A review and critique of the literature on occupational therapy in forensic mental health settings was conducted. The results indicate that the evidence base supporting occupational therapy in a forensic mental health setting is relatively weak. Much of the literature describing the role of occupational therapy in a secure setting is over 10 years old and lacks currency, and many of the research-based articles lack methodological rigour. Research has often been conducted in isolation and over a diverse range of topics, which means that important research questions have not been studied systematically.

This paper argues that to enhance the credibility and efficacy of occupational therapy in forensic practice, a coordinated international network of therapists needs to be established. Using the strength of multi-site studies, such a group can build the evidence base for occupational therapy practice in forensic settings. In addition, better links between occupational therapy services and local universities should be formalised in order to promote ongoing research that meets rigorous research standards.

Occupational Therapy in Forensic Psychiatry: a Review of the Literature and a Call for a United and International Response

Marita O'Connell[1] and Louise Farnworth[2]

Introduction

Forensic psychiatry refers to the sector of mental health services responsible for the assessment and treatment of mentally ill offenders in the criminal justice system (Farnworth et al 2004). Forensic psychiatry has the dual objective of treating and rehabilitating the mentally ill offender and protecting the community (Derks et al 1993, Lindstedt et al 2004).

Offenders receiving psychiatric treatment in the criminal justice system are frequently referred to as forensic patients, which is the term that is used throughout this paper. The forensic patient population consists of people on remand (often undergoing court-ordered assessment); sentenced prisoners who have become psychiatrically ill in prison; people found by the court to be unfit to plead or not guilty of a crime by reason of insanity; those assessed as at a high risk of committing harm to themselves or others owing to a mental disorder; patients under Mental Health Act orders, who cannot be safely detained in general psychiatric hospitals (Lloyd 1995); and individuals in the community on various legislative orders who are required to submit to the supervision of forensic mental health services. Forensic services may include the courts, prisons, secure units, psychiatric hospitals and the community (Lloyd 1995).

Diagnostically, forensic patients comprise people with psychotic illnesses, including schizophrenia, mood disorders and personality disorders (Garner 1995). What constitutes a forensic patient differs throughout the world, particularly in the case of highly politicised sex offenders and those offenders with severe personality disorders (Mullen et al 2000). Often, the forensic patient is institutionalised for long periods of time and is doubly stigmatised by mental illness and a criminal background (Farnworth et al 1987, Lloyd 1988, Lloyd and Guerra 1988, Garner 1995, Baker and McKay 2001).

After the release of a number of governmental policy papers (Lloyd 1995), the United Kingdom (UK) was the first country to develop secure settings in regional areas to augment the already existing high security hospitals. The development of these units coincided with the closure of the larger psychiatric hospitals, a new focus on community care (Lloyd 1995) and the realisation that increasing numbers

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of people in prison had a mental illness (Stein and Diamond 1985, cited in Lloyd 1995). Countries like Australia and New Zealand followed the British example by also developing stand-alone secure units (Mullen et al 2000).

This paper presents a review of the forensic occupational therapy literature to summarise the role of occupational therapy in a secure setting and to critique the evidence base supporting occupational therapy practice. The paper concludes with strategies for the future development of the specialty.

Method

A structured literature search was performed and included an electronic search (with no restriction on date) of a combination of relevant terms (occupational therapy, forensic, psychiatry, secure, activity, prison) in Ovid, using Medline, PsycINFO and CINAHL as well as Google Scholar. In addition, a manual search of reference lists of articles was conducted. The search yielded over 65 articles, chapters and books, all of which were reviewed. There was a paucity of research-based articles and so the criteria for inclusion were expanded to include both formal research and descriptive studies based on clinical experience.

Findings

The findings from the review fall broadly into two main categories: a description of the occupational therapy role and formal research studies undertaken. Although in some cases there is overlap between these, they are presented separately.

The role of the occupational therapist in a forensic setting

The literature presented an homogeneous view of the occupational therapy role and discussed the use of assessments, specific interventions and models of practice. In addition, a number of issues specific to a forensic setting that have an impact on occupational therapy practice emerged.

Occupational therapy in the secure setting has been described as similar to that in general psychiatry, but within the confines of a secure environment (Flood 1993, Chacksfield 1997). According to Chacksfield (1997), it is the use of the environment and everyday activities and the application of purposeful task engagement that form the unique differences between the occupational therapist and other professionals in all areas of assessment and treatment.

The role has been defined as a clinical specialty that is developing rapidly (Chacksfield 1997, Flood 1997, Forward et al 1999). The focus is on daily living skills aimed at integrating patients back into the community (Farnworth et al 1987, Lloyd and Guerra 1988, Lloyd 1995, Whiteford 1995, Flannigan 1996, Forward et al 1999). The occupational therapist should have an understanding of the relevant legal complexities (Farnworth et al 1987, Chacksfield 1997, Taylor et al 1997, Forward et al 1999) and may be called on to contribute to the court report process (Kromm et al 1982, Tse 1990). Many of these journal-based descriptions are now out of date.

More recently, a number of texts have emerged that discuss occupational therapy in a forensic setting. Couldrick and Aldred (2003) edited a book on forensic occupational therapy. It compiles the work of a number of authors working in medium and high security hospitals, as well as prisons, in the UK. The book describes numerous examples of the practitioners' experience rather than providing a peer-reviewed, evidence-based practice text. Flannigan (1996) provided a chapter on the role of occupational therapy in a forensic psychotherapy text and Cronin-Davis et al (2004) contributed a chapter to an occupational therapy text.

Occupational therapy interventions

Several interventions have been described as a part of a social therapy programme on a forensic unit attached to a large psychiatric hospital in Alberta, Canada, including the use of film and literature in the treatment of incest offenders (Lloyd 1987a), a case study of a female incest offender (Lloyd 1987e), a discharge preparation group (Lloyd 1988), vocational programmes (Lloyd 1986, Lloyd and Guerra 1988) and the use of art (Lloyd and Campbell 1986-87). No critique or outcome measurement was offered by the authors for any of the interventions.

In one of the more informative descriptions of the occupational therapy process, Kromm et al (1982) offered an in-depth case study in one of the few articles found from the United States. The authors described the occupational therapy assessment of a young woman sent to a psychiatric hospital by the court after being accused of murdering her mother. Much of the traditional assessment process, including psychiatric and psychological testing, was ineffective against the controlled performance of the patient. Occupational therapy provided a 'safe' and activity-based milieu to explore clinical and personality features and offered diagnostic clues as to the patient's underlying thought processes, organisational abilities and a profoundly 'dysfunctional' personality style. Case studies of this type can provide practitioners with useful examples of occupational therapy interventions.

In a more contemporary intervention, Gooch and Living (2004) described the use of videogames within a secure setting and claimed that the video console provided a normal and modern leisure pursuit that promoted mastery and control over one's environment. Garner (1995) too gave a description of a multidisciplinary prevocational programme on a medium secure unit in the north of England that had mainstream accreditation. The participants created a portfolio, a curriculum vitae and a personal development plan as well as doing work experience. Garner (1995) reported positive results, mostly a move to further education or training, for the 18 patients who had completed the programme successfully. Although not research based, such descriptions can foster ideas and debate among therapists attempting to set up similar programmes.

Joe (2003) provided the only identified discussion, although broad and nonspecific, of the occupational therapy role in a community forensic setting in the UK. She defined the role as having a focus on vocational training and opportunities for social inclusion, within a supervisory legal framework.

Most of the therapeutic interventions offered by occupational therapists in a forensic setting occur in groups (Duncan et al 2003) and it is usually the occupational therapist who coordinates the group activity programme on the ward (Freeman 1982, Chacksfield and Forshaw 1997, Flood 1997). However, in the only study that elicited participants' views on group programmes in Australia, Farnworth et al (2004) reported that the participants described many of the groups as boring and a waste of time, or that they had grown tired of attending groups after long periods of detention. Similarly, a survey of 12 patients in a forensic unit in the UK found that patients were bored in the secure setting despite occupational therapy (Morrison 1996).

Penner (1978) commented on the limitations of group work within a correctional setting, whereby the group could foster criminality or maladaptive behaviours. This issue, along with the therapeutic dilemma of patients participating in therapy solely to gain leave entitlements or to 'keep the staff happy' (Farnworth et al 2004, p435) and the difficulty of providing client-centred group interventions in a mandated setting, requires further investigation.

Issues having an impact on occupational therapy intervention

Within the occupational therapy literature, authors have described working with a variety of specialised client groups, including female offenders (Lloyd 1987e), sexual offenders (Lloyd 1987b), young offenders (Paulsen 1980), offenders with AIDS (Schindler 1990), prisoners with special needs (Whiteford 1995, 1997) and those with the tripartite problem of mental disorder, offending behaviour and addictive behaviour (Chacksfield and Forshaw 1997). Authors have also noted an overrepresentation of particular cultural groups where they work, including African-Caribbean patients in the UK (Garner 1995) and Maori and Pacific Islanders in New Zealand (Tse 1990).

The forensic patient, usually male, has been described as being particularly difficult to work with, owing to low motivation as a result of his illness and internment (Crawford and Mee 1994, Lloyd 1995) and a potential for manipulative and splitting behaviours towards other patients and staff (Tse 1990, Flood 1993). The occupational therapist in a forensic setting must have an awareness of the increased potential for violence and aggression (Lloyd 1995) and have ways of dealing with dangerous behaviours (Flood 1993). Lloyd (1995) noted that therapists must examine their own feelings and attitudes in dealing with clients who have committed violent crimes.

Forensic patients housed in secure hospitals, as well as prisons, are separated from their regular social networks, have unpredictable relationships with peers and staff, and often live in cramped, noisy spaces (Farnworth et al 1987). Molineux and Whiteford (1999) suggested that the lack of access to routine activities of daily living, such as doing personal laundry, restricted occupational roles and compounded temporal disorientation. Wittman and Velde (2001) warned that the structure of security in the prison setting could lead to sensory deprivation in inmates, and Whiteford (1995) described inmates in prison as likely to experience occupational deprivation. Wilcock (1998, p16) characterised occupational deprivation as 'the influence of an external circumstance that keeps a person from acquiring, using or enjoying something'. Cronin-Davis et al (2004) also discussed occupational risk factors, such as occupational disruption, occupational imbalance and occupational alienation, inherent in secure forensic settings. These concepts, as well as temporal disorientation (Molineux and Whiteford 1999), may have relevance in the secure setting, but require further definition and research evidence.

The only discussions of the daily routine in secure settings are dated. They describe the daily routine as rigid, whereby activities were performed at the same time, residents were treated alike and activities were tightly scheduled (Penner 1978, Farnworth et al 1987). No descriptions of patient routines in the regionally placed secure settings exist. Although it has been shown that long-term psychiatric institutions constrain residents' routines and ways of occupying time (Champney and Dzurec 1992, Suto and Frank 1994), similar research in secure settings is needed. Forward et al (1999) discussed some of the limitations in planning treatment in the secure setting, including strict regulations, security, staff safety, client behaviours, resources, access to equipment, time and limited space. For example, treatment choice is limited by restricted tool policies as a means of protecting staff and patients (Lloyd 1995, Whiteford 1995, 1997, Taylor et al 1997, Gooch and Living 2004). These limitations are, in part, offset by the advantages of working with a 'captive audience' (Farnworth et al 1987, p45), in a setting with a higher staff-to-patient ratio, to promote therapeutic efficacy and security (Stone et al 2000, cited in Aldred 2003). However, any therapy must provide for safe community reintegration because most forensic patients and prisoners will be released from the secure setting at some time (Lloyd 1985, Farnworth et al 1987).

Occupational therapy assessments

The forensic application of standardised assessments commonly used in a mental health setting has not been explored fully. Nor has there been a consistent call for these assessments to be validated and norms established for the forensic patient population.

Several authors lament the absence of occupational therapy assessments for a forensic setting and call for the development of assessment tools specific to the setting (Farnworth et al 1987, Flood 1997, Taylor et al 1997, Forward et al 1999). The Occupational Circumstances Assessment Interview and Rating Scale (OCAIRS) (Forsyth et al 2005a) is the first assessment to include a forensic mental health component. The interview is based

on the Model of Human Occupation (MOHO) (Kielhofner 2002) and is also included as a part of the Model of Human Occupation Screening Tool (MOHOST) (Parkinson et al 2006). Nothing has appeared yet in the literature about their application or their assessment of occupational therapy effectiveness in a forensic setting.

The ongoing assessment of risk is an important role for all staff (Flood 1993) and is a concern that tends to dominate forensic psychiatry literature. There have been calls for a profession-specific risk assessment tool to be developed (Duncan et al 2003), but no rationale is offered as to why occupational therapists require a separate risk assessment tool from the multidisciplinary team. Chacksfield and Forshaw (1997) argued that the occupational therapy contribution to risk assessment was in the observation of patients in real life situations that replicated real life activities.

The use of other assessment tools in data collection in forensic settings is discussed in the research section.

Occupational therapy models of practice in a forensic setting

A number of articles discussed the use of models of practice within the forensic setting. Some authors suggested the need for an occupational therapy model of practice specifically for the secure setting (Lloyd 1995, Tse 1990), although no convincing argument was offered as to why existing models could not be applied successfully.

The use of the Model of Human Occupation (MOHO) in a forensic setting has been described by Lloyd (1987c, 1988) and Forsyth et al (2005a), as well as being referred to by several authors in Couldrick and Aldred (2003). Although Muñoz et al (1993) found that occupational therapists in the United States were using MOHO profitably to frame assessment and intervention methods in a general psychiatric setting, no research has been published on its application in a forensic setting.

Chacksfield and Forshaw (1997) briefly mentioned the use of the Canadian Model of Occupational Performance (CMOP) (Canadian Association of Occupational Therapists [CAOT] 1993) in their occupational therapy programme on a forensic addictive behaviours unit at Broadmoor Hospital. Clarke (2003) provided a more thorough description of the application of the CMOP (CAOT 1997) in a secure hostel setting. Clarke (2003) listed the advantages of this model as being client-centred, having a focus on performance and the provision of assessment and evaluation tools, although these are not discussed in detail. According to Clarke (2003), the application of the CMOP in the secure setting differed from that in a general psychiatric setting only in its consideration of the environment. The author claimed to have achieved treatment gains with the use of the model, but these claims have yet to be supported by empirical research.

Finally, Wittman and Velde (2001) cited the Lifestyle Performance Model (Wittman and Velde 2002) for use in a prison setting. This model has been developed by the authors but has not been reported elsewhere and is not cited in any other forensic occupational therapy literature.

Further research to describe and evaluate the application of existing occupational therapy models of practice to a forensic setting is required to determine if existing models can be applied successfully to the setting. MOHO appears to have applicability to the setting. The added advantage of MOHO is the availability of specific forensic occupational therapy assessment tools as well as the extensive research base supporting occupational therapy practice.

Occupational therapy research in the forensic setting

There is a lack of published evidence relating to occupational therapy in forensic psychiatry (Forward et al 1999, Cronin-Davis et al 2004, Farnworth et al 2004). Although there has been a call for further research (Flood 1993, Farnworth et al 2004), few authors have added to the evidence base. Mountain (1998) published a preliminary review of the knowledge and research base for occupational therapy in a forensic setting for the College of Occupational Therapists in the UK and concluded that the evidence base did require strengthening. Her review of the published literature included special care units in mainstream psychiatric units, thereby not differentiating between a forensic population and that of general mental health services. In addition, there were a number of publications not included in the review that were relevant to both a forensic setting and occupational therapy intervention.

Duncan et al (2003) distributed a questionnaire survey to approximately 230 occupational therapists working in forensic psychiatry across the UK in an attempt to ascertain research priorities. Only 71 therapists participated in the survey. The priorities identified from this survey were the development of reliable and appropriate outcome measures and the development of effective risk-assessment tools. Contrary to the recommendations of Mountain (1998), research into occupational science and occupational deprivation was considered a low priority.

Baker and McKay (2001) also used a postal survey to seek occupational therapists' perspectives of the needs of women in medium secure units across the UK. The authors acknowledged that women were treated differently from men in secure units and formed a 'neglected group with specific needs' (p442). They drew on existing literature from outside the occupational therapy field to question 'how women could receive the care and treatment they need if they were not heard' (Humphries 1999, p43, cited in Baker and McKay 2001). Despite this important point, the questionnaire study design used by Baker and McKay (2001) did not seek the perspectives of female offenders, limiting the value of the findings.

Almost 20 years ago, Lloyd (1987d) completed a study on the use of the Bay Area Functional Performance Evaluation with 54 offenders diagnosed with personality disorder. She compared the results with the norms established by the tool's authors (Houston et al 1987) and found that 98% of the group tested fell into the high functioning range. Lloyd (1987d) claimed that this established test norms for a forensic population but, given

that all the participants were in a dedicated treatment programme and had been diagnosed with a personality disorder, the subject population was not necessarily reflective of a forensic patient or prison population, so the results should be viewed with caution. Lloyd (1987d) did state that the tool could be a useful one in a forensic setting when supplemented with an interview, although no further studies in the forensic setting have appeared in the literature.

Occupational performance

More recently, Lindstedt et al (2004) looked at the occupational performance and social participation of 74 mentally disordered offenders in Sweden. Among other tools, they used the Allen Cognitive Level Screen (Allen 1985) to measure occupational performance. The authors compared the results to the participants' appraisals of their own abilities. The results indicated that the forensic patients considered themselves to have fewer disabilities and limitations than did the occupational therapist, supporting the view that both the perspective of the consumer and an objective assessment of occupational performance are required.

Subsequently, Lindstedt et al (2005) investigated the extent to which personality traits, and psychopathy in particular, were predictive of occupational performance and life satisfaction. The 55 study participants were all inpatients of various forensic psychiatric hospitals in mid-Sweden. Like the 2004 study, the Capability to Perform Daily Occupations (Lindstedt et al 2004) was used to assess the participants' view of their occupational performance. The tool's validity and reliability have not been established, introducing issues to the internal validity of two otherwise rigorous studies. Lindstedt et al (2005) found no statistically significant relationship between the personality traits and occupational performance of the participants, but reported that participants' life history was related to their occupational performance and life satisfaction. Farnworth et al (2004) have reported similar findings.

Farnworth et al (2004) focused on the time use of inpatients of a forensic ward of a large psychiatric hospital in Australia. They used time diaries and the Occupational Performance History Interview II (OPHI II) (Kielhofner et al 1998). The authors found that forensic patients' time use was dominated by passive leisure and self-care activities, and that examining patterns of time use and understanding individuals' unique occupational histories, interests and skills, using tools such as the OPHI-II, were essential to effective rehabilitation programmes within a forensic setting. Although a small study, it employed rigorous qualitative and quantitative research techniques by utilising an established occupational therapy assessment and time diaries. The results also contributed to existing time-use studies both within and outside the forensic literature, such as Farnworth's (2000) study on the time use of young offenders.

Whiteford (1997) also reported that a group of 10 special needs prisoners (most of whom had a mental illness) in a maximum-security prison in New Zealand spent much of their time in passive leisure and sleeping. Whiteford (1997) attempted to establish the occupational needs of the inmates, with the methods of investigation employed including a time-use survey, observation, interview and an assessment of individual functioning using the Assessment of Motor and Process Skills (Fisher 2003). She also interviewed staff and reviewed current policies and management plans. Whiteford (1997) concluded that the environment was set up to ensure the safety of inmates and staff but that this led to a lack of meaningful routine, a lack of meaningful activities and no opportunity to utilise tools, and in fact contributed to the likelihood that inmates would experience psychotic phenomena. However, only limited information was provided on the research methods and findings, which questions the rigour and credibility of the study.

In another study from the occupational therapy literature, Garner et al (1996) investigated the incidents of deliberate self-harm on a 77-bed forensic inpatient facility in the UK. Correlational statistics were used to identify any pattern between planned activity and acts of deliberate self-harm over 9 months. No relationship between the two was found. Although the results did not indicate that planned activity and occupational therapy were ineffective, the authors called for further research to demonstrate that activity was beneficial and to explore the quality of activities used in occupational therapy intervention.

Outcomes of treatment

Only two studies were found in the occupational therapy literature that evaluated the outcomes of treatment. Jones and McColl (1991) compared a conventional psychotherapy group with an Interactional Life Skills (ILS) group for forensic patients in Canada. The study was quasi-experimental and tested the 12 participants in each group at intake and at completion of the group. The results showed that the ILS group members took on more roles, such as pleaser, director and risk-taker, within the group and valued these roles more positively than the members of the psychotherapy group. Although the study design and the statistical analysis applied to the evaluation of the occupational therapy intervention were rigorous, the social roles and the valuing of those social roles were measured by a 22-item list designed by the authors. This introduced issues related to construct validity, in that the reader cannot be sure that the operational definition is effective in measuring both the construct and the effectiveness of the ILS group (Portney and Watkins 2000). Conversely, group leaders, subjects and assessors were blind to the study and a minimum number of therapists were used throughout the treatment programme. Unfortunately, little information was given regarding the content of the ILS group, making replication of the intervention, and the study, difficult.

Also focusing intervention on role promotion, Schindler (2004, 2005) developed and evaluated a theory-based intervention called Role Development with forensic patients in the United States. Half of the 84 men participated in the

Role Development Programme (RDP) and the other half in a multidepartmental activity programme. The participants were assessed with the Role Functioning Scale (Goodman et al 1993) and with versions of the Task Skills Scale and the Interpersonal Skills Scale (Mosey 1986, Rogers et al 1991) that were adapted by the author. The Role Functioning Scale has established measures of reliability and validity, but the remaining two do not. The participants were tested on entry into the programme, and then at 4, 8 and 12 weeks of participation, although only 28 participants completed the full 12 weeks of the programme. Schindler (2005) reported significant improvement in task skills, interpersonal skills and roles among those in the RDP compared with the activity group. Focus groups were also conducted with both staff and participants, which added qualitative data, suggesting that both groups could identify and cite the roles and skills developed in the programme. Although much of the role development theory is based on earlier work completed by Mosey (1986), the RDP is a novel approach and further replication of the study, with more reliable evaluation tools, is required.

An overall review of the research conducted shows that many of the studies lack rigour and have been conducted in relative isolation, creating a diffuse body of knowledge. This is problematic when trying to develop evidence-based practices and legitimacy for forensic occupational therapy.

Discussion

Despite calls for research in forensic occupational therapy, the evidence base remains poor. Research should be the basis for interventions in evidence-based occupational therapy practice. Hayes (2000) called for the profession to provide research-based evidence for established initiatives in clinical practice, rather than expending limited research resources on developing novel and diverse interventions. This review of the occupational therapy literature in forensic psychiatry highlights the need for research in all areas. Much of the research that has been completed has not referred to, nor built upon, previous studies. Many of the studies do not meet rigorous research standards and employ flawed study designs, use non-validated instruments, and/or do not provide sufficient information for the reader about the methodology and the data collected. Several descriptions of the occupational therapy role exist, but many of the journal-based articles are outdated given the recent emergence of regional secure units across the world.

There are a number of possible options on how the profession can strengthen its evidence base. As a starting point to build a coherent evidence base, occupational therapists need to document the area of practice in which they are concerned. To do this, there is a need to establish current patterns of occupational engagement, such as the time use of patients within secure settings, and occupational performance. For example, it may be found that the longer a person stays in hospital, the more likely it is that his or her functional abilities deteriorate, increasing the likelihood of poor community reintegration. Such a finding has implications for policy and practice. There is a priority for research to include the validation of existing outcome assessment tools in a forensic setting, the use of these tools to establish the effectiveness of occupational therapy interventions, and the evaluation of applications of occupational therapy models of practice. Of significance is the lack of discussion on an important philosophical issue surrounding the provision of client-centred practice to patients who are detained involuntarily. Similarly, there is a dearth of research that includes the voices of the forensic patients themselves.

Mullen et al (2000) have noted the development of links between the practice arena and academic institutions as increasingly essential to developing the evidence base for forensic mental health. This has certainly been reflected in the emergence of a number of forensic psychiatry and psychology journals. Crist et al (2005) have written about an occupational therapy case study, involving an academic-practice partnership in a county jail in the United States, that supported the scholarship of practice and provided a model to embed evidence gathering through a systematic evaluation process. Forsyth et al (2005b) discussed a similar academic-practice partnership in the UK, which aimed to increase evidence-based practice in a forensic setting. In this partnership, research is currently being conducted on a MOHO-based assessment, the interest checklist.

The College of Occupational Therapists (2002) has published a strategic vision and action plan for forensic occupational therapy, which was generated largely by a national forum of head occupational therapists across the UK. Although the document does confirm the need for a plan of action to build a coherent evidence base for the profession, it focuses on a local response only and does not include any measurement criteria to ascertain if the stated objectives are being met. As yet, there is no evidence to indicate that the plan has led to an increased publication of research. This suggests that such plans need champions for the implementation of actions.

The teaching of research knowledge and skills at undergraduate and postgraduate levels requires strengthening. A critique of evidence supporting practice in the field is required so that the overall quality of research conducted improves, having an impact on evidence-based programme development. Stronger links, such as joint positions or adjunct roles, between forensic occupational therapy practitioners and academic institutions in achieving this will have mutual benefits.

Baxter (1996) reported that the training and education provided to occupational therapists working in a forensic setting was generally inadequate. Flannigan (1996) made a brief reference to the need for supervision and peer support, but it remains relatively unexplored in the literature. This may be contributing to the ongoing recruitment and retention problems reported by Lloyd (1995). In comparison with other practice areas, discipline numbers are small, leading to potential

isolation and a lack of support (Lloyd 1995). However, there are advantages to a small specialist group, in that it should be feasible to approach research in a coordinated and united way precisely because the total group size is small. The potential to undertake multi-site, international studies is achievable. If the current list-serve discussions (forensic_occupational_therapy@yahoogroups.co.uk) are any indication of the potential for such an idea, then forensic occupational therapists have the beginnings of a productive research group. Taken further, the list serve and exchange of ideas through national and, potentially, international forensic occupational therapy conferences may go some way towards addressing the problems identified in this literature review, namely a lack of coordination of research endeavours and a paucity of rigorous published articles.

Conclusion

This review of the literature indicates that there is an overall lack of coordinated rigorous research on occupational therapy practice in secure settings. Coordination of research, especially within countries, and optimally, internationally, would ensure that answers to key research questions can be developed, in order to give occupational therapy further credibility as an essential service in secure and forensic settings.

The identified gaps in the evidence base of occupational therapy in forensic psychiatry should be seen as an opportunity for individual therapists to participate in research to add to the much needed collective knowledge that defines the profession. Technology should be employed to set up an international network of occupational therapists working in forensic psychiatry, with the key concern being that of research. Partnerships with universities should be developed to assist in capacity building of practice-based research. It is clearly time for occupational therapists with an interest in forensic psychiatry to unite.

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