“Oh why didn’t I take more notice?” Professionals’ views and perceptions of pre-qualifying preparation for interprofessional working in practice

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It is widely assumed that interprofessional learning (IPL) impacts positively on interprofessional working (IPW) in health and social care. However, there is no clear evidence that pre-qualifying IPL improves service delivery. The direct effect of pre-qualifying IPL on IPW and service delivery is difficult to demonstrate; researchers must rely on professionals’ self-report in this regard. This paper presents findings from a qualitative study in which semi-structured interviews were used to collect individuals’ views and perceptions about pre-qualifying IPL as preparation for practice. Two groups of participants came from four health and social care professions: adult nursing, midwifery, physiotherapy and social work. One group had experienced a substantial pre-qualifying IPL initiative, while the other group had not. Useful insights were gained from comparing the views and perceptions of individuals from these two groups. The total sample comprised 29 practitioners: 19 were educated on interprofessional curricula and 10 on traditional uniprofessional curricula. Thematic data analysis produced findings about pre-qualifying education as preparation for IPW. These findings suggest that pre-qualifying IPL can prepare individuals to work effectively as qualified professionals with colleagues from other disciplines and that effective IPW impacts positively on service delivery.

Keywords: Qualitative method, interprofessional collaboration, interprofessional learning, collaborative competence, health and social care, pre-qualifying/pre-licensure

INTRODUCTION

Over the last decade, interprofessional learning (IPL) within health and social care, whereby students learn “with, from and about” each other [Centre for the Advancement of Interprofessional Education (CAIPE), 2009], has become increasingly common globally (Rodger & Hoffman, 2010). This development has resulted partly from an assumption that IPL impacts positively on both interprofessional working (IPW) in practice and on service delivery. IPW involves “members of different professions and/or agencies work[ing] together to provide integrated health and/or social care for the benefit of service users” (Pollard, Sellman, & Senior, 2005, p. 10). While evidence supporting universal benefits of IPW is limited, poor IPW undoubtedly contributes significantly to poor outcomes (Laming, 2003, 2009).

Post-qualification IPL appears to improve service delivery (Reeves, Zwarenstein, Goldman, Barr, Freeth, Hammick, & Koppel, 2008); there is as yet no conclusive evidence that pre-qualifying IPL is equally effective. Studies concerning IPL have mostly focused on pre-qualifying student attitudes and accounts or on post-qualification educational initiatives (e.g. Anderson & Lennox, 2009; Pahor & Rasmussen, 2009). There is very little literature available concerning professionals’ reports of their own experience of a substantial pre-qualifying IPL initiative. However, qualified practitioners stated that pre-qualifying experience of a 4-week interprofessional (IP) training ward helped prepare them for future practice (Reeves & Freeth, 2002). A search of AMED, CINAHL Plus, MEDLINE and SCIE databases yielded one other paper which focused on eight nurses’ perceptions of their own experience of pre-qualifying IPL (Derbyshire & Machin, 2011).

In the paper presented here, the authors report the views and perceptions of individuals from four health and social care professions – adult nursing, physiotherapy, midwifery and social work – about IPL as preparation for IPW; approximately, two-thirds of the participants experienced a substantial pre-qualifying IPL initiative. This study was a component in a longitudinal evaluation which followed individuals through their professional education and out into practice, as recommended by Barr, Koppel, Reeves, Hammick and Freeth (2005). One aim of the longitudinal evaluation was to explore the impact of IPL through comparing cohorts. 

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following an IP curriculum with a cohort which experienced uniprofessional (UP) education (Pollard, Rickaby, & Miers, 2008).

The University of the West of England (UWE), Bristol, implemented an IP undergraduate curriculum in 2000. Students from adult nursing, children's nursing, diagnostic imaging, learning disabilities nursing, mental health nursing, midwifery, occupational therapy, physiotherapy, radiotherapy and social work undertook a compulsory formally assessed IP module in each year of study. This involved small mixed groups using inquiry-based learning in an academic environment to explore a given professional scenario (Barrett, Greenwood, & Ross, 2003; Hughes, Ventura, & Dando, 2004). This curriculum was evaluated between 2001 and 2006. As well as qualitative studies of students’ IPL experience in both academic and practice environments, evaluation included longitudinal quantitative measurement of individuals’ attitudes towards, and perceptions of, IPL and IPW as both students and qualified practitioners (Pollard & Miers, 2008; Pollard, Miers, & Gilchrist, 2004, 2005; Pollard, Miers, Gilchrist, & Sayers, 2006). The quantitative sample included a cohort educated on previous UP curricula. A significant finding was that qualified practitioners with pre-qualifying IPL experience revealed more positive attitudes about their own intraprofessional and IP relationships than practitioners without such pre-qualifying experience. This finding applied particularly to adult nurses, physiotherapists and midwives.

The UWE researchers subsequently undertook a follow-up qualitative study, in order to explore in more depth the views and perceptions of individuals who participated as students in the curriculum evaluation, about their experience of pre-qualifying IPL and about its influence (if any) on their professional practice as qualified practitioners (Pollard et al., 2008). The aim of the study was to evaluate learning from a pre-qualifying IP curriculum for health and social care students in relation to preparation for IPW, partly by comparing the views and perceptions of practitioners with different pre-qualifying educational experience.

The effect of undergraduate IPL on service delivery is difficult to demonstrate due to the complexity and number of confounding variables involved (Zwarenstein, Reeves, & Perrier, 2005). In an extensive review of research into the effects of IPL, Freeth, Hammick, Koppel, Reeves, and Barr (2002) noted that most reports of IPL initiatives identify outcomes involving learners’ reactions, attitudes, knowledge and/or skills. Behavioral change, change in organizational practice and benefits to patients/clients are difficult to identify and/or rarely reported. In an attempt to identify changes in professional practice and/or impact on service delivery, we adopted a “chain” strategy: firstly, we explored participants’ perceptions of the effect of IPL on their practice and skills with respect to IPW; secondly, we investigated whether or not they thought that the way they worked interprofessionally directly affected service delivery. It is clear that our findings depend on individuals’ self-report concerning their own experience. Nevertheless, despite obvious limitations, such data can help inform the evidence base concerning IPL (Barr et al., 2005). In this paper, we present and discuss our study findings.

METHODS

The study was informed by a realist approach (Carter & New, 2004) to exploring the impact of IPL on outcomes such as professional views and perspectives. As the study aimed for in-depth exploration of the topic, one-to-one interviews were used to gather qualitative data (Bryman, 2001). Ethical approval was gained from National Health Service (NHS) and UWE Research Ethics Committees (Pollard et al., 2008).

Study instrument

Data were collected through semi-structured interviews which included focus on:

- the impact of participants’ professional education on their ability to work in a multi- or interprofessional environment and
- participants’ current experience of IPW.

Sample

A purposive quota sample was constructed from the participants in the longitudinal quantitative study, who had, as students, stated their willingness to participate in further research. The sample comprised social workers, adult nurses, midwives and physiotherapists. Social workers were included due to the importance of health and social care integration (Ham & Oldham, 2009). The other three professions were included because of the quantitative results from the curriculum evaluation (see above). It was planned to recruit 40 professionals, 10 from each of the four disciplines. Of each set of 10 participants, the researchers aimed to recruit five from UWE’s IP pre-qualifying curriculum and five from previous UP curricula. It was anticipated that, by including participants from all these curricula, a more delineated picture of any influence of IPL on practice could be achieved. Due to out-of-date contact details, it proved relatively difficult to recruit midwives and physiotherapists, particularly from the UP cohorts, and the final sample comprised 29 professionals (Table I), all of whom had participated in the earlier UWE curriculum evaluation. Those from the IP curriculum had been practising professionally for 1–2 years, while those from the UP curriculum had been practising for 5–6 years.

Data collection and analysis

Participants were interviewed at their workplaces, homes or in UWE campus. Due to geographical distance, some interviews were conducted by telephone (Table I). With one exception, interviews were transcribed verbatim. Three researchers from different professional backgrounds collected and analyzed the data. Data were analyzed thematically (Barnard, 1991). Initial codes were identified on the transcripts manually and codes and resulting categories and themes were discussed, agreed and aggregated by the three researchers. A selection of interview transcripts was analyzed.
collectively to establish interresearcher reliability. QSR Nvivo7 software was used to help organize analysis.

**FINDINGS**

This paper reports findings concerning qualified practitioners’ perceptions of their pre-qualifying education as preparation for IPW and their experiences of IPW as professionals. Participants are identified by a code indicating their type of curriculum (IP and UP) and profession (adult nurse-AN, midwife-MW, physiotherapist-PH and social worker-SW), followed by a research number. To preserve anonymity, any references to participants’ characteristics or work locations have been removed.

**Pre-qualifying education as preparation for IPW**

*IPL in the academic environment.* Participants experiencing each type of curriculum had different views about their academic preparation for IPW. Nine participants from the IP cohort valued the IPL modules. Positive factors included engaging with individuals with a range of opinions and learning about other professionals’ roles and team working. These participants stated explicitly that the inclusion of the IP modules in the curriculum had helped to prepare them for IPW in practice:

“I think it’s important that it continues … so that everybody coming up through their student years realizes the importance of it …“(IP-MW-02).

Some IP curriculum participants indicated that they had not realized the importance of the IP modules at the time:

“I can’t see how…any information like that doesn’t help you… I didn’t realise just how much until I got out there…you often think… oh why didn’t I take more notice?… I didn’t realise the importance of it to be honest… it’s not until you’re doing it, and then you think crikey, that was important. The interprofessional modules were very important, but it’s not until you’re out there that you really realise the impact… “(IP-AN-06).

IP curriculum participants thought that the IP modules had raised awareness of the importance of IPW and had also helped them learn about relevant issues and develop appropriate skills. Key areas mentioned were the importance of communicating with individuals from other professions, appreciating other professionals’ perspectives and working within groups:

“I think the interprofessional [modules] made us think about the importance of working with other professionals, I think that was important…you’d listen to what somebody else would say and think ‘oh I never looked at it that way’; I would have looked only [at] my way of looking at it” (IP-SW-03).

“I think it got me prepared for working in terms of group working and setting goals, setting things to do for next time and how to work in a group when people have got different ideas and come from different angles” (IP-PH-02).

Five IP curriculum participants found the modules helpful but considered hands-on experience in the workplace more valuable and two expressed the view that good IPW is not something that can be taught. Six respondents from the IP cohort said that they would have liked to have learnt more about other professionals’ roles and perspectives:

“A summary of what [other] people do learn, what sort of areas they work in and how their professions grow… helps when you’re actually on placement and when you actually graduate and work…you only need to have a little summary about their profession at uni and then it would make more sense when you go out…” (IP-PH-02).

Some effects of IPL did not appear to be positive. On-line delivery, in particular, was associated with highlighting differing standards of written communication between different professions. One physiotherapist thought that the modules had actually created professional stereotypes and divides:

“I think that for me doing those modules actually put stereotypes there that I might not necessarily have developed myself…they made me a lot more cautious of certain professions when I went out on placement…because of my experiences learning alongside them (IP-PH-01).”

Participants from the UP cohort had mixed views about their pre-qualifying preparation for IPW. Six participants felt that there had been very little emphasis on IP issues during their education and that they had not been well prepared:

“I didn’t feel that we ever got taught how to communicate with other people…to liaise with people. I found it very difficult at the start and shied away from it…” (UP-AN-01).

Four other individuals from the UP cohort did feel prepared for IPW. However, they noted that other factors could play a part, notably personal attributes and prior experience:

<table>
<thead>
<tr>
<th>Profession</th>
<th>IP curriculum – face to face interview</th>
<th>IP curriculum – face to face interview</th>
<th>UP curriculum – telephone interview</th>
<th>UP curriculum – telephone interview</th>
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<td>0</td>
<td>1</td>
<td>5</td>
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<tr>
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<td>0</td>
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<td>0</td>
<td>7</td>
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<tr>
<td>Total</td>
<td>15</td>
<td>4</td>
<td>8</td>
<td>2</td>
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“I felt quite well equipped and confident. But I was a health care assistant before I went into social work so I had that knowledge already” (UP-SW-01).

Some IP respondents agreed that personal attributes play a part in helping individuals to acquire essential skills for IPW:

“I think if you’ve got quite a shy person … regardless of what training they’ve had, they’re less likely to try and involve other professions, whereas if you’ve got a more confident person then they are more likely to sort of say ‘oh, ask people’ and try and involve people” (IP-AN-02).

However, at least one participant with previous health care experience felt that, in spite of her prior knowledge, she had still learnt a lot from the IP modules. This included awareness of the broader health care environment and the necessity to work across primary and secondary care boundaries:

“I was working interprofessionally before I started the course so I knew the way it worked. [However] I think it…makes you look beyond [the hospital environment]…take a broader approach” (IP-AN-04).

Experience of IPL and working in placement settings. Participants from both cohorts reported variable experiences concerning IPL and IPW as students on placement and emphasized the importance of placement experience. The organization of services meant that placements offered very different opportunities for IPW:

“I was in an out-patients department so it was…just very much physios everywhere…” (IP-PH-01).

“I worked with an adult community care team in social services…with GPs…a community care worker, myself and a social worker, an OT [occupational therapist] and an OT aide so it was quite a positive experience” (UP-SW-01).

The importance and effect of role modeling by staff in placement settings was mentioned by 24 interviewees. Most of the positive comments were associated with the length of time that staff had been working in an area or factors arising from particular working environments:

“I was on a neurosurgical ward… and they had to work quite closely together by the nature of the sort of conditions they were dealing with… I think they were particularly good, actually, at working together” (UP-PH-01).

Good role models were praised particularly for the quality of their interpersonal interaction, including their response to and acceptance of students:

“There were a couple of senior nurses… it was all first name terms and it was almost like asking a friend to do a favor sometimes” (IP-AN-02).

Observations concerning negative role modeling focused mainly on behavior protective of professional role boundaries and hierarchy and poor interpersonal behavior. Although medical staff attracted a high proportion of criticism in this respect, other professional groups were also mentioned:

“It’s all a bit of… ‘this is our profession’… ‘this is what I do, and you do not do that’…” (IP-AN-05).

Experience of IPW as professionals

IPW in current practice environments. Study participants were asked to describe IP working in their current place of work. Nineteen participants reported good IPW, eight thought that it was variable and two participants reported difficulties. The importance of shared understanding about roles and work demands was emphasized by 16 participants:

“I know the doctors are getting quite stressy…with the social workers… they [social workers] need to be more involved in the team… they’ve got generally unrealistic ideas about… how hard the day is…” (IP-AN-01).

Factors contributing to good IPW. Interviews explored views and perspectives about factors contributing to good IPW. Twenty-five respondents across both cohorts mentioned communication skills as key attributes for effective IPW. A range of communication skills and practices were referred to, including being approachable, being adaptable, maintaining contact and appropriate use of documentation. Listening was perceived as of immense importance. One respondent recognized the role of non-verbal communication in supporting listening:

“… it’s really important, listening skills, body language is important, you need eye contact… there’s nothing worse than you’re talking to somebody when they are sort of looking around… you know they’re not interested” (IP-AN-06).

Eighteen respondents across the two cohorts identified knowledge of other professionals’ roles as contributing to good IPW. Understanding each others’ role and expertise was seen as leading to mutual respect and willingness to involve colleagues actively in client care:

“A gentleman asked me the other day… his walking sticks were too short… I knew straight away that the physio would do that. I spoke to her… he had a new pair straight away” (IP-AN-01).

Personal qualities and attributes such as confidence, maturity, leadership styles, patience, tolerance and being open-minded were seen as contributing to a willingness to engage in IPW. Despite an emphasis on individual qualities, respondents also identified management and organizational factors as contributing to good IPW, e.g. streamlined communication systems. Conversely, organizational factors such as differences in working practices and shift systems were seen as inhibiting effective collaboration.
Impact on care delivery. Twenty-four participants reported IPW having a positive impact on service delivery. Outcomes mentioned included prevention of admission and swifter and smoother discharge, achieved through enhanced information exchange and service coordination:

“...if we feel that people aren’t managing, then we get in touch with other agencies that can help put carers in place, once, twice or three or four times a day and... basically try and keep people out of hospital...” (IP-AN-06).

“...we communicate really well between all of us and we’re the only ward in the hospital who’s got the fastest turnover to be able to get people out and home without bouncing back in within a week or so...” (UP-AN-01).

Conversely, poor IPW involving sub-optimal communication and lack of service coordination was seen to impact negatively on care:

“It’s so frustrating when things fall apart... and it really impacts the patient... it’s always a communication breakdown... someone else thinks someone else is doing it and... it really impacts on service delivery” (IP-PH-01).

Only participants from the IP cohort (four respondents) specifically mentioned how IPW can help ensure appropriate location for care, in either community or acute settings. These participants offered examples of scenarios in which effective IPW helped support home-based care:

“The whole little group sorted that out... we all took turns to do our bit... the daughter is pleased that her mother hasn’t had the trauma of moving...” (IP-SW-03).

Conversely, only participants from the UP cohort stated that IPW can enhance service users’ understanding of relevant issues:

“I think because I get on quite well with the team, that does help the patients to understand what’s going on a bit more” (UP-AN-01).

Reflection. It was noted that, when discussing teamwork in their current roles, IP respondents tended to report on their own actions, demonstrating an understanding of their own behavior in teams and contributions they can make:

“Team working won’t work if someone doesn’t communicate their views... because often you’re in an interprofessional meeting or on a ward and you’re the only... [one] representing your profession... and if that person doesn’t feel able to speak out... it means you’re losing a whole professional opinion... I suppose in a group setting I’m someone who gets very frustrated if things get dragged on and clear plans aren’t made... that’s one of the main abilities I’ve got is to bring a conversation back to... what does it all mean?” (IP-PH-02).

Although reflection as a key aspect of professional practice has been emphasized in professional curricula for many years, it was IP respondents who demonstrated reflective skills and were particularly aware of the importance of reflection in collaborative working:

“And everybody jumps in with two feet and wishes they hadn’t said something... you’ve got to learn from that as well. And that’s the good thing about reflection, I think. That’s the big thing I learned from my course... was about reflecting on experiences and then building on it and learning from it” (IP-MW-02).

This explicit level of awareness concerning the potential effect of their own actions was not found in data from the UP respondents.

DISCUSSION

The opinions of the IP participants in this study are particularly valuable, as this is one of very few instances of data being reported from health and social care professionals whose pre-qualifying education included a substantial IPL initiative. The small number of these participants can be seen as a limitation of the study; however, they expressed a range of views and perceptions about pre-qualifying IPL. Moreover, useful insights have been gained from examining these views and perceptions alongside those of professionals without pre-qualifying IPL experience.

The findings presented here suggest that IP respondents showed a greater awareness of the value of reflection on practice and a more complex understanding of teamworking, including their own part within it, attributes which can help practitioners to function effectively in an IP environment (Clark, 2009). It was also notable that some IP curriculum participants reported only having realized the importance of IPL once in practice, while others found that IPL had raised their awareness of relevant issues. These findings indicate the necessity of helping students to see the value of IPL, particularly those who consider it an unnecessary distraction from their core professional curriculum.

Other important findings to emerge from our study include the fact that, as in the study by Reeves and Freeth (2002), many IP cohort participants felt that IPL helped to prepare them for IPW, which they saw as having a direct impact on service delivery; that many UP cohort participants were clearly skilled workers in an IP context; and that one participant felt that IPL had had some negative effects.

The finding that IPL may actively promote the formation of negative stereotypes challenges a major assumption concerning its benefits (Derbyshire & Machin, 2011; Oandasan & Reeves, 2005). Tunstall-Pedoe, Rink and Hilton (2003) noted that IPL could reinforce negative stereotypes; however, in the study presented here, one professional reported the development of negative stereotypes due to participation in IPL. Other individuals who participated in the UWE curriculum evaluation reported similar effects while still students (Pollard et al., 2008). If pre-qualifying IPL is to prepare individuals to work effectively with colleagues
from other disciplines, it is essential that such negative stereotype formation or reinforcement is avoided. This finding supports the argument that facilitation of IPL groups requires a comprehensive level of skill (Freeth, Hammick, Reeves, Koppel, & Barr, 2005; Thomas, Clarke, Pollard, & Miers, 2007). It was clear from other data in our study that participants had had mixed experiences of facilitation in the IP modules (Pollard et al., 2008).

Our data also revealed that individuals from the UP cohort appeared to be skilled and effective when working interprofessionally. As many of them stated that their professional education had not prepared them for IPW, this may in part have been due to personal characteristics enabling them to acquire requisite skills (an opinion expressed by some of our participants). The length of time they had been practising may also have helped in this regard. However, the skills of these participants with regard to IPW notwithstanding, problems in practice persist (Laming, 2009); there is no guarantee that all individuals will acquire the necessary skills simply through IP exposure in practice. It is not known whether or not any of these individuals had experienced any post-qualification IPL. Our failure to inquire about post-qualifying IPL, due to a narrow focus on pre-qualifying education, is a limitation of the study.

Given the relatively strong impact of practice placement experience on students’ learning (Pollard, 2008; Randle, 2003), the quality of students’ experience of IPL and IPW in placements appears to be particularly important. Practice-based IPL is known to be beneficial for both students and staff in placement settings, but can increase staff workloads and is also highly contextually dependent on the environment (Milburn & Colyer, 2008; Miller, Woolf, & Mackintosh, 2006). While practice-based IPL has been successful in some cases (e.g. Anderson & Lennox, 2009; Reeves & Freeth, 2002), logistical problems commonly restrict its implementation (Glen & Reeves, 2004; Mallik & McGowan, 2007). In the UK, these problems are currently compounded by the economic climate and ongoing restructuring of the NHS (Department of Health, 2010), which appear to be increasing pressure on front-line staff (Snow, 2010). It therefore seems likely that students’ learning about IPW in practice will continue to depend largely on role modeling by staff (including supervisors and/or mentors) and the nature of placement environments, whether negative or positive in effect.

Participants provided examples of the effect of bad IPW on care, reinforcing other findings about this issue (e.g. Laming, 2009, 2003). However, they also described situations in which good IPW enhanced service delivery. These findings support the assumption that effective IPW is beneficial for service users; and therefore that professionals who can work well with colleagues from other disciplines contribute to the provision of good service delivery. We have established that many of our IP curriculum participants felt that their pre-qualifying IPL helped them to gain relevant awareness and skills which impact directly on their ability to work interprofessionally. By applying our “chain strategy” to our findings (see above), we conclude that there is some evidence that pre-qualifying IPL can impact favorably on service delivery and care.

**CONCLUSION**

The findings presented here suggest that the effects of IPL appear to be mitigated by various factors, including the quality of facilitation and supervision/mentorship in both academic and placement environments. However, the limitations of this study notwithstanding, its findings, together with earlier quantitative results (Pollard & Miers, 2008), reinforce the assumption that pre-qualifying IPL can help prepare individuals to work interprofessionally as qualified practitioners; and that it therefore can have a positive, if indirect, effect on service delivery.

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**Declaration of interest**

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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