., Fronsman, A., & Kelkar, J. (2017). Mental and behavioral health settings: Importance & effectiveness of environmental qualities & features as perceived by staff. *Journal of Environmental Psychology, 50*, 37-50. doi: 10.1016/j.jenvp.2017.01.005

Sims, K. L. (2014). *The acute setting* (W. Bryant, J. Fieldhouse & K. Bannigan Eds. 5th ed.): Elsevier Health Sciences.

Sweeney, A., Fahmy, S., Nolan, F., Morant, N., Fox, Z., Lloyd-Evans, B., . . . McCabe, R. (2014). The relationship between therapeutic alliance and service user satisfaction in mental health inpatient wards and crisis house alternatives: a cross-sectional study. *PLoS One, 9*(7), e100153.

Tacchi, J. A., Fildes, J., Martin, K., Kiran, M., Baulch, E., & Skuse, A. (2008). Ethnographic action research: training handbook.

Wilding, C., & Galvin, D. (2015). *Action research: exploring occupation and transforming occupational therapy* (S. Nayar & M. Stanley Eds.): Routledge.