**Title: Interprofessional Interactions Study.**

***Abstract.***

This small scale study explored the interprofessional interactions that occur in practice between students and other professionals.

The students completed a one week structured diary of their contact with other professionals, using these two proximity categories: Proximity 1 – within speaking distance but no interaction with the other professional or Proximity 2 – having direct interaction with the other professional.

Eight students participated in the study and 31 different professionals were listed. The results varied between student from different year groups and on different courses. Each student recorded different experiences and there was a large variety in the interprofessional interactions that were recorded.

The data collected will allow real experiences from practice to be used in interprofessional learning sessions and the results of this study can be used to illustrate to students which professional groups they are likely to encounter in practice.

***Key words.***

Interprofessional education

Health and social care education

Communication

Interactions

***Introduction.***

Interprofessional learning (IPL) has been in place in Higher Education since 2000 (Leathard, 2003). The purpose of IPL is to improve Interprofessional collaboration and the quality of care provided to patients and service users (CAIPE, 2008). IPL came about as a result of the NHS Plan (DH, 2000), The Bristol Royal Infirmary enquiry (2001) and the Victoria Climbie report (DH, 2003). The quality of care to service users within the NHS has always been an important issue. Lord Darzi’s report (DH, 2008) highlighted this and since the publication of the Francis report (Francis, 2013), the quality of care has become even more of a key issue.

There is very little written about the actual interactions that occur between professionals in the health and social care practice setting. As a result, students on health and social care courses often find it difficult to identify which other professionals they will interact with and work with in practice settings (Wicker, 2011). This makes it difficult for students to understand the relevance of IPL and link theory to practice. Students need to be enabled to see how IPL can inform their practice and to understand how many different professionals they will be working with in the practice environment.

The results of this study will prove beneficial for the future delivery of interprofessional education and also inform students about the different professionals they will encounter in practice (Shaw et al., 2005; Xyrichis and Ream, 2008; Wicker, 2011). It is also anticipated that this study will assist the students in contextualising their learning, as real examples could be drawn upon during the teaching sessions.

***Aim.***

To ascertain the range of professionals that students work with in different practice settings.

***Objectives.***

* To record the proximity that different professionals have to one another and how closely they work together in practice
* To examine the differences in interprofessional interactions between different professional groups
* To map the different professionals that work together in different workplaces to assist students.

***Literature review.***

IPL has been in place in pre-registration health and social care education in UK universities since 2000 (Leathard, 2003). However, the long term impact of IPL on interprofessional practice is difficult to quantify (Hammick et al., 2007; Cooper et al., 2011). Reeves et al. (2010) in their systematic literature review of IPL concluded that it was not possible to draw generalizable inferences about the effectiveness of IPL. It is however acknowledged that IPL should have a positive effect on practice and the way in which health and social care professionals work together.

IPL should improve the safety of service users by improving collaboration and communication. Both educators and practitioners agree that interprofessional working is important and that the service user’s care should be paramount. Sharing of expertise is therefore a crucial part of interprofessional working (Barr and Low, 2002).

Interprofessional working and good patient care can be enhanced through good communication between professionals (Shaw et al., 2005; Suter et al., 2009; Bajnok et al., 2012). Burniss and Kelly (2008) suggest that people who work together on a regular basis as part of a team naturally learn from one another therefore learning becomes transformational and the provision of care for service users becomes much more holistic in its approach.

Wagter et al. (2012) outline the importance of learning from other professionals by personal experience. They explain that this occurs mostly by informal day-to-day interactions in practice. Wagter et al. (2012) also point out that in order to understand the interprofessional learning that takes place between professionals we need to examine the relational patterns between professionals, i.e. their network structure. All practice placements have the potential for IPL. However, these opportunities are not always clearly articulated or celebrated, instead there are pockets of ad-hoc informal learning (Lloyd-Jones et al., 2007).

Miers et al. (2009) in their evaluation of IPL modules found that students were unsure about how their IPL would translate to the practice environment. One student said that they were more aware about working interprofessionally as a result of the IPL modules, but they were unsure about how they would do this and who they would work with in practice.

Facilitating learning across and between healthcare groups can be counterproductive if practice environments do not support and re-enforce this interprofessional working. Practice should provide opportunities to consolidate academic learning and see interprofessional working in practice (Henderson et al., 2010).

Dutton and Worsley (2009) in their article about practice educators’ attitudes to IPL found that although students were favourably inclined towards IPL, they appeared negative towards interprofessional interactions and did not wish to network with other professionals. It is apparent that although interprofessional working in practice exists, there are many cultural and social barriers that occur and that professionals do not always communicate effectively with each other. The participants questioned in this research cited conflict between professional groups as a barrier to effective communication and stated that this could cause negative stereotypes of other professions (Dutton and Worsley, 2009).

Thistlethwaite et al. (2013) in their deconstruction of interprofessional collaborative practice suggest that although there has been a lot of progress with IPL in the university setting, the hidden curriculum of norms, values and beliefs in practice continues to influence students. They perceive that what is being said in the classroom is not always put into clinical practice. They give examples where a different profession might be seen as the enemy; “I had to persuade the doctor to review the patient; I had to win over the nurse to my way of thinking; it was a real struggle getting the professionals together to agree on a management plan” (Thistlethwaite et al., 2013 p50). McNeil et al. (2013) agree with the notion of professional identity, norms, beliefs and values. They suggest that professional identity plays a key role in interprofessional working and team success.

It can be seen from the literature that the effect of IPL in practice is still very difficult to quantify. There is, however, a general agreement that IPL is needed and as educators there is a need to ensure that there is a joined up approach between IPL in the classroom and IPL in practice.

***Methodology.***

This was a small scale qualitative study using diaries recorded by students. Qualitative research enquires into the meaning which individuals or groups ascribe to a social or human problem; it allows for the exploration of people’s thoughts, feelings and ideas (Creswell, 2007). The purpose of this study was to study interprofessional interactions and in order to do this we utilised the perspective of those who were a part of the interactions, namely the students working in the practice placement (Crotty, 2005).

The researchers aimed to recruit several students from each of the groups involved in the IPL modules at the university. These students were from the following professional groups; adult nurses, child health nurses, mental health nurses, midwives, social workers, operating department practitioners, therapy radiographers and diagnostic radiographers. There were approximately 900 students in total over the three year groups.

Each student was asked to keep a one week diary whilst in placement to record the different professionals that they came into contact with, and they were provided with a template to complete (Figure 1). They were asked to complete the diary either during or at the end of a shift. The use of diaries to record activities is thought to provide an interesting insight into practice (Polit and Beck, 2006) and diaries can provide access to people’s interpretations of their world (Alaszewski, 2006). Burns and Grove (2005) suggest that diary records are more accurate than obtaining information during an interview as interview data is reliant on recall, whereas diary data can be recorded at the time. Diaries can be structured or un-structured (Moule and Goodman, 2009), for this study a structured approach was used with a set diary template for the students to complete.

Each student participating in the study was briefed about the data collection tool and the types of interactions to record. We wanted them to record all interactions that occurred within the practice setting, these could be sociable comments like ‘hello, how are you?’ or more work-related interactions like requesting information about a service user or passing on information. It was felt that all of these interprofessional interactions were important for the study and would provide an illustration of the way in which professionals work together.The interactions that the students had with other professionals were recorded using these two proximity categories:

* Proximity 1 – within speaking distance but no actual interaction, these were occasions when the student saw another professional in the work environment, was aware of their role bit did not actually speak to that person. They may have smiled at one another or acknowledged one another.
* Proximity 2 – interaction with the other professional, this could be sociable or work-related and would involve some verbal interaction by way of a conversation.

The students were asked to record some brief details of the interaction, the time and length of the interaction and where it took place (see Figure 1).

(insert Figure 1 here)

*Ethics*

Ethical approval was gained from the university ethics committee. All participating students were provided with an information sheet and completed a consent form prior to participation. The identity of all of the students was protected as no student names were used during the study. Students were numbered and labelled according to their course and year group to allow for comparison of the data. The other professionals were not aware that the students were making a record of these interactions. However, none of the other professionals were mentioned by name and none of the names of the organisations where the students were placed were mentioned in the data.

Eight participants agreed to take part in the study:

* One first year radiotherapy (RT) student
* Two second year students – one diagnostic radiography (DR) student and one operating department practice (ODP) student
* Five third year students – two social work (SW) students, one adult nursing (AN) student, one radiotherapy (RT) student and one diagnostic radiography (DR) student

There were no midwifery students, mental health or child health nursing students.

The students deemed ‘other professionals’ to include administrative staff, assistants and assistant practitioners, and relatives, as well as those with professional qualifications. The students were not given a list of professionals to choose from, rather they could record the job titles of the different professionals that they had interactions with.

31 different professional groups were mentioned by the students and there was a large variety between the students. The professional groups mentioned the most often were doctors and nurses in different settings and with different specialisms. The results collected from the eight students are illustrated in Figure 2.

(insert Figure 2 here)

The interactions recorded ranged from being introduced to and saying ‘hello’ to another professional to actually working alongside the other professional and sharing information about the service user. In some cases the students initiated the interactions themselves, for example in an interprofessional team meeting where they needed information, and in other cases it was the other professional who began the interaction. The proximity one interactions were largely when a student was aware that another professional was present, they may have been introduced but did not actually communicate, or they may have just been aware that the other professional was there in the same setting as the student.

It is acknowledged that student interactions may differ from those of qualified professionals as students may not need to speak to the same people and also other professionals may not need to interact with students.

***Discussion.***

There were a small number of participants and this was disappointing. This resulted in not all of the professions undertaking the IPL modules being represented, so there was no data from midwifery students, mental health or child health nursing students. Therefore no comparison was possible across the student groups studying IPL at the university.

The participants were five 3rd year students, two 2nd years and one 1st year. It may be that the 3rd years could see the relevance of the project more readily due to their experience on the course thus far. It may also be that because they had spent more time in practice they understood the purpose of the research and could appreciate how it could benefit future students. Also, interactions that students have with other professionals may differ depending on experience and also confidence to interact with other professionals in the team.

Students interpreted the term ‘other professionals’ very differently and included administrative staff, assistants and assistant practitioners, and relatives, as well as those with professional qualifications. This was a fault in the instructions given to the students, as a definition of ‘other professionals’ may have proved useful and less ambiguous. However, this also meant that other interesting information was collected about those with whom the students interacted. Alazewski (2006) suggests that when using diaries for research that instructions need to be clear and unambiguous.

There was a large variety in the data. The 2nd year ODP student recorded the most interprofessional interactions during a week at 55, with 46 of these interactions being a direct interaction with the person. It was clear that working in the operating theatre setting exposed this student to people from many different professional groups and the interprofessional nature of the operating theatre environment was evident from these results. This was followed by the 3rd year radiotherapy student who recorded 48 interactions in the week, but only seven were direct interactions, the other 41 were Proximity 1 - within speaking distance but no interaction with the other person. This indicated that several different professionals were present in the radiotherapy department but did not speak directly to the student radiographer. These results were probably due to the placements in which students were situated. The operating theatre, where the ODP was working is a busy environment where lots of different professionals work and staff members come and go, so the ODP student who was in their final year of training came into contact with many different professionals. This could also be said for the 3rd year radiotherapy student too, as a radiotherapy department is an interprofessional environment too. It was also of interest that these two students, with the most interactions recorded were in their final year of training, and may therefore have been more confident and aware of the roles of the other professionals.

The two 3rd year social work students and the 3rd year adult nursing student all recorded nine interactions, but these were slightly different. The adult nursing student had only recorded direct interactions (proximity 2), and the social workers had recorded some proximity 1 interactions, one had recorded one of these and the other two. All of the interactions recorded by the nursing student were with one other professional, doctors. The social work students had included nurses, the police and the probation service. These results may be due to the location in which they were placed; these three students were in largely uni-professional teams for that week and therefore spent more time interacting with people from their own professional groups than those from other professions. Profession centrism can also provide some explanation, this may be a barrier to interprofessional interactions in some locations where one profession may be dominant. Acquavita et al. (2014) found that doctors did not spend time with student nurses in some situations. This profession centrism will influence the interactions and level of interactions that occur. The results will also be affected by the fact that the participants were all students and may not be spoken to by other professionals as they may not be ‘in charge’ of the care of the service user.

The two diagnostic radiography students, one from year two and one from year three recorded 19 and 13 interactions respectively, with more proximity 2 interactions. With the exception of the 3rd year radiotherapy student, the general trend was that the further on in their course the student was the more proximity 2 interactions they had and the less proximity 1. This would perhaps indicate a greater confidence in communicating directly with other professionals as the course progresses. It may also be that students further on in their course have a greater awareness of other professionals groups within their practice area and may also get to know individual staff that they interact with on a regular basis.

The results will vary depending on the student’s location for the week that the diary was completed, and if undertaken with the same students for a different week, the results would be different. Some areas of practice have more potential for interprofessional interactions, and these may also vary from day to day or week to week depending on the service users. Acquavita et al. (2014) in their study of IPL suggested that organisational barriers can be a disadvantage to interprofessional communication and that workers can be compartmentalised and so students may not always have contact with other professional groups.

***Conclusion.***

This small scale study has provided some useful data regarding the different professionals that work together in different practice settings. The data indicates that there is a huge variation in the Interprofessional interactions that occur in different practice environments. Students have very different experiences and contact with different professionals depending on the course they are studying, their own confidence and the location of their practice placement.

***Limitations.***

The limitations of the study were the small number of students participating, and the lack of engagement from some professional groups. Also, there was some misunderstanding by the students about what was meant by a ‘professional’, this was due to poor communication by the researchers and would need to be improved for further studies.

***Recommendations.***

From the data it is possible to provide real examples and to indicate to students which professional groups they are likely to encounter in their practice. These are examples that can be used in IPL sessions. It is hoped that this will help students to understand the relevance of IPL and to be able to apply it to their future career. The results of this study can be used to provide examples for students during the IPL modules and be used as a teaching and learning tool.

Students can also start to think about the different interprofessional interactions that occur and the power differentials involved in these interactions. Assumptions about different professional groups can be challenged, and students can consider the remit, values and professional culture of different professional groups. They can also start to apply IPL to their own area of practice and think about which professionals they are likely to encounter in their professional career.

It is hoped that a more detailed study can be carried out with further students involved, to include the students from the groups that were missing from this study. Better briefing of the students before collecting data would be needed.

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| *Figure 1*Participant interprofessional interactions diary Please record all of the interactions that you have with other professionals this week during your placement using the table below.You need to record brief details of the interaction, the time and length of the interaction, the professional you interacted with (e.g. physiotherapist, social worker, police officer), and where it took place. Please could you also record the proximity using these two levels?* Proximity 1 - within speaking distance but no interaction with the other person
* Proximity 2 – direct interaction with the person

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date & time | Length of interaction | Professional interacted with  | Proximity 1 or 2 | Nature of interaction |
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***Figure 2 – Level of Interactions Results***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RT | DR | ODP | SW | SW | AN | DR | RT |
| Total number of interactions | 22 | 19 | 55 | 9 | 9 | 9 | 13 | 48 |
| Proximity 1 | 8 | 4 | 9 | 2 | 1 | 0 | 5 | 41 |
| Proximity 2 | 14 | 15 | 46 | 7 | 8 | 9 | 8 | 7 |

|  |  |
| --- | --- |
|  | 1st year students  |
|  | 2nd year students |
|  | 3rd year students |